


Getting It On Versus Getting It Over With: Sexual Motivation, Desire, and Satisfaction in Intimate Bonds

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Abstract

Across three studies, we demonstrate that pursuing sex for approach goals, such as to enhance intimacy, fuels satisfaction and pursuing sex for avoidance goals, such as to avoid disappointing a partner, detracts from satisfaction. In Study 1, we use hypothetical scenarios to provide experimental support for the associations between sexual goals and sexual and relationship satisfaction. In Study 2, a dyadic daily experience study of dating couples, we demonstrate that daily sexual goals are associated with both partners' daily relationship and sexual satisfaction. In Study 3, a dyadic daily experience study, we replicate the daily associations between sexual goals and satisfaction in a sample of long-term couples, and demonstrate that sexual goals impact partner's relationship and sexual quality 4 months later. In all studies, the associations between sexual goals and enhanced satisfaction as reported by both partners were mediated by sexual desire. Implications for research on sexual motivation and close relationships are discussed.

Keywords

sexual motivation, sexual desire, romantic relationships, satisfaction, dyadic daily experience

Sexuality is a key factor that shapes happiness in romantic relationships (see review by Impett, Muise, & Peragine, 2013). Previous research guided by approach-avoidance theories of motivation has shown that people's sexual goals (or reasons for engaging in sex) have a profound impact on the quality of their relationships. Engaging in sex for *approach goals* such as to pursue intimacy in a relationship is associated with personal and relational benefits such as greater well-being, enhanced relationship satisfaction, and more positive sexual experiences (Cooper, Barber, Zhaoyang, & Talley, 2011; Impett, Peplau, & Gable, 2005). In contrast, engaging in sex for *avoidance goals* such as to avoid disappointing a partner is associated with negative emotions, relationship conflict, and lower sexual satisfaction (Cooper et al., 2011; Cooper, Shapiro, & Powers, 1998; Impett et al., 2005).

The current set of studies extends this previous research on motivation in the sexual domain of relationships in two critical ways. First, whereas most previous research has examined the impact of people's sexual goals on their own experiences, we extend this work by looking at how pursuing sex for approach and avoidance goals impacts the *romantic partner's* relationship and sexual satisfaction. Second, we investigate a mechanism of the link between sexual goals and relationship quality, focusing on the critical role of *sexual desire* to understand why engaging in sex for approach goals is associated with benefits for relationships while doing so for avoidance goals can be so costly.

Approach-Avoidance Sexual Motivation

Researchers have demonstrated the utility of classifying the varied reasons why people engage in sex as approach or avoidance in nature (Cooper et al., 1998; Impett et al., 2005). The approach-avoidance framework distinguishes between goals that direct people toward positive outcomes and goals that are focused on avoiding negative outcomes (Gable, 2006; Gable & Impett, 2012). In the realm of sexuality, approach goals for sex focus on obtaining positive outcomes such as physical pleasure or greater relationship intimacy. In contrast, avoidance goals focus on averting negative outcomes such as feelings of guilt or relationship conflict. Studies in the growing literature on sexual motivation have begun to document the emotional and relationship consequences of engaging in sex for approach and avoidance goals. In a 14-day daily experience study of college students in dating relationships, on days when people engaged in sex for approach goals, they experienced enhanced positive emotions and relationship satisfaction, whereas on days when they engaged in sex for avoidance goals, they felt more

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negative emotions and reported more daily relationship conflict (Impett et al., 2005).

Cooper and colleagues (Cooper et al., 2011; Cooper et al., 1998; Patrick, Maggs, Cooper, & Lee, 2011) have found that approach and avoidance goals differentially predict people's sexual experiences and feelings about sex. In general, approach goals for sex are linked to more positive feelings about sex (erotophilia) and greater sexual satisfaction. Conversely, avoidance goals for sex are linked to more negative feelings about sex (erotophobia) and lower sexual satisfaction. In a study of heterosexual and lesbian women, engaging in sex for the approach goal of enhancing intimacy was associated with sexual satisfaction, whereas having sex for the avoidance goal of averting a partner's disapproval was associated with sexual dissatisfaction (Sanchez, Moss-Racusin, Phelan, & Crocker, 2011). In a sample of adolescent girls, Impett and Tolman (2006) found that girls who engaged in sex for stronger approach goals were more likely to report that their most recent sexual experience was positive and made them feel closer to their partner than girls with lower approach goals.

A Dyadic Approach to Sexual Motivation

Although sex is sometimes solitary or may occur in the context of a casual encounter, the overwhelming majority of sexual experiences take place in the context of an ongoing intimate relationship (see review by Impett et al., 2013). Despite the dyadic nature of sexual interactions, the majority of research on sexual motivation has only considered the sexual goals of one member of the couple. To date, Cooper and colleagues have conducted the only study of sexual motivation in which both partners' sexual goals were assessed (see also Cooper et al., 2006; Cooper et al., 1998; Cooper, Tally, Sheldon, Levitt, & Barber, 2008). This research demonstrates that not only are the reasons why people pursue sex important for how they feel about their relationships, but they are important for their partner's feelings as well. Cooper and colleagues (2006; Cooper, Talley, Sheldon, Levitt, & Barber 2008) found that the male partners of women who reported higher avoidance goals experienced fewer affectionate exchanges in the relationship, were more likely to coerce their partner into having sex, and were more likely to be unfaithful to their partners.

While suggestive, this initial work on dyadic processes and sexual motivation is limited in a number of crucial ways. First, most of this work has focused on people's most common motivations for sex and has not assessed the impact of both partners' goals for a specific sexual encounter on the quality of intimate relationships. We know that people's sexual goals vary from day-to-day (Impett, Strachman, Finkel, & Gable, 2008), but we do not know whether a person's goals for a specific sexual encounter influence their partner's

feelings about the relationship. By focusing only on people's general goals for sex, we do not yet know if and how daily changes in a person's sexual goals shape their partner's relationship satisfaction. Second, research on this topic has typically focused on predictors of sexual goals, such as attachment orientation (Impett, Gordon, & Strachman, 2008), but much less work has focused on the outcomes of pursuing sex for approach versus avoidance goals from a dyadic perspective. Third, the research that has considered outcomes of pursuing sex for different goals has focused primarily on negative outcomes such as sexual risk-taking, sexual coercion, and infidelity (Cooper et al., 1998; Cooper et al., 2006; Cooper et al., 2008). A burgeoning area of research on the positive psychology of sexuality demonstrates that it is crucial to understand the factors that contribute to a thriving and fulfilling sex life (see review by Impett, Muise, & Breines, 2013).

In the current research, we expect to replicate previous research that has documented that pursuing sex for approach goals is associated with heightened satisfaction (Impett et al., 2005). Most critically, however, and extending previous research, we also expect that pursuing sex for approach goals will be positively associated with the romantic partner's relationship and sexual satisfaction, based on existing research showing that the romantic partners of people who are high in approach relationship goals experience the most positive relationship outcomes (Impett et al., 2010). We also expect to replicate previous research that has documented an association between avoidance-motivated sex and poorer relationship and sexual quality (Cooper et al., 2011; Impett et al., 2005). However, the potential relationship costs of avoidance-motivated sex for a person's romantic partner are less clear than the potential benefits of approach goals. Given that when people engage in sex for avoidance goals they may be trying to avoid upsetting or disappointing their partner, it is possible that their partner will benefit (i.e., their partner is still "getting" sex). However, approach-avoidance motivational theory (Gable, 2006; Gable & Impett, 2012) posits that avoidance relationship goals are associated with lower relationship quality. In addition, the romantic partners of people high in avoidance relationship goals report less satisfaction in their relationship and indicate that their partner is less responsive to their needs (Impett et al., 2010). Therefore, we predict that on days when people engage in sex for avoidance goals, both partners will experience lower relationship satisfaction.

The Mediating Role of Sexual Desire

Another important limitation of previous work on sexual motivation is that we do not yet know why pursuing sex for approach goals is beneficial, whereas pursuing sex for avoidance goals is costly. In a recent review of research on motivation and relationships, Gable and Impett (2012) called for research on the *mechanisms* underlying the effects of

approach and avoidance goals on relationship outcomes. Therefore, the current study builds on existing literature by testing sexual desire as a key mechanism linking sexual goals to relationship and sexual satisfaction. Prior work on sexual motivation indicates that the pursuit of approach goals is linked with higher sexual desire, whereas engaging in sex for avoidance goals is associated with lower desire (Impett, Strachman, Finkel, & Gable). Across three studies, Impett et al. (2008) found that people who strived to achieve approach goals such as heightened intimacy, growth, and connection maintained high sexual desire over a 6-month period of time in their relationships. Furthermore, approach-oriented individuals maintained high sexual desire on a daily basis, and even on days when they had disagreements with their partner. In addition, in a study of long-term couples, people who were more communally motivated to meet a partner's sexual needs pursued sex more for approach goals which in turn fueled daily sexual desire (Muisse, Impett, Kogan, & Desmarais, 2013).

Previous research also indicates that sexual desire is associated with higher relationship quality. People who report higher levels of sexual desire have fewer thoughts about leaving their current relationship (Regan, 2000) and report being more satisfied with their relationships (Brezsnyak & Whisman, 2004). Apt, Hurlbert, Pierce, and White (1996) conducted a cluster analysis of women's marital and sexual satisfaction ratings and found that sexual desire was the best single discriminator between classification profiles. Sexual desire was significantly lower in the group that showed severe dissatisfaction with their relationship and highest in the group that reported high relationship and sexual satisfaction. In addition, in a study of midlife and older adults, sexual desire was associated with greater sexual satisfaction (Chao et al., 2011). Therefore, we predict that pursuing sex for approach goals will be associated with higher sexual desire and this will enhance the sexual experience and ultimately promote greater sexual and relationship quality. In contrast, we predict the pursuing sex for avoidance goals will be associated with lower sexual desire and this will detract from sexual and relationship satisfaction.

The Current Research

In three studies, we test our predictions regarding the associations between sexual goals and sexual and relationship satisfaction. In Study 1 we use hypothetical scenarios to provide experimental support for our theoretical model that approach goals are associated with greater sexual and relationship satisfaction and avoidance goals with lower satisfaction. In Studies 2 and 3, two dyadic daily experience studies of romantic couples, we test our predictions regarding the influence of daily sexual goals on both partners' relationship and sexual satisfaction. Across all studies, we test sexual desire as a mechanism linking sexual goals to relationship and sexual satisfaction. Finally, in addition to

examining how sexual goals shape how people feel about their sexual experiences in their daily lives, in Study 3, we also examined how people's sexual goals impact both partner's feelings about their relationships over a 4-month period of time.

Study 1

In Study 1, we sought to provide evidence for our theoretical model that engaging in sex for approach versus avoidance goals is differentially associated with sexual and relationship quality. Because we cannot assign people to have sex for different goals and then observe their sexual interactions, we used a set of scenarios to manipulate the sexual goals of a hypothetical couple and had participants rate the target individual's sexual desire and relationship and sexual satisfaction. We predicted that participants would rate targets as having higher sexual and relationship satisfaction when they are thought to have engaged in sex for approach as opposed to avoidance goals. We also expected that participants' ratings of the target's sexual desire would mediate the association between the target's sexual goals and ratings of their sexual and relationship satisfaction.

Method

Participants and procedure. A total of 636 participants were recruited from the United States through Amazon's Mechanical Turk, an online recruitment website. To be eligible to participate in the study, participants had to have previously been in a sexual relationship and pass an attention check in the survey. Sixty participants (9.5%) indicated that they had not been involved in a sexual relationship and an additional 63 participants (9.9%) failed the attention check, therefore their data were not included in the current analyses. The final sample consisted of 517 participants (250 men, 261 women, 6 choose not to report their gender identity) who ranged in age from 18 to 79 years ($M = 33.2$; $SD = 11.3$) and comprised a diverse range of ethnic backgrounds (61% were European, 8% were Latino, 5% were Asian, 4% were African American, 3% were Native American, 1% were Indian, and 18% self-identified as "Other"). Most participants were in a romantic relationship or married at the time of the survey (74%), 21% were single, and 5% were widowed or divorced. After consenting to participate in this study, participants provided demographic information and answered questions regarding a hypothetical sexual scenario. Each participant was paid \$0.60 USD.

Measures. Participants were presented with one of eight scenarios describing a couple in which one partner engaged in sex "to feel closer to their partner" (approach goal condition) or "to avoid disappointing their partner" (avoidance goal condition). The gender of the individual whose sexual goal was presented and the relationship status of the couple were

Table 1. Descriptive Statistics and Effect Sizes for Study 1.

	Condition		Effect size (Cohen's <i>d</i>)
	Approach goals	Avoidance goals	
Relationship satisfaction	4.97 (0.10)	3.73 (0.10)	0.80
Sexual satisfaction	5.03 (0.08)	3.18 (0.08)	1.47
Sexual desire	5.16 (0.08)	2.84 (0.08)	1.85

Note. Numbers outside parenthesis are means; numbers inside parenthesis are standard errors.

also manipulated. Therefore, the study design was a 2 (approach vs. avoidance sexual goals) \times 2 (man vs. woman's goals) \times 2 (dating vs. married couple). An example scenario is as follows: John and Katie have been *dating for several months*. One night, John and Katie go out for dinner and see a late movie. After the date, they have sex. *Katie's* reason for having sex that night is *to feel closer to John*. After the scenario, participants were asked to rate Katie's (or John's, depending on whose sexual goals were reported) relationship satisfaction, sexual satisfaction, and level of sexual desire on a 7-point scale (1 = *extremely low* to 7 = *extremely high*).

Results

To test our predictions regarding the link between sexual goals and sexual and relationship satisfaction, we conducted a Multivariate Analysis of Variance (MANOVA). The independent variable was sexual goals (coded as 1 = *avoidance*, 2 = *approach*), and the dependent variables were ratings of relationship and sexual satisfaction. The results did not differ based on the gender of the person in the scenario, or the relationship status of the couple, therefore we collapsed across conditions. To test sexual desire as a mediator of the effects, we used the INDIRECT SPSS macro (Preacher & Hayes, 2008) to construct a 95% confidence interval for each indirect effect using bootstrapping techniques with 5,000 resamples. Significant mediation is indicated when the interval does *not* include zero.

Sexual goals and relationship and sexual outcomes. Consistent with our predictions, participants in the approach, as opposed to the avoidance condition, rated the target as having higher relationship satisfaction, $F(1, 424) = 76.51, p < .001$, and higher sexual satisfaction, $F(1, 424) = 242.60, p < .001$ (see Table 1 for means and effect sizes). These associations remained significant when relationship length and gender were entered as covariates.

In our next set of analyses, we tested sexual desire as a mechanism for the associations between sexual goals and sexual and relationship satisfaction. First, in line with our predictions, participants rated targets who pursued sex for approach goals as having higher desire than targets who pursued sex for avoidance goals, $F(1, 424) = 87.42, p < .001$

(see Table 1). Mediation analyses revealed that ratings of the target's sexual desire accounted for the association between sexual goals and relationship satisfaction (indirect effect = 95% CI = [.83, 1.36], direct effect = $b = .16, t(424) = 0.92, SE = .17, p = .36$) and partially mediated the association between sexual goals and sexual satisfaction (indirect effect = 95% CI = [.31, .78], direct effect = $b = 1.31, t(424) = 8.48, SE = .15, p < .001$).

Ruling out alternative hypotheses. Our results supported our theoretical model that sexual goals are associated with sexual and relationship satisfaction via sexual desire. However, it is also possible that a target's sexual goals are linked to their relationship and sexual satisfaction and this in turn is associated with ratings of sexual desire. To test this alternative pathway, we conducted a set of reverse mediation analyses where relationship and sexual satisfaction were the mediators and sexual desire was the outcome. Although the analyses suggest that sexual and relationship satisfaction mediate the association between sexual goals and sexual desire, they accounted for a lower reduction in the overall effect (17%-24%) compared with our mediation model (accounting for 31%-77% reduction in the overall effect; see Kenny, 2012; Kenny, Kashy, & Bolger, 1998, for a discussion of reduction in the overall effect and reverse causality in mediation).

Brief Discussion

Previous research relying on correlational designs has documented that approach and avoidance sexual goals are differentially associated with sexual and relationship satisfaction (Cooper et al., 2008; Cooper et al., 2011; Impett et al., 2005; Impett et al., 2008). The findings from Study 1 replicate this work and extend it in two critical ways—by providing the first experimental support for the effects of sexual goals on relationship quality and by documenting that sexual desire is a critical mechanism of these effects.

Study 2

An important limitation of Study 1 is that it is based on hypothetical scenarios and may not adequately represent couples' real-life sexual experiences. To extend the ecological validity of Study 1, we conducted a 14-day dyadic daily experience study to test our predictions in a sample of dating couples in a more natural context. Our first set of predictions concerned the effects of approach and avoidance sexual goals on both partner's feelings of daily relationship and sexual satisfaction. We predicted that on days when people engage in sex to pursue approach goals, both partners would report greater relationship and sexual satisfaction, whereas on days when people engage in sex for avoidance goals, both partners would report lower relationship and sexual satisfaction.

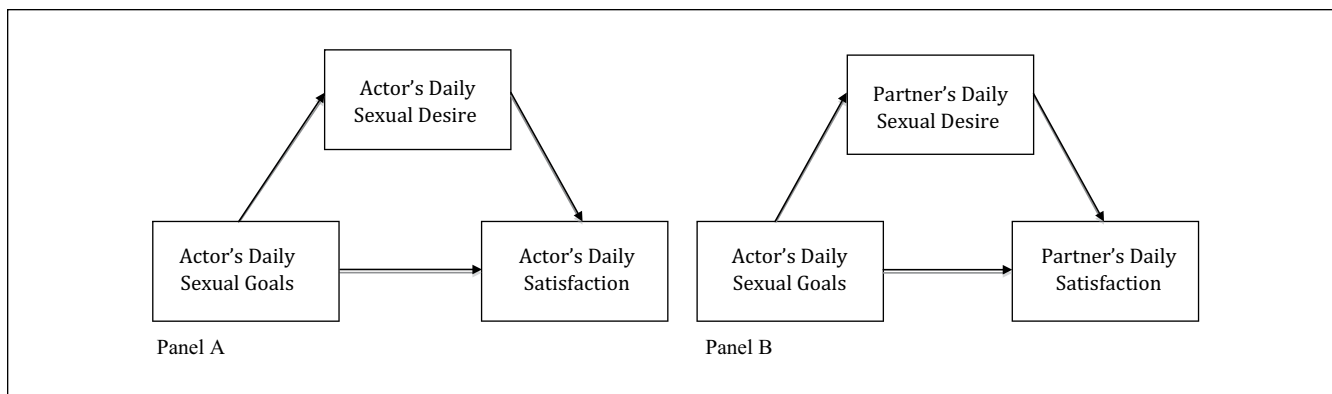


Figure 1. Actor mediation model where sexual desire mediates the associations between daily sexual goals and daily relationship and sexual satisfaction (Panel A) and partner mediation model where partner's sexual desire mediates the association between actor's daily sexual goals and partner's relationship and sexual satisfaction (Panel B).

Our second set of predictions concerned the mediating role of sexual desire. As depicted in Figure 1 (Panel A), we expected that on days when a person engages in sex in pursuit of approach goals, they will report higher sexual desire, and this will account for the associations between approach sexual goals and increased relationship and sexual satisfaction. In contrast, when a person engages in sex in pursuit of avoidance goals, they will report lower levels of desire and this will account for the associations between avoidance sexual goals and relationship and sexual satisfaction. In addition, as depicted in Figure 1 (Panel B), we expected that on days when a person pursues sex for approach goals, their partner will report higher desire, and on days when a person pursues sex for avoidance goals, their partner will report lower sexual desire, and this will account for the associations between one partner's sexual goals and the other partner's relationship satisfaction.

Method

Participants and procedure. Participants were 108 dating couples ($n = 216$) recruited from a small Canadian university. The participants ranged in age from 19 to 31 years ($M = 21.05$, $SD = 0.94$). To be eligible, participants had to be involved in a heterosexual dating relationship and both partners had to agree to take part in the study. The participants had been in their current relationship from 2 to 73 months ($M = 19.78$, $SD = 15.49$), and 9% of the couples were living together. Participants comprised a diverse range of ethnic backgrounds: 40% were European, 20% were Asian, 8% were Black/African Canadian, 5% were Latin, 2% were Aboriginal, and 25% self-identified as "Other."

The participants completed a background survey as well as a 14-day daily experience study. Participants were instructed to complete all surveys, a 30-min background survey on the first day of the study and a 10-min daily survey for 14 consecutive nights, independently from their partner.

To maximize compliance with the daily part of the protocol, reminder emails were sent to the participants who had not completed their daily diaries by 10:00 p.m. each night. On average, participants completed 12 diaries across the 14-day study (range = 1-14, $M = 12.45$, $SD = 3.72$) for a total of 2,689 days across participants. Participants were compensated with \$40 CAD.

Person-level measures

Relationship satisfaction. Relationship satisfaction was assessed with five items (e.g., "Our relationship makes me happy"; $\alpha = .91$, $M = 7.78$, $SD = 1.14$) from Rusbult, Martz, and Agnew (1998) rated on a 9-point scale (1 = *do not agree at all* to 9 = *agree completely*).

Sexual desire. Sexual desire was measured with the 25-items Hurlbert Index of Sexual Desire (Apt & Hurlbert, 1992; $\alpha = .92$, $M = 3.91$, $SD = 0.63$). Participants rated such items as "My desire for sex with my partner is strong" on a 5-point scale (1 = *not at all* to 5 = *very much*).

Sexual satisfaction. Sexual satisfaction was measured with the 25-item Index of Sexual Satisfaction (Hudson, Harrison, & Crosscup, 1981; $\alpha = .96$, $M = 5.83$, $SD = 0.81$). Twenty-five items were rated on a 7-point scale. Participants rated such items as "I feel our sex life really adds a lot to our relationship" on a 7-point scale (1 = *never* to 7 = *all the time*).

Daily-level measures. On each diary day, participants completed measures of relationship satisfaction and sexual desire, and on days when participants reported engaging in sex with their partner, they reported on their sexual goals and sexual satisfaction. 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).

Table 2. Total, Direct, and Indirect Effects for Models With Sexual Desire Mediating the Link Between Sexual Goals and Daily Satisfaction in Study 2.

	Daily outcomes					
	Actor's relationship satisfaction	Actor's sexual satisfaction	Actor's sexual desire	Partner's relationship satisfaction	Partner's sexual satisfaction	Partner's sexual desire
Actor's approach goals						
Total effect	.33*** (.09)	.23*** (.06)	.31** (.12)	.27** (.09)	.09 (.06)	.42** (.12)
Direct effect	.25* (.09)	.17** (.05)	—	.21* (.09)	.01 (.05)	—
Indirect effect	[.01, .09]	[.02, .11]	—	[.01, .07]	[.03, .13]	—
Actor's avoidance goals						
Total effect	-.29*** (.07)	-.23*** (.07)	-.42** (.09)	-.29*** (.07)	-.10* (.04)	-.16 (.10)
Direct effect	-.25** (.07)	-.16* (.04)	—	—	—	—
Indirect effect	[-.06, -.01]	[-.11, -.03]	—	—	—	—

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

Relationship satisfaction. Participants responded to three items on a 7-point scale (1 = *not at all true*, 7 = *very true*) about how satisfied they felt with their relationship (Rusbult et al., 1998; $\alpha = .93$, $M = 5.71$, $SD = 1.40$).

Sexual desire. Sexual desire was measured on a 7-point scale (1 = *not at all true*, 7 = *very true*) with an item used in previous research: “I felt a great deal of sexual desire for my partner today” (Impett et al., 2008; Muise et al., 2013; $M = 4.55$, $SD = 2.06$).

Sexual goals. Each day, participants indicated whether they engaged in sex with their partner. On average, participants reported having sex three times over the 14-day study ($M = 2.98$, $SD = 1.45$; range = 1-7). On days when participants reported having sex, they answered questions designed to measure their sexual goals with 12 items adapted from Cooper et al. (1998), including six approach sexual goals (e.g., “to feel closer my partner”; $\alpha = .80$, $M = 4.88$, $SD = 1.08$) and six avoidance sexual goals (e.g., “to prevent my partner from becoming upset”; $\alpha = .86$, $M = 2.16$, $SD = 1.27$). Items were rated on a 7-point scale (1 = *not at all important* to 7 = *very important*).

Sexual satisfaction. On days when participants reported having sex with their partner, they answered the question “How much did you enjoy the sexual experience?” ($M = 4.50$, $SD = 0.68$) on a 5-point scale (1 = *not at all* to 7 = *very much*).

Results

We analyzed the data with multilevel modeling using mixed models in SPSS 20.0 (IBM, 2011). The Actor Partner Interdependence Model (APIM) guided the analyses (Kenny, Kashy, & Cook, 2006). All models included actor approach,

actor avoidance, partner approach, and partner avoidance goals entered simultaneously. 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 et al., 2006). To avoid confounding within- and between-person effects, we used techniques appropriate for a multilevel framework, partitioning all the Level 1 predictors into their within- and between-variance components, which were person-mean centered and aggregated, respectively (Raudenbush, Bryk, Cheong, & Congdon, 2004; Zhang, Zyphur, & Preacher, 2009). All daily-level predictors were person-mean centered such that coefficients reflect associations between deviations from a person’s mean score on daily sexual goals and each outcome measure. In addition, the aggregate of all daily-level predictors were entered into model. As such, these analyses account for between-person differences in sexual goals and assess whether day-to-day changes from a participant’s own mean in sexual goals are associated with changes in relationship satisfaction. In our tests of mediation, we followed the guidelines for a 1-1-1 mediation outlined by Zhang et al. (2009) and 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.

Sexual goals and relationship and sexual outcomes. As expected and shown in Table 2, on days when people engaged in sex for approach goals (more than their own average across the 14-day study), they experienced greater relationship and sexual satisfaction, but on days when people engaged in sex for avoidance goals, they experienced lower relationship and sexual satisfaction. Consistent with our hypotheses, controlling for their partner’s own sexual goals, on days when a person engaged in sex for approach goals, their partner experienced greater relationship satisfaction, whereas on days

when they engaged in sex for avoidance goals, their partner experienced lower relationship and sexual satisfaction

We next tested sexual desire as a mediator of these effects. Consistent with our predictions and shown in Table 2, on days when participants engaged in sex for approach goals, they reported higher sexual desire, and on days when participants engaged in sex for avoidance goals, they reported lower sexual desire. As shown in Table 2, sexual desire mediated the associations between a person's approach sexual goals and their relationship and sexual satisfaction, and between a person's avoidance sexual goals and their relationship and sexual satisfaction. In addition, on days when a person engaged in sex for approach goals, their romantic partner reported experiencing higher sexual desire, and this accounted for the association between approach goals and increased partner relationship satisfaction and the association between approach goals and increased partner sexual satisfaction. Contrary to our expectations, however, a person's avoidance sexual goals were not significantly associated with their partner's sexual desire.

Ruling out alternative hypotheses. To bolster our confidence in our effects, we conducted additional analyses to rule out potential alternative explanations for our findings. First, it is possible that initiation of sex is driving our effects. In a series of additional analyses, we considered whether who initiated sex ($0 = I \text{ did}$, $1 = \text{my partner did}$) was associated with sexual goals and if this could account for our effects. However, initiation was not significantly associated with approach ($b = .14$, $SE = .23$, $p = .55$) or avoidance goals ($b = .39$, $SE = .29$, $p = .23$), and did not significantly moderate any of our effects.

We also examined whether participant gender, relationship duration, or sexual frequency over the course of the study moderated any of our reported effects. Out of 12 possible moderations by gender, gender only significantly moderated one effect. For women, avoidance sexual goals were significantly negatively associated with daily relationship satisfaction ($b = -.31$, $SE = .10$, $p = .002$), but for men, this effect was marginal ($b = -.15$, $SE = .09$, $p = .10$). Relationship duration and sexual frequency did not moderate any of our effects, suggesting that sexual goals impact couples' satisfaction and desire regardless of how long they have been together or how often they have sex. Finally, we wanted to rule out potential third variables accounting for our effects. Specifically, we considered participants' feelings of commitment and daily anger. Although commitment was associated with lower ($b = -.17$, $p = .03$) and anger with higher avoidance goals ($b = .12$, $p = .01$), all of our effects remained significant when these were controlled.

We also conducted a series of additional analyses to address the directionality of our effects. Although our theoretical model suggests that sexual goals are associated with sexual and relationship satisfaction through sexual desire, two alternative patterns could explain our data. First, sexual goals could be a mediator of the association between daily

sexual desire and relationship satisfaction. For example, on days when people experience higher sexual desire, they may be more likely to pursue sex for approach goals and in turn, feel more satisfied. Second, sexual goals could be an outcome predicted by daily feelings of desire and satisfaction. For example, on days when people report lower relationship satisfaction, they may experience lower sexual desire and in turn, engage in sex for avoidance goals. To examine these possibilities, we tested and compared several alternative mediation models (Kenny, 2012; Kenny et al., 1998). In the alternative models with sexual goals as the outcome, none of the mediation models were significant. In the alternative models where sexual goals are a mediator, we found support for one of the alternative pathways. On days when people report lower sexual desire, they were more likely to engage in sex for avoidance goals, and in turn, they felt less satisfied with their relationship. However, the effects of this alternative pathway were relatively weaker (accounting for 8% of the overall effect) compared with our hypothesized mediation models (accounting for 14%-89%).

Finally, we also considered the question of whether it is better to have sex for high avoidance goals than not to have sex at all. One challenge in assessing this is that it is difficult to parse out the effects of approach versus avoidance goals since each day participants are reporting a unique combination of goals. As such, a day is not exclusively approach or avoidance oriented. Participants did report higher relationship satisfaction ($b = .73$, $SE = .07$, $p < .001$) and higher sexual desire ($b = 1.82$, $SE = .10$, $p < .001$) on days when they engage in sex compared with days when they do not engage in sex. Therefore, engaging in sex to avoid negative outcomes may still provide some boosts to daily satisfaction and desire compared with not engaging in sex, albeit not to the same degree as approach-motivated sex.

Brief Discussion

The findings from Study 2 replicate the findings from Study 1 and past research indicating that engaging in sex for approach goals is associated with relationship benefits while engaging in sex for avoidance goals is typically costly (Cooper et al., 1998; Cooper et al., 2011; Impett et al., 2005). We extend this research by demonstrating that sexual desire is a critical mechanism by which daily sexual goals are associated with daily relationship and sexual satisfaction. Finally, we find, for the first time, that on days when a person has sex in pursuit of approach goals, their partner reports higher sexual desire and relationship satisfaction, and on days when a person has sex in pursuit of avoidance goals their romantic partner feels less satisfied.

Study 3

Our third study was guided by two central goals. First, Gable and Impett (2012) recently outlined the importance of

Table 3. Total, Direct, and Indirect Effects for Models With Sexual Desire Mediating the Link Between Sexual Goals and Daily Satisfaction in Study 3.

	Daily outcomes					
	Actor's relationship satisfaction	Actor's sexual satisfaction	Actor's sexual desire	Partner's relationship satisfaction	Partner's sexual satisfaction	Partner's sexual desire
Actor's approach goals						
Total effect	.22*** (.06)	.30*** (.08)	.26** (.09)	.08 (.06)	.02 (.08)	.07 (.09)
Direct effect	.17** (.06)	.24** (.08)	—	—	—	—
Indirect effect	[.01, .10]	[.03, .12]	—	—	—	—
Actor's avoidance goals						
Total effect	-.27*** (.06)	-.49*** (.08)	-.43** (.09)	-.06 (.06)	-.07 (.08)	-.20* (.09)
Direct effect	-.20** (.06)	-.35*** (.07)	—	-.02 (.06)	-.004 (.07)	—
Indirect effect	[-.13, -.03]	[-.14, -.04]	—	[-.07, -.003]	[-.14, -.01]	—

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

applying approach-avoidance models of social motivation to a wider variety of relationships, such as older, more established couples. As such, in Study 3, we conducted a 21-day daily experience study of married and cohabiting couples in longer term relationships. Second, we also sought to determine whether the effects of sexual goals on both partner's relationship and sexual outcomes are relatively short-lived or if they would persist over a longer period of period of time. Therefore, the couples completed a 4-month follow-up survey.

Method

Participants and procedure. The sample for Study 3 included both members of 44 heterosexual couples ranging in age from 23 to 60 ($M = 35.4, SD = 9.7$ years). Most (82%) participants were White/Caucasian. All of the couples were living together, and most (68%) were married. The couples had been involved in their relationships from 3 to 39 years ($M = 11.1, SD = 8.8$). Approximately half of the couples had children (48%), and of these, most had one or two children ($M = 1.8, SD = 1.1$).

Study procedures were the same as Study 2 except that participants completed the daily survey for 21 consecutive nights. Participants completed an average of 17.7 (out of 21) daily surveys for a total of 1,560 days. Sixty-eight (77%) of these participants completed a 10-min follow-up survey 4 months later. Each partner was paid \$40 CAD for participating in the diary and entered into a \$100 draw for participating in the follow-up.

Person-level measures. In Study 3, we used the same measures as in Study 2 to assess relationship satisfaction (background: $\alpha = .94, M = 7.56, SD = 2.01$; follow-up: $\alpha = .96, M = 7.79, SD = 1.38$), sexual desire (background: $M = 3.27, SD = 1.26$; follow-up: $M = 3.55, SD = 0.79$, both $\alpha s = .96$), and sexual

satisfaction (background: $\alpha = .98, M = 5.29, SD = 0.88$; follow-up: $\alpha = .97, M = 5.50, SD = 0.99$). Commitment was also assessed using seven items from Rusbult et al. (1998) at background ($M = 7.71, SD = 0.57$) and follow-up ($M = 8.26, SD = 1.03$; both $\alpha s = .94$). Participants rated items such as "I want our relationship to last for a very long time" on a 9-point scale (1 = *do not agree at all* to 9 = *agree completely*).

Daily-level measures. In Study 3, participants reported engaging in sex an average of once a week over the 21-day study ($M = 3.34, SD = 2.33$, range = 1-10 days). We used the same measures as Study 2 to assess daily relationship satisfaction ($\alpha = .94, M = 5.93, SD = 1.05$), sexual desire ($M = 4.76, SD = 1.69$), sexual satisfaction ($M = 4.43, SD = 0.83$), and sexual goals (approach: $\alpha = .92, M = 5.62, SD = 1.12$; avoidance: $\alpha = .89, M = 1.76, SD = 1.19$).

Results

Sexual goals and relationship and sexual outcomes. Our first set of predictions concerned the daily effects of pursuing sex for approach and avoidance goals on both partners' satisfaction. Our data analysis plan for the daily diary study was the same in Study 3 as in Study 2. Consistent with our hypotheses and shown in Table 3, on days when participants engaged in sex for approach goals more than they typically did across the diary, they reported feeling more satisfied with their relationship and their sex life. In contrast, on days when participants had sex for avoidance goals, they reported lower relationship and sexual satisfaction. Contrary to our expectations and findings from Study 1, after controlling for their partner's own sexual goals, there were no significant effects of a person's own sexual goals on their partner's relationship or sexual satisfaction.

Next, we tested our predictions regarding the mediating role of sexual desire. As shown in Table 3, on days when

Table 4. Approach and Avoidance Sexual Goals Predicting Longitudinal Outcomes in Study 3.

	Longitudinal outcomes			
	Relationship satisfaction	Sexual satisfaction	Sexual desire	Commitment
Actor effects				
Approach	-.01	.14	.20†	.19
Avoidance	-.11	-.29**	-.19*	-.17
Partner effects				
Approach	.07	.06	-.18	.14
Avoidance	-.07	-.22*	-.07	-.45***

† $p = .06$. * $p < .05$. ** $p < .01$. *** $p < .001$.

participants engaged in sex for approach goals, they reported higher desire, and on days when participants engaged in sex for avoidance goals, they reported lower desire. Most critically, as shown in Table 3, MCMAM analyses revealed that daily sexual desire mediated the associations between a person's approach sexual goals and their relationship and sexual satisfaction, and between a person's avoidance sexual goals and their relationship and sexual satisfaction.

As shown in Table 3, after controlling for a partner's own goals, a person's daily avoidance goals were significantly associated with their partner's lower daily sexual desire, and in turn, their partner's desire had an indirect effect on their partner's relationship and sexual satisfaction. In short, although avoidance sexual goals did not directly impact a partner's relationship and sexual satisfaction, avoidance goals were linked to lower satisfaction through the association with lower sexual desire. Finally, a person's approach sexual goals were not significantly associated with their partner's sexual desire.

Finally, to test our hypotheses regarding the longitudinal effects of pursuing approach versus avoidance goals, we used mixed models in SPSS 20.0. In these analyses, we focused on aggregate measures of both partners' goals over the course of the 21-day diary, as well as controlled for the person's outcome variable at background. As expected and shown in Table 4, the more people reported engaging in sex with their partner for approach goals over the course of the diary study, the higher sexual desire they reported at the 4-month follow-up. In contrast, the more people reported engaging in sex in pursuit of avoidance goals, the lower their sexual desire and sexual satisfaction at the 4-month follow-up. While a person's own approach goals did not significantly predict their partner's relationship quality at the follow-up, the more people engaged in sex for avoidance goals over the course of the diary, the less sexually satisfied and the less committed their romantic partners felt at the 4-month follow-up.

Ruling out alternative hypotheses. We conducted a series of additional analyses to examine whether gender, relationship

duration, or sexual frequency moderated any of our reported daily or longitudinal effects, but none of these effects reached significance. As in Study 2, we were able to rule out feelings of commitment as a third variable accounting for our effects.

We also conducted a series of reverse mediations to determine whether an alternate mediation model could better explain the associations between sexual goals and the daily relationship and sexual outcomes. As in Study 2, we tested sexual goals as a mediator between desire and satisfaction and as the outcome in the mediation model. We found support for a few of the alternative pathways. First, on days when people report lower relationship satisfaction, they experience lower sexual desire and in turn engaged in sex for avoidance goals. Second, on days when people reported higher desire, they pursued sex for approach goals and in turn reported higher relationship satisfaction. Finally, on days when people reported lower relationship satisfaction, they had sex more for avoidance goals, and in turn report lower desire. However, as in Study 2, we compared these effects (Kenny, 2012; Kenny et al., 1998) and found that the effects of these alternative pathways were weaker (accounting for 18%-23% of the overall effect) than those in our hypothesized mediation model (accounting for 20%-94%).

Finally and as in Study 2, we considered whether it is better to have sex for high avoidance goals than not at all. Participants reported higher relationship satisfaction ($b = .34$, $SE = .06$, $p < .001$) and higher sexual desire ($b = 1.27$, $SE = .09$, $p < .001$) on days when they engaged in sex compared with days when they did not engage in sex. However, analyses of the longitudinal data in this study revealed that sexual frequency (i.e., the number of times a couple engaged in sex over the course of the diary) did not predict any of the relationship or sexual outcomes at the 4-month follow-up ($ps = .31-.56$). However, higher avoidance sexual goals over the course of the diary did predict lower sexual satisfaction and lower commitment 4 months later. Taken together, these results suggest that although engaging in sex provides daily boosts to satisfaction and desire compared with not engaging in sex at all, pursuing sex more frequently for avoidance goals is detrimental to satisfaction and commitment over time.

Brief Discussion

In our final study, we replicated the findings from our first two studies in a sample of established couples and provide additional evidence for sexual desire as a mechanism of these effects. We also found evidence for the cumulative impact of avoidance goals by showing that the pursuit of avoidance sexual goals detracted from both partner's feelings about their relationship and sex lives over the course of time.

General Discussion

Across three studies, we demonstrate that a person's reasons for engaging in sex with their partner have important implications for both partners' feelings of satisfaction. Engaging

in sex for approach goals, such as to enhance intimacy or promote closeness with a partner, was associated with greater relationship and sexual satisfaction, whereas engaging in sex for avoidance goals, such as to avoid disappointing a partner or avoid conflict, was associated with lower relationship and sexual satisfaction. These findings are consistent with a growing body of research demonstrating the relationship benefits of pursuing approach goals and the costs of pursuing avoidance goals (see review by Gable & Impett, 2012).

The findings from the current research extend previous work on sexual motivation by taking a dyadic approach to the study of sexual interactions in romantic relationships. Existing research on sexual motivation has primarily focused on the influence of a person's sexual goals on their own outcomes, such as risky sexual practices, sexual satisfaction, and relationship satisfaction (e.g., Cooper et al., 1998; Cooper et al., 2008; Impett et al., 2005; Impett, Strachman, et al., 2008; Patrick et al., 2011). In the current research, we considered the influence of sexual goals on both partners' relationship and sexual satisfaction and demonstrated that a person's sexual goals influence their partner's satisfaction above and beyond the impact of their partner's own goals for sex. A key contribution of the current research is demonstrating that within-person fluctuations in sexual goals influence a partner's feelings of desire and satisfaction. Previous work has considered both partners' most frequent goals for sex and perceptions of a partner's general sexual goals (Cooper et al., 1998; Impett et al., 2005), but the current findings allow us to conclude that goals for sex in couples' day-to-day lives shape both partners' relationship quality not only on that day but also over longer periods of time.

In the current research, we find more consistent effects of avoidance goals than approach goals, especially over time. In fact, in Study 3, the only significant partner effects were for avoidance goals, and engaging in sex for avoidance goals was associated with decreases in relationship quality and sexual desire over time. These findings are consistent with a large body of psychological research suggesting that negative experiences can have a more powerful impact than positive experiences (see review by Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Indeed, Gottman (1994) reports that in stable marriages the ratio of positive events to negative events is 5:1, suggesting that five times as many positive interactions are needed to balance negative interactions (see also Impett et al., 2008). In addition, although avoiding conflict in a relationship may provide some immediate benefits, conflict avoidance can be detrimental to relationship satisfaction over time (see review by McNulty & Fincham, 2012). The current research is the first to extend these ideas to the domain of sexuality. Given the benefits associated with more frequent sex (Laumann, Gagnon, Michael, & Michaels, 1994), engaging in sex, even for avoidance goals, may be associated with more daily relationship benefits than not engaging in sex at all. However, the current research suggests that approach-motivated sex provides substantially

greater daily benefits than avoidance-motivated sex and that pursuing sex for avoidance goals is associated with lower sexual and relationship quality over time.

The current research also extends previous work by providing an explanation for why sexual goals promote relationship and sexual satisfaction. In hypothetical scenarios as well as in the daily lives of dating, married and cohabitating couples, we found that sexual desire was a key mechanism linking sexual goals to relationship and sexual quality. That is, an important reason why approach goals are associated with better quality relationships is because people experience more sexual desire for their partner when they engage in sex to enhance intimacy and promote closeness. In contrast, avoidance goals are associated with lower relationship satisfaction because people feel less desire when they engage in sex to avoid negative outcomes in their relationships. In addition, we found that sexual desire is a key reason why a person's sexual goals are associated with their partner's relationship satisfaction. When a person engaged in sex for approach goals, their partner reported higher desire and this, in turn, was associated with their partner reporting higher sexual and relationship satisfaction (Study 2). In contrast, when a person engaged in sex for avoidance goals, their partner reported lower desire, and this, in turn, was associated with their partner feeling less satisfied with their sex life and the relationship (Study 3). Given the difference in these partner effects across the two diary studies, it is possible that avoidance goals become more salient in longer term compared with newer relationships, and future research is needed to investigate this possibility.

Theoretical Contributions

The current research has contributed to a growing body of literature that demonstrates the utility of applying approach-avoidance theory to the study of social motivation (Elliot, Gable, & Mapes, 2006; Gable, 2006). The current studies fill important gaps in this literature by applying this framework to understand dyadic sexual processes in relationships and identifying an important mechanism by which sexual goals are associated with relationship quality. Most critically, although it may be intuitive that pursuing sex to avoid disappointing a partner feels less satisfying for the self, it could be presumed that doing so might have positive consequences for one's partner (after all, the partner is still "getting" sex). However, the current findings indicate that this is not the case; pursuing sex for avoidance goals is associated with lower desire and satisfaction for *both* partners.

The current research also makes an important contribution to the literature on sexuality. Although a lack of sexual desire is the most common presenting problem among couples pursuing sex therapy (Beck, 1995; Hawton, Catalan, & Fagg, 1991) and dissatisfaction with one's sex life is linked to relationship dissolution (Yabiku & Gager, 2009), very few

studies have considered the factors that promote sexual desire and sexual satisfaction in romantic relationships. Consistent with previous work that has included only one member of romantic couples (Impett et al., 2008; Impett et al., 2005), we found that sexual motivation shapes sexual desire and satisfaction for both partners in dating, married and cohabitating couples. Future research would benefit from exploring these associations in nonheterosexual couples, samples of more distressed couples or among couples during periods where desire tends to decline, such as during the transition to parenthood.

Limitations, Future Research Directions, and Implications

Although we identified sexual desire as a key mechanism linking sexual goals to relationship satisfaction, the majority of the mediation effects were partial, suggesting that there are other important reasons why approach and avoidance goals are differentially associated with the quality of romantic relationships. Given the central role of emotion in motivational processes (Keltner & Lerner, 2010), it is possible that the emotions that people experience when they engage in sexually intimate interactions may also represent important mediating factors. In addition, although we found support for the dyadic influence of sexual goals, a key question still remains about how one partner's sexual goals influence the other partner's desire and satisfaction. An important avenue for future research is to consider the cues that people use to detect their partner's sexual goals.

Daily experience methods are useful for studying sexuality because participants report on their experience as close in time to when sex actually occurred. However, participants are still reporting on their sexual goals *after* the sexual experience and their responses could be influenced by the sexual experience or other relationship events. In addition, all possible reasons for engaging in sex may not be captured by our measure or fit into the approach-avoidance framework. In the future, researchers could consider asking partners for open-ended responses and use strategies to assess goals *prior* to sex. Such research might include intervention studies, where one group is primed with approach goals and compared with a control group, or might include attempts to assess sexual goals earlier in the day and then assess outcomes following a sexual experience.

Given that the current data are correlational, we tested a series of reverse mediation models in all studies to bolster our confidence in our theoretical model. Although we found the strongest and most consistent support for our model, a few of the alternative models for the actor effects were significant. These results suggest that there are some bidirectional associations between sexual goals, desire and satisfaction. As such, although sexual goals influence desire and satisfaction, a person's daily feelings of satisfaction and

desire also seem to have some impact on a person's reasons for engaging in sex with their partner.

Although we find that on days when a couple has sex, avoidance goals are associated with lower desire and satisfaction, avoidance-motivated sex may still provide boosts in satisfaction compared with not engaging in sex (albeit not to the same degree as a approach-motivated sex). An interesting direction for future research is to consider a person's goals for not engaging in sex with their partner, as well as how declining sex for various reasons compares to pursuing sex for avoidance goals.

One key implication of these findings is that modifying goals for sex may help to boost levels of sexual desire and relationship satisfaction in couples. Research on mindfulness suggests that when women who are experiencing low sexual desire or arousal engaged in a series of mindfulness exercises including "trying on" a more positive sexual self schema, they experienced enhanced sexual desire and arousal (Brotto, Krychman, & Jacobson, 2008). An important avenue for future research is to explore whether it is possible for people to change the goals that they pursue when engaging in sex as the current research suggests that the pursuit of approach goals has positive consequences for sexual desire and relationship satisfaction. In a study on positive and negative sexual cognitions, Clark, Purdon, and Byers (2000) found that negative cognitions were more intrusive and resulted in more frequent attempts to control them, but this research was not conclusive as to whether these attempts were successful. Another avenue for future research is to explore the factors that promote approach sexual goals in relationships. In a previous study, we demonstrated that people who are more motivated to meet their partner's sexual needs (high in *sexual communal strength*) were more likely to pursue sex for approach goals and, in turn, reported experiencing higher daily sexual desire (Muise et al., 2013).

Concluding Comments

Couples engage in sex for a variety of reasons. At times people pursue sex to enhance intimacy in their relationship or to feel closer to their partner. Other times, people pursue sex to prevent a fight or to avoid declining a partner's request. The primary conclusion of the current set of studies is that these two different types of motivations for sex can have profoundly different effects on the quality of intimate bonds. Engaging in sex with a partner to pursue intimacy or to experience closeness promotes sexual desire, which in turn, enhances sexual and relationship satisfaction. In contrast, pursuing sex to avert negative consequences such as conflict or a partner's disappointment diminishes sexual desire, and in turn, detracts from sexual and relationship quality. In sum, these findings suggest that sex does not uniformly impact satisfaction, but that people's goals for sex matter.

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Note

1. In Studies 2 and 3, we tested for actor-partner interactions. Out of 18 possible effects, 2 were significant. In Study 2, actor approach goals interacted with partner approach goals to predict sexual satisfaction. On days when people reported engaging in sex for high approach goals, their partner's approach goals did not significantly affect their sexual satisfaction, but on days with low approach goals, their sexual satisfaction was higher when their partner had high approach goals. In Study 3, actor approach goals interacted with partner avoidance goals to predict sexual satisfaction. On days when people pursued sex for high approach goals, their partner's avoidance goals had little impact on their sexual satisfaction, but on days with low approach goals, their partner's avoidance goals negatively affected their sexual satisfaction.

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