

## Maintaining Sexual Desire in Intimate Relationships: The Importance of Approach Goals

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Three studies tested whether adopting strong (relative to weak) approach goals in relationships (i.e., goals focused on the pursuit of positive experiences in one's relationship such as fun, growth, and development) predict greater sexual desire. Study 1 was a 6-month longitudinal study with biweekly assessments of sexual desire. Studies 2 and 3 were 2-week daily experience studies with daily assessments of sexual desire. Results showed that approach relationship goals buffered against declines in sexual desire over time and predicted elevated sexual desire during daily sexual interactions. Approach sexual goals mediated the association between approach relationship goals and daily sexual desire. Individuals with strong approach goals experienced even greater desire on days with positive relationship events and experienced less of a decrease in desire on days with negative relationship events than individuals who were low in approach goals. In two of the three studies, the association between approach relationship goals and sexual desire was stronger for women than for men. Implications of these findings for maintaining sexual desire in long-term relationships are discussed.

*Keywords:* sexual desire, motivation, close relationships, gender differences, daily experience methods

*I know nothing about sex, because I was always married.*—Zsa Zsa Gabor

With this statement, Zsa Zsa highlights a common belief about the decline of sexual interest and activity in long-term relationships. Lack of sexual desire is the most common presenting problem at sex therapy clinics (e.g., Beck, 1995; Hawton, Catalan & Fagg, 1991). In the American survey conducted by Laumann and his colleagues, a lack of sexual desire was reported by 32% of women and 15% of men between the ages of 18 and 29 years (Laumann, Gagnon, Michael, & Michaels, 1994). Recent books by sex therapists and clinicians with such titles as *Rekindling Desire: A Step-by-Step Program to Help Low-Sex and No-Sex Marriages* (McCarthy & McCarthy, 2003) and *Reclaiming Desire: Four Keys to Finding Your Lost Libido* (Goldstein & Brandon, 2004) target couples who seek to rekindle sexual intimacy and passion in their relationships. In this article, we introduce and test *approach relationship goals* (i.e., goals focused on the pursuit of positive experiences in one's relationship such as fun, growth, and development) as a factor that may

help couples to maintain sexual desire over the course of their relationships.

### Sexual Desire and Relationship Quality

Although there is no widely accepted definition of sexual desire among researchers and theorists (Levine, 2003), central to many definitions is the need, drive, or motivation to engage in sexual activities (Breznsnyak & Whisman, 2004; Clayton et al., 2006; Diamond, 2004).<sup>1</sup> Several large-scale surveys have shown that sexual desire as well as the related constructs of sexual satisfaction and sexual frequency decline with the length of time that partners have been in a relationship (e.g., Johnson, Wadsworth, Wellings, & Field, 1994; Klusmann, 2002). One large survey of German college students revealed that as duration of partnership increased, the frequency of sexual intercourse and sexual satisfaction declined in both women and men. Further, whereas men's sexual desire remained relatively stable over the course of a relationship, women's sexual desire dropped steadily after about 1 year of dating (Klusmann,

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<sup>1</sup> Although we were centrally concerned with the motivational component of sexuality (i.e., sexual desire), there is substantial overlap between sexual desire and the related constructs of sexual arousal and enjoyment. The traditional "human sex response cycle" of Masters and Johnson (1966) and Kaplan (1979) depicts sexual desire as a spontaneous force that itself triggers sexual arousal. In more recent years, however, therapists and researchers have begun to challenge this model, particularly Basson and colleagues (Basson et al., 2004) who have suggested that sexual arousal, desire, and enjoyment co-occur and can reinforce each other. Many people report that their sexual desire increases during sexual intercourse; that is, as they begin to be aroused and enjoy the sexual experience, they recognize that their sexual desire increases, and they become motivated to become even more aroused (Levine, 2002). For these reasons, in some of the studies in the current article, we assessed sexual arousal and enjoyment in addition to sexual desire in order to more fully capture the interrelated components of sexual desire.

2002). Another study documented that the association between relationship duration and reduced frequency of intercourse was stronger than the association between age and sexual frequency (Johnson et al., 1994). In short, sexual desire typically peaks at the beginning of relationships when partners are just getting to know each other and often decreases over the course of relationships (Basson, 2002; Levine, 2003).

Because both sexual desire and sexual satisfaction play key roles in determining the quality of intimate relationships, relationship scholars and therapists should care about the decline of sexual desire. Many studies of couples who voluntarily attend sex therapy clinics provide support for the idea that low sexual desire is associated with decreased levels of relationship satisfaction, both for individuals with low desire and for their partners (e.g., McCabe, 1997; Trudel, Landry, & Larose, 1997). More recent studies have also documented similar associations between sexual desire and relationship satisfaction in community samples of married couples (Brezsnyak & Whisman, 2004) and dating couples (Regan, 2000; Sprecher, 2002). Further, many empirical studies have documented a significant positive association between sexual satisfaction and dating and marital quality (Yeh, Lorenz, Wickrama, Conger, & Elder, 2006; see review by Sprecher & Cate, 2004). Sex therapists have similarly noted that when sexuality functions well in a marriage, it contributes substantially to the marital bond. However, dysfunctional or nonexistent sexuality robs the marriage of intimacy, satisfaction, and stability (McCarthy, 1999).

While a wealth of research has shown that sexual desire contributes to relationship quality and stability, less research has investigated the factors that help promote and sustain sexual desire in relationships. In this article, we suggest that the adoption of approach relationship goals may help couples to maintain sexual desire over the course of their relationships. We first introduce the approach–avoidance theoretical perspective guiding this research and apply this theory to the study of sexuality in intimate relationships. We then present the results of three studies designed to test our hypotheses concerning the link between approach relationship goals and sexual desire. Finally, we discuss the implications of this research for couples and sex therapists who wish to promote healthy sexual functioning in long-term relationships.

### Approach–Avoidance Motivational Framework

Several theories of motivational processes postulate the existence of distinct approach (also called appetitive) and avoidance (also called aversive) motivational systems (see reviews in Carver, Sutton, & Scheier, 2000; Elliot & Covington, 2001). For instance, Gray's (1987) neuropsychological model of motivation posits appetitive and aversive motivational systems, referred to as the behavioral approach system (BAS) and the behavioral inhibition system (BIS; see also Carver & White, 1994). Specifically, the BAS is an appetitive system that is primarily sensitive to positive stimuli or signals of reward, whereas the BIS is an aversive system that is primarily sensitive to negative stimuli or signals of punishment. Gray (1990) has shown that the BAS is associated with feelings of hope, whereas the BIS is associated with feelings of anxiety. In a study of motivational dispositions and daily events, Gable, Reis, and Elliot (2000) found that participants with higher BAS sensitivity reported experiencing more daily positive affect than those with lower BAS sensitivity, while participants with

higher BIS sensitivity reported experiencing more daily negative affect than those with lower BIS sensitivity.

The approach–avoidance motivational distinction has been particularly helpful in understanding motivation in interpersonal relationships. Basing their work on that of early social motivation theorists (e.g., Boyatzis, 1973; Mehrabian, 1976), Gable and colleagues have recently distinguished between approach and avoidance social goals (Elliot, Gable, & Mapes, 2006; Gable, 2006b). Whereas approach social goals direct individuals toward potential positive outcomes such as intimacy or growth in their relationships, avoidance social goals direct individuals away from potential negative outcomes such as conflict or rejection. For example, in a discussion about child care, a husband who has strong approach goals may be concerned with wanting the discussion to go smoothly and wanting both partners to be happy with the outcome. In contrast, a husband with strong avoidance goals may be more concerned with avoiding conflict about child care and preventing both partners from being unhappy with the outcome (Gable, 2006b). These goals are flexible forms of regulation that may take on diverse manifestations; they may focus on a specific relationship or relationships in general, they may focus on close relationships or acquaintances, and they may focus on a variety of relational concerns such as sexuality, intimacy, and parenting (Dowson & McInerney, 2003; Sorokin & Rook, 2004). In this article, we are specifically concerned with individuals' goals in their romantic relationships (in Studies 1 and 2) and in their interpersonal relationships more generally (in Study 3).

Just as BAS and BIS are associated with distinct emotional outcomes, research has also shown that approach and avoidance social goals predict different social outcomes (Gable, 2006b; Impett, Gable, & Peplau, 2005). In three short-term longitudinal studies, approach goals were associated with more positive social attitudes, more satisfaction with social bonds, and less loneliness, whereas avoidance goals were associated with more negative social attitudes, relationship insecurity, and more loneliness (Gable, 2006b). In a daily experience study of dating couples, on days when individuals made sacrifices for approach motives, they experienced greater positive affect and relationship satisfaction; on days when they sacrificed for avoidance motives, they experienced greater negative affect, less relationship satisfaction, and more conflict (Impett, Gable, & Peplau, 2005). In short, the approach system (but not the avoidance system) is associated with positive emotional and social outcomes.

### Applying the Approach–Avoidance Motivational Framework to Sexuality

Central to many definitions of sexual desire is the need or motivation to engage in sexual activities or the pleasurable anticipation of such activities in the future (Brezsnyak & Whisman, 2004; Clayton et al., 2006; Diamond, 2004). In short, sexual desire involves the potential rewards and the positive emotional experience that are characteristic of the approach motivational system. In addition to predicting positive affect and relationship satisfaction (Gable, 2006b; Gable et al., 2000; Impett, Gable, & Peplau, 2005), approach relationship goals may also be associated with daily sexual desire and the maintenance of sexual desire over time. One possible reason why approach relationship goals may promote sexual desire concerns people's motives or reasons for engaging in

sexual activity with a partner (Cooper, Shapiro, & Powers, 1998; Impett, Peplau, & Gable, 2005). People who pursue positive experiences, such as growth and development, in their relationships may view sexual activity as one way to create positive, intimate experiences with a partner. Therefore, compared with people with weak approach relationship goals, those with strong approach relationship goals may think more about sex, be more sensitive to their partners' cues, create environments that promote intimate interaction, and act more readily upon potential sexual encounters. Previous research has shown that approach motives and goals are primarily linked to outcomes through an exposure process (Elliot et al., 2006; Gable, 2006b; Gable et al., 2000). That is, individuals with strong approach goals or motives tend to report experiencing a greater number of positive events (but not fewer negative events). Therefore, individuals with strong approach goals are likely to experience a greater number of positive events and positive emotions (including desire) with their partners. Because of these previous findings, we believe that approach goals in close relationships will be more strongly related to sexual desire than will avoidance goals because approach goals are primarily associated with positive events (likely through processes that lead to increased exposure) and avoidance goals have not been linked reliably to positive events.

It is also likely that people with strong approach goals for their relationships in general may also engage in daily sexual activity for approach reasons such as pleasing a partner or enhancing intimacy in the relationship. Repeatedly engaging in sex for approach reasons, in turn, may promote greater sexual desire. A recent cross-sectional study of late adolescent girls showed that engaging in sex for approach goals (e.g., to express love, for physical attraction) was positively associated with sexual satisfaction (Impett & Tolman, 2006). Based on this research, we predicted that individuals with strong approach relationship goals would report engaging in sexual activity for approach reasons, in turn, promoting greater sexual desire.

### Gender and Sexual Desire

Many lines of research demonstrate that men show more interest in sex than do women (see review by Baumeister, Catanese & Vohs, 2001). For example, men think about sex more often than women do (Laumann et al., 1994), report more frequent sexual fantasies (Beck, Bozman, & Qualtrough, 1991), and report greater feelings of sexual desire (Leitenberg & Henning, 1995). Further, men and women differ in their preferred frequency of sex; when dating and marriage partners disagree about sexual frequency, men usually want to have sex more often than women (Julien, Bouchard, Gagnon, & Pomerleau, 1992; Sprecher & Regan, 1996).

Complementing these descriptive gender differences is research demonstrating that women's sexual desire may be more closely tied to the interpersonal aspects of the relationships than is men's desire (see review by Peplau, 2003). For instance, when Regan and Berscheid (1999) asked young adults to define sexual desire, men were more likely than women to emphasize physical pleasure and sexual intercourse, whereas women were more likely than men to emphasize the emotional or relational side of sexual desire. Women are more likely than men to engage in sex to enhance commitment and express love for their partners (Basson, 2002; Impett, Peplau, & Gable, 2005). Taken together, these lines of

research suggest that women's sexual desire may be more sensitive than men's to relationship dynamics, and in particular, to women's goals for the relationship. For this reason, a secondary goal of the current research was to explore whether the association between approach relationship goals and sexual desire is stronger for women than for men.

### Hypotheses and Research Overview

We conducted three studies of individuals in dating relationships to test several predictions from approach-avoidance motivational theory about the maintenance of sexual desire in dating relationships. Study 1 was a 6-month longitudinal study of individuals in dating relationships that included biweekly assessments of sexual desire. In this study, we tested the hypothesis that the adoption of approach relationship goals would buffer against declines in sexual desire over time. Study 2 was a 2-week daily experience study of individuals in dating relationships designed to extend the findings from Study 1 by testing whether approach sexual goals would mediate the link between approach relationship goals and sexual desire. Study 3 was an additional 2-week daily experience study that included (a) a more general measure of social (as opposed to relationship-specific) approach goals, (b) a more detailed measure of sexual goals that distinguished between self-focused and other-focused goals, and (c) measures of positive and negative relationship events. These last measures enabled us to examine how perceptions of the daily relationship climate influence sexual desire and whether relationship events moderate the association of approach goals with sexual desire. In all three studies, we conducted additional analyses to examine the effects of approach goals on sexual desire beyond the influence of how long people have been involved in their relationships, how satisfied they are with their partners, and how frequently they engage in sexual activity. Finally, in all three studies, we examined gender as a moderator of the link between approach goals and sexual desire, exploring the possibility that the association may be stronger for women than for men as women's sexual desire may be particularly sensitive to women's goals for their relationships.

### Study 1

We tested three main predictions in a 6-month longitudinal study of college students in dating relationships: (a) Individuals with strong approach goals would report higher sexual desire at study entry than individuals with weak approach goals; (b) individuals who began the study with weak approach relationship goals would experience decreases in sexual desire over the course of the study, whereas individuals who began the study with strong approach relationship goals would not experience such decreases; and (c) avoidance relationship goals would not be significantly associated with sexual desire. Finally, we explored gender as a moderator of the association between approach relationship goals and sexual desire.

### Method

#### *Participants and Procedure*

Sixty-nine Northwestern University undergraduate students (34 men, 35 women) were recruited via flyers posted around campus

to participate in a 6-month longitudinal study of dating processes. Eligibility criteria required that each participant be: (a) a first-year undergraduate at Northwestern University, (b) involved in a dating relationship of at least 2 months' duration, (c) between 17 and 19 years old, (d) a native English speaker, and (e) the only member of a given couple to participate in the study. Participants who completed all components of the study were paid \$100; those who missed some were paid a prorated amount. At the beginning of the study, most participants were 18 years old (7% were 17, 81% were 18, and 12% were 19) and White (74% White, 12% Asian American, 3% Hispanic, 1% African American, and 10% other). On average, participants had been dating their partner for a little over 1 year ( $M = 13$  months; range = 2–42 months). During the 6-month study, 26 participants (38%) broke up with their romantic partner; they were included in the analyses until the breakup.<sup>2</sup>

This study was part of a larger investigation of dating processes that was divided into four parts: (a) an initial 60-min questionnaire sent via campus mail, (b) a 90-min lab-based session involving additional questionnaires and training for the online sessions, (c) a 10- to 15-min online questionnaire every other week for 6 months (14 in total), and (d) a 60-min lab-based session at the end of the 6-month period. During the training for the online sessions, a researcher reviewed the procedures for the completion of the biweekly surveys, specifically emphasizing that participants should complete their surveys every other Wednesday evening and that their responses were confidential (i.e., they used a password to log onto the server). To bolster and verify compliance, we sent participants reminder e-mails if they forgot to complete a survey on time, and financial incentives were linked to completing each survey. Only surveys received within 48 hr of when they were due were retained in the data set. Participant retention was excellent: All 69 participants completed the study, and 67 of them completed at least 12 of the 14 online measures on time. Fourteen participants failed to complete the measure of approach and avoidance relationship goals correctly, leaving the final sample at 55 participants.<sup>3</sup>

### Measures

**Approach and avoidance relationship goals.** As part of the initial questionnaire, participants completed a 4-item measure assessing *approach relationship goals* (e.g., "I will be trying to deepen my relationship with my romantic partner" and "I will be trying to move toward growth and development in my romantic relationship";  $\alpha = .86$ ) and another assessing *avoidance relationship goals* (e.g., "I will be trying to avoid disagreements and conflicts with my romantic partner" and "I will be trying to make sure that nothing bad happens in my romantic relationship";  $\alpha = .66$ ; Gable, 2006a). All questions were answered on 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*), and each scale was calculated as an average score of the ratings on the 4 items. In the current study, a two-factor-solution principal components analysis with varimax rotation explained 60% of the scale variance. The first factor (35% of explained variance) included the four approach relationship goals items, and the second factor (25% of explained variance) included the four avoidance goals items. The correlation between the two subscales was  $.21$ ,  $p = .12$ .

**Sexual desire.** As part of the 14 biweekly online questionnaires, participants answered questions about their sexual desire for and participation in sexual activities with their dating partner. (These

activities were not limited to sexual intercourse.) Participants completed a two-item partner-specific measure of sexual desire, answering the questions "I feel a great deal of sexual desire for my partner" and "When my partner and I have sexual contact, I enjoy it a great deal" on 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*). Within each of the 14 waves of online data collection, the correlations between these two items were quite high ( $r_s = .69$ – $.98$ ,  $p_s < .001$ , with an average correlation across these waves of  $.91$ ). We also assessed frequency of sexual contact with one's partner. Participants answered the question "How many times did you have sexual contact with your partner over the last 2 weeks?" by typing in a number rather than answering on a response scale.

**Relationship satisfaction.** Participants answered one question designed to measure relationship satisfaction as part of the 14 biweekly online questionnaires. Specifically, they responded to the statement "I am satisfied with my relationship" on 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*).

### Results

Participants reported an average of 3.16 ( $SD = 3.92$ ) acts of sexual contact with their partner per 2-week time period of the study. The central hypotheses guiding this study were that approach relationship goals would predict elevated sexual desire at study entry and buffer against declines in sexual desire over time. The two-level data structure included measures assessed on each of the online questionnaires (Level 1) nested within each participant (Level 2). For example, participants who completed all waves of online data collection reported their level of sexual desire on 14 different occasions. Traditional ordinary least squares regression methods assume independence of observations, a criterion that is typically violated when the same individual completes the same measures repeatedly. Therefore, we analyzed the data using multilevel modeling techniques (Raudenbush & Bryk, 2002) with the MIXED procedure in SAS (Littell, Milliken, Stroup, & Wolfinger, 1996). Multilevel modeling approaches provide unbiased hypothesis tests by simultaneously examining variance associated with each level of nesting. A strength of multilevel modeling techniques is that they can readily handle an unbalanced number of cases per person (i.e., number of surveys completed), giving greater weighting to participants who provide more data (Snijders & Bosker, 1999). Following Singer and Willett (2003), we permitted the intercept and slope terms for approach relationship goals to vary randomly; the slope terms for the other predictors were treated as fixed. Finally, all variables were standardized prior to analyses; consequently the coefficients represented changes in standard deviation units of the dependent variable (i.e., sexual desire) associated with a standard deviation unit of the predictor variable. Thus, the coefficients are a convenient measure of effect size.

<sup>2</sup> Participant sexual orientation was not assessed in Studies 1 and 3.

<sup>3</sup> These 14 participants responded to the approach relationship goals questionnaire items with check marks rather than with the 1–7 rating scale, which meant that we were not able to calculate a score for them. The 55 participants who completed the goals measure correctly did not differ significantly from the 14 who did not on the initial measures of relationship duration, relationship satisfaction, or sexual desire. This problem with the goals measure was subsequently rectified in Studies 2 and 3.



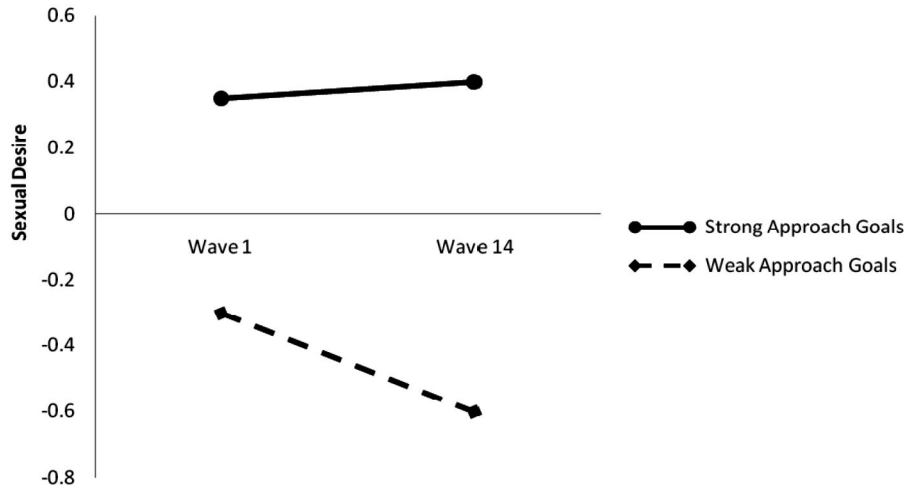


Figure 1. Approach relationship goals as a moderator of the intercept and slope of sexual desire (Study 1). Note: The means were estimated with  $\pm 1$  standard deviation on approach goals.

Before testing our specific hypotheses concerning approach and avoidance relationship goals and sexual desire, we conducted a preliminary analysis to determine if, on average, participants experienced a decline in sexual desire over the course of the study. This analysis included time as a predictor of the intercept and the slope of sexual desire. In this and all subsequent analyses, time was coded such that the first wave of data collection was 0 and the final wave was 13. A significant effect of time on sexual desire,  $\beta = -.02$ ,  $t(66) = -2.52$ ,  $p = .02$ , showed that sexual desire decreased significantly over time at a rate of .02 standard deviation units every 2 weeks; this rate of biweekly decline would lead to an annual decline in sexual desire of approximately half a standard deviation (.52 standard deviation units, to be precise). This decline over time in sexual desire mirrors a similar decline in desire in samples of married couples (e.g., Johnson et al., 1994; Klusmann, 2002).

Next, we tested the hypothesis that approach relationship goals would moderate the intercept and slope of sexual desire. We predicted that participants with strong approach goals would begin the study higher in sexual desire and would not experience the decline in sexual desire that characterized the sample as a whole. To test this hypothesis, we simultaneously entered time, approach goals, and avoidance goals to predict both the intercept and the slope of sexual desire. The results showed that approach goals predicted the intercept of sexual desire,  $\beta = .35$ ,  $t(625) = 3.17$ ,  $p < .01$ , providing support for the hypothesis that participants with strong approach goals would report greater sexual desire at study entry relative to those with weak approach goals. Approach goals also (marginally) moderated the effect of time on sexual desire,  $\beta = .014$ ,  $t(625) = 1.87$ ,  $p = .06$ . The results showed that whereas participants with low approach relationship goals experienced declines in sexual desire over the course of the study, participants with strong approach goals retained relatively high levels of sexual desire over the course of the study. Figure 1 depicts both of these effects. Consistent with our hypotheses, avoidance goals predicted neither the intercept,  $\beta = -.17$ ,  $p = .13$ , nor the slope,  $\beta = -.01$ ,  $p = .42$ , of sexual desire. We then conducted two sets of follow-up analyses. In the first analysis, we controlled for relationship satisfaction and duration (both the intercept and slope terms), and approach relationship goals remained significant predictors of both

the intercept,  $\beta = .28$ ,  $t(470) = 2.64$ ,  $p < .01$ , and slope of sexual desire,  $\beta = .015$ ,  $t(470) = 2.16$ ,  $p < .05$ . In the second analysis, we controlled for the frequency with which participants engaged in sexual intercourse across the 14-day study, and approach relationship goals remained significant predictors of both the intercept,  $\beta = .34$ ,  $t(469) = 3.03$ ,  $p < .01$ , and slope of sexual desire,  $\beta = .02$ ,  $t(469) = 2.34$ ,  $p < .01$ , pointing to the robust nature of these findings.<sup>4,5</sup>

The final goal of this study was to explore whether the association between approach relationship goals and sexual desire is stronger for women than for men. To examine this possibility, we included six additional terms involving gender (coded as 1 = men and  $-1$  = women) to the primary analysis described above. Specifically, we examined whether gender moderated the intercept and slope effects for sexual desire and whether gender moderated any of the associations of approach or avoidance relationship goals with the intercept and slope of sexual desire. This analysis revealed a significant gender effect on the sexual desire intercept,  $\beta = .18$ ,  $t(591) = 2.04$ ,  $p = .04$ , indicating that men reported greater sexual desire than did women at the beginning of the study. There was no significant

<sup>4</sup> We conducted additional analyses in which we analyzed both of the individual-item dependent measures of sexual desire separately (i.e., sexual desire and enjoyment). When we included both approach and avoidance goals in an equation simultaneously, approach goals significantly predicted the intercepts of both sexual desire,  $\beta = .33$ ,  $t(469) = 3.05$ ,  $p < .01$ , and enjoyment,  $\beta = .24$ ,  $t(467) = 2.17$ ,  $p < .05$ ; further, approach goals marginally predicted the slope of sexual desire,  $\beta = .013$ ,  $t(469) = 1.77$ ,  $p = .077$ , and significantly predicted the slope of sexual enjoyment,  $\beta = .02$ ,  $t(467) = 2.96$ ,  $p = .003$ , when both the intercept and the slope of relationship satisfaction and duration were controlled. There were no significant associations between avoidance relationship goals and either of the individual item-dependent measures of sexual desire.

<sup>5</sup> In all of the studies reported in this article, we tested for interactions between approach and avoidance goals, and none of these effects was significant. Furthermore, once the interaction terms were added, the effects for the intercept and the slope of approach goals (in Study 1) and the effects for approach goals in Studies 2 and 3 remained significant.

gender effect on the sexual desire slope, however,  $\beta < .01$ ,  $t(591) = 0.67$ ,  $p = .51$ . Gender also moderated the effect of approach goals on the intercept of sexual desire,  $\beta = -.33$ ,  $t(591) = 3.63$ ,  $p < .001$ , suggesting that the association between approach goals and sexual desire at study entry was stronger for women than for men. Finally, gender did not significantly moderate the effect of approach goals on the slope of sexual desire,  $\beta = -.012$ ,  $t(591) = -1.43$ ,  $p = .15$ . This result suggests that men and women with weak approach goals did not significantly differ in the tendency to experience decreased sexual desire over time, although this nonsignificant effect trended in the direction of approach goals more positively predicting the slope of sexual desire for women than for men.

### Brief Discussion

Study 1 provided evidence for the two hypotheses linking approach relationship goals and sexual desire. Not only did approach relationship goals predict greater sexual desire at study entry, but having strong approach relationship goals buffered against declines in sexual desire over a 6-month period. Avoidance goals were not significantly associated with sexual desire at the beginning of the study or trajectories of sexual desire over time. Finally, the association between approach relationship goals and sexual desire at the beginning of the study was stronger for women than for men, pointing to the particular importance of goals focused on obtaining positive outcomes in romantic relationships for enhancing women's sexual desire. Why do approach relationship goals buffer against declines in sexual desire over time? Study 2 tested the hypothesis that approach relationship goals promote increased sexual desire during daily sexual interactions, given that people who typically pursue approach goals in their relationships may also be highly motivated to pursue shorter term approach goals, such as enhancing intimacy and closeness, during their sexual interactions with a partner (Gable, 2006b). In addition, Study 2 tested approach sexual goals as a possible mediator of the association between approach relationship goals and sexual desire.

### Study 2

We tested three main predictions in a 2-week daily experience study of college students in dating relationships: (a) Approach relationship goals would be associated with increased sexual desire in day-to-day sexual interactions, (b) approach sexual goals would mediate the association between approach relationship goals and sexual desire; and (c) avoidance relationship goals would not be significantly associated with daily sexual desire. In addition, as in Study 1, we examined gender as a possible moderator of the association between approach relationship goals and sexual desire, exploring the possibility that the association would be stronger for women than for men.

### Method

#### Participants and Procedure

The study was advertised as an examination of dating relationships, and participants received credit toward psychology coursework at the University of California, Los Angeles, in exchange for participation. To be eligible, participants had to: (a) be currently involved in a dating (not a marital) relationship, (b) see their partner at least 5 days per week (i.e., no long-distance relationships), and (c) be the only member of a given couple to participate in the study. Of the 121 participants (55 men, 66 women) who completed the study, 2 were engaged to be married, and 18 were cohabitating; the mean relationship length for all participants was 18 months (range = 1 month–8 years). Participants ranged in age from 18 to 38 years ( $M = 20.2$ ,  $SD = 2.6$ ). The sample was ethnically diverse: 5% were African American, 36% were Asian or Pacific Islander, 15% were Hispanic, 37% were White, and 7% self-identified as multi-ethnic or other. In addition, all participants identified as heterosexual except one gay man, and he was included in the study.

During an initial session, each participant was given 14 surveys, each containing the daily measures, one for each night of the week. A researcher then reviewed the procedures for completion of the daily surveys, specifically emphasizing that participants should begin completing their surveys that evening, that they should complete one survey each night before going to bed (even if they did not engage in sex on that particular day), that their responses were confidential, that they should not discuss their surveys with their partner, and that if they missed a day, they should leave that particular survey blank. To bolster and verify compliance with the daily schedule, we asked participants to return completed surveys every 2–3 days to a locked mailbox located outside the laboratory. As an incentive, each time participants handed in a set of surveys on time, they received a lottery ticket for one of several cash prizes (\$100, \$50, \$25) to be awarded after the study. Participants who did not return a particular set of surveys on time were reminded by phone or e-mail. Only daily surveys returned on time were treated as valid and retained in the data set. In total, participants completed 1,549 daily surveys on time, an average of 12.8 days per person. Ninety percent of the participants completed all 14 daily reports on time.

#### Background Measures

In their initial session in the laboratory, participants completed a questionnaire with basic demographic information (i.e., gender, age, ethnicity, relationship duration), as well as the same measure of approach and avoidance relationship goals used in Study 1 (Gable, 2006a). They were instructed to answer the questions about their goals for their relationships over the next few months. In the present study,  $\alpha = .78$  for approach social goals and  $\alpha = .79$  for avoidance social goals. The correlation between the two subscales was  $.57$ ,  $p < .001$ . In addition, participants completed a standard 5-item measure

of relationship satisfaction (Rusbult, Martz, & Agnew, 1998). Participants responded to such statements as "Our relationship makes me happy" on 9-point scales (0 = *do not agree at all*, 8 = *agree completely*). In this sample,  $\alpha = .89$ .

### Daily Measures

If participants had engaged in sexual intercourse since they had completed the previous day's survey, they completed measures of sexual desire and sexual goals.<sup>6</sup>

*Sexual desire.* Each time that they engaged in sexual intercourse, participants answered two questions designed to measure their sexual desire on 7-point scales (1 = *very low*, 7 = *very high*). More specifically, they responded to the following two items: "Rate your own level of sexual desire *just prior to engaging in sex*," and "Rate your own level of sexual desire *during sex*." A composite sexual desire variable was created by averaging the responses to these two questions ( $\alpha = .64$ ).

*Sexual goals.* Each time they engaged in sexual intercourse, participants responded to a nine-item measure of sexual goals adapted from Cooper et al. (1998) and used by Impett, Peplau, & Gable (2005). Participants rated the importance of five approach and four avoidance goals in influencing their decision to engage in sex on 7-point scales (1 = *not at all important*, 7 = *extremely important*). The approach items were "to pursue my own sexual pleasure," "to feel good about myself," "to please my partner," "to promote intimacy in my relationship," and "to express love for my partner." The avoidance items were "to avoid conflict in my relationship," "to prevent my partner from becoming upset," "to prevent my partner from getting angry at me," and "to prevent my partner from losing interest in me." The within-person correlation between approach and avoidance sexual goals was .03,  $p = .49$ . The reliability coefficients were .71 for approach goals and .90 for avoidance goals.

### Results

Participants reported a total of 480 sexual interactions. On average, participants reported engaging in sexual intercourse on 4 days during the 2-week study ( $SD = 2.3$ ; range = 1–10 days). A central goal of this study was to test predictions about the associations between approach and avoidance relationship goals and sexual desire. To address the data nonindependence, analyses were performed using multilevel modeling techniques in the hierarchical linear models (HLM) computer program (HLMwin, Version 5.02; Raudenbush, Bryk, Cheong, & Congdon, 2000). Level-1 (i.e., daily) predictors were centered around each individual's mean across the 14-day study. This technique, known as group-mean centering, accounts for differences between-persons in the sample and assesses whether day-to-day changes from a participant's own mean are associated with changes in the outcome variable, consequently unconfounding between- and within-person effects. As in Study 1, all variables were standardized prior to analyses.

### Relationship Goals and Daily Sexual Desire

The first major hypothesis guiding this study was that approach relationship goals would predict increased daily sexual desire. To test this hypothesis, we entered approach and avoidance relationship goals as simultaneous predictors of daily sexual desire. The results showed that approach relationship goals were positively associated with sexual desire,  $\beta = .20$ ,  $t(117) = 2.84$ ,  $p < .01$ . In contrast, avoidance goals were not significantly associated with sexual desire,  $\beta = -.07$ ,  $p = .31$ .<sup>7</sup> As in Study 1, we then conducted two sets of follow-up analyses. In the first analysis, we controlled for relationship satisfaction and duration, and the association between approach relationship goals and sexual desire remained significant,  $\beta = .17$ ,  $t(115) = 2.23$ ,  $p < .05$ . In the second analysis, we controlled for the frequency with which participants engaged in sexual intercourse across the 14-day study, and the association between approach goals and desire also remained significant,  $\beta = .20$ ,  $t(116) = 2.79$ ,  $p < .01$ , pointing to the robust nature of these findings.

We also explored gender as a moderator of the association between approach relationship goals and sexual desire. Similar to the way we conducted analyses in Study 1, we simultaneously entered approach relationship goals, avoidance relationship goals, gender, and two interaction terms (Approach Relationship Goals  $\times$  Gender; Avoidance Relationship Goals  $\times$  Gender) to predict daily sexual desire. Although there was no main effect of gender,  $\beta = -.06$ ,  $p = .28$ , the interaction between gender and approach relationship goals significantly predicted sexual desire,  $\beta = .21$ ,  $t(114) = 2.08$ ,  $p < .05$ . As shown in Figure 2, the association between approach relationship goals and sexual desire was stronger for women than for

<sup>6</sup> Although people certainly experience sexual desire in the absence of having sexual contact with their partner, we focused only on days on which participants reported engaging in sexual contact with the partner for several reasons. First, we focused on desire just before a concrete event (e.g., sexual activity) to improve recall and lessen retrospective biases (Reis & Gable, 2000). Second, because there are multiple reasons that partners may not have engaged in sexual activities, some benign or related to circumstance (e.g., schedule, proximity of partner) and some related to self or partner desire (e.g., rebuffed sexual advances), it would be extremely difficult to compare event days to nonevent days. Finally, we wanted to examine goals for each sexual event to capture the full range of goals that participants experienced across days, and we suspected that asking participants to report sexual goals in the absence of sexual activity would have been difficult and would have produced unreliable data.

<sup>7</sup> We conducted analyses in which we analyzed both of the individual-item dependent measures of sexual desire separately (i.e., sexual desire just prior to engaging in sex and sexual desire during sex). When we included both approach and avoidance goals in an equation simultaneously, approach relationship goals significantly predicted sexual desire just prior to engaging in sex,  $\beta = .20$ ,  $t(117) = 3.23$ ,  $p < .01$ , and marginally predicted sexual desire during sex,  $\beta = .14$ ,  $t(117) = 1.69$ ,  $p < .10$ . There were no significant associations between avoidance relationship goals and either of the individual item-dependent measures of sexual desire.

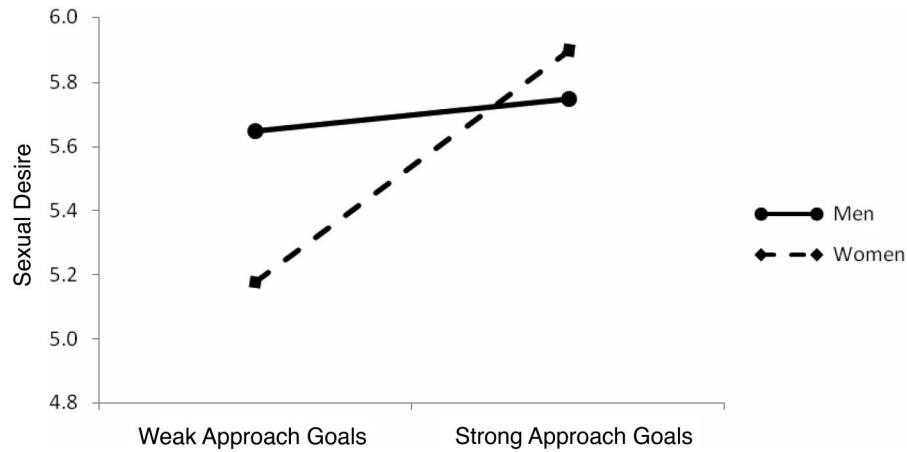


Figure 2. Gender as a moderator of the association between approach relationship goals and sexual desire (Study 2).

men.<sup>8</sup> Neither avoidance relationship goals,  $\beta = -.04, p = .68$ , nor the interaction between gender and avoidance goals,  $\beta = -.06, p = .56$ , significantly predicted daily sexual desire.

*Approach Sexual Goals as a Mediator*

Another hypothesis was that approach sexual goals would mediate the association between approach relationship goals and sexual desire (see Figure 3). Standard (ordinary least squares [OLS]) hierarchical regression analysis based on the principles of Baron and Kenny (1986) was used to test mediation. Data were aggregated across days such that each person received summary scores for approach sexual goals and sexual desire. The first requirement in demonstrating mediation is that the predictor variable be associated with the outcome variable. Indeed, approach relationship goals were significantly associated with sexual desire ( $r = .24, p < .01$ ). The second requirement is to show that approach relationship goals predict the putative mediator, approach sexual goals; indeed they did ( $r = .45, p < .001$ ). The third requirement is that the mediator predicts the outcome variable (i.e., sexual desire) after the predictor variable is controlled and that this effect could plausibly account for the direct effects between the predictor and the outcome variable. Approach sexual goals significantly predicted sexual desire,  $\beta = .33, p < .01$ , and the direct effect from approach relationship goals to sexual desire dropped to nonsignificance,  $\beta = .09, p = .36$ . A significant Sobel (1982) test indicated that the drop in the value of the latter beta was significant

( $z = 2.90, p < .01$ ), providing evidence for mediation. In other words, participants with strong approach relationship goals also tended to engage in sexual activity to pursue positive outcomes, in turn promoting greater daily sexual desire.

*Brief Discussion*

Study 2 replicated and extended the findings from Study 1 in several important ways. First, the results showed that approach relationship goals promoted greater sexual desire during day-to-day sexual interactions. Second, Study 2 demonstrated that approach sexual goals may be an important mechanism by which approach relationship goals promote sexual desire. That is, individuals who are generally oriented toward promoting positive experiences in their relationships also engage in sex to pursue positive outcomes such as a partner's happiness or increased intimacy. Approach sexual goals were, in turn, associated with sexual desire. Third, this study showed that the association between approach relationship goals and sexual desire was stronger for women than for men, providing further evidence that women's sexual desire is more closely tied to relationship dynamics than is men's sexual desire. Fourth, this study showed that avoidance goals were not significantly associated with daily sexual desire.

*Study 3*

Study 3 was another daily experience study of college students in dating relationships, but Study 3 differed from Study 2 in three

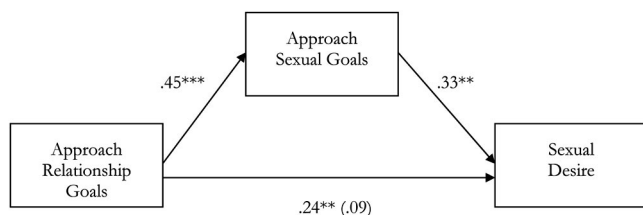


Figure 3. Approach sexual goals as a mediator between approach relationship goals and sexual desire (Study 2). Note: All numbers are ordinary least squares regression coefficients. \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

<sup>8</sup> In addition to testing for interactions with participant gender, we also tested for interactions with ethnicity by creating two dummy-coded variables: 1 = White versus not White, and 2 = Asian versus not Asian. When each of these dummy-coded variables was (separately) added as a covariate, approach relationship goals remained a significant predictor of daily sexual desire. More important, we also created interaction terms between approach goals and both of the dummy-coded variables. Neither of these interaction terms was associated with daily sexual desire. We also tested for interactions with ethnicity in Study 3 using the same strategy; none of the interactions was significant.



important ways. First, the approach relationship goals measure was replaced with a more general measure of approach social goals, allowing us to determine whether the effects were specific to a measure of romantic relationships. Second, Study 3 included a longer, more refined measure of sexual goals that enabled us to determine the relative contributions of both self-focused sexual goals (e.g., “to pursue my own sexual pleasure”) and other-focused sexual goals (e.g., “to please my partner”) to daily sexual desire. Third, Study 3 also included measures of positive and negative relationship events to enable us to examine how people’s perceptions of the daily relationship climate relate to their levels of sexual desire. Each day poses an opportunity for positive events (e.g., partners compliment each other, express their love, or do fun things together) as well as negative events (e.g., they criticize, disagree, or give each other the silent treatment). On the basis of previous research showing a link between relationship satisfaction and increased sexual desire (e.g., Breznsnyak & Whisman, 2004; Sprecher, 2002), we predicted that individuals would experience greater sexual desire on days with more frequent positive events and also on days with less frequent negative events in their relationships. We also predicted that approach social goals would moderate these associations, such that people with strong approach goals would experience even greater sexual desire on days with many positive events because the approach system is sensitive to the presence and absence of positive goal-relevant events (Gable et al., 2000). This prediction is also consistent with work on the upward spiral effect of positive emotions (Fredrickson & Joiner, 2002) and on the role of positive-arousing activities in relationship satisfaction and passionate love (Aron, Norman, Aron, McKenna, & Heyman, 2000). Finally, as in Studies 1 and 2, we explored gender as a moderator of the association between approach social goals and sexual desire.

### Method

#### Participants and Procedure

The study was advertised as an examination of “relationships, sexuality, and health,” and participants received credit toward psychology coursework at the University of California, Los Angeles, in exchange for participation. Participants were told that the study was about daily events in relationships, including sexual interactions. To be eligible, participants had to be: (a) currently involved in a dating relationship, (b) sexually active with their partner, (c) see their partner at least 5 days per week (i.e., no long-distance relationships), and (d) the only member of a given couple to participate in the study. Ninety participants (60 women, 29 men, 1 did not report gender) completed the study. Twelve of the participants did not engage in sexual intercourse during the study; therefore, the final sample consisted of the remaining 77 participants (55 women, 22 men). Two of the participants were married, and 8 were cohabitating; the mean relationship length for all participants was 21 months. Participants ranged in age from 17 to 44 years ( $M = 20.3$ ,  $SD = 3.6$ ).<sup>9</sup> The sample was ethnically diverse: 4% were African American, 32% were Asian or Pacific Islander, 35% were White, 26% identified as multi-ethnic or other, and 3% did not report their ethnicity.

During an initial session, participants were given instructions about how to complete an online survey by logging onto a secure

server each day. The daily survey was posted on a Web site, and participants were given a login name and password to use each time they entered the site. Participants were asked to complete the survey at the beginning of each day for 14 consecutive days. The survey asked about the previous day’s relationship and sexual activities. Participants were instructed to complete the survey by 1 p.m. each day. The date and time of survey completion were automatically recorded by the Web site, and research assistants checked this log each morning and e-mailed reminders to participants who had not yet completed their daily surveys. Only surveys completed on time were accepted and included in the data analyses. As an incentive for on-time completion of surveys, participants who completed between 11 and 14 diaries ( $N = 71$ ) were entered into a lottery drawing for \$100. Participants completed a total of 1,182 daily surveys on time, an average of 13 days per person. Ninety percent of participants completed all their surveys on time.

#### Background Measures

In their initial session in the laboratory, participants completed a questionnaire with basic demographic information (i.e., gender, age, ethnicity, relationship duration), as well as a measure of approach and avoidance social goals (Elliot et al., 2006). Participants responded to four approach statements (e.g., “I will be trying to move toward growth and development in my friendships,” and “I will be trying to deepen my relationship with my friends”) and four avoidance statements (e.g., “I will be trying to make sure nothing bad happens to my close relationships,” and “I will be trying to avoid getting embarrassed, betrayed, or hurt by any of my friends”) on 7-point scales (1 = *not at all true of me*, 7 = *very true of me*). They were instructed to answer the questions about their goals for their relationships over the next few months. In the present study,  $\alpha = .78$  for approach social goals and  $\alpha = .79$  for avoidance social goals. The correlation between the two subscales was  $.36$ ,  $p < .05$ . Relationship satisfaction was also assessed using the same measure as in Study 2 (Rusbult et al., 1998;  $\alpha = .94$ ).

#### Daily Measures

If participants had engaged in sexual intercourse since they had completed their previous day’s survey, they completed measures of sexual desire and sexual goals.

**Sexual desire.** Each time that they engaged in sexual intercourse, participants answered three questions designed to measure their sexual desire on 5-point scales (1 = *not at all*, 5 = *very much*). The questions were: “How much did you *want* to have sex?” “How much did you *enjoy* the sexual experience?” and “How sexually *aroused* were you during this sexual experience?” A composite variable called *sexual desire* was created by averaging the responses to these three questions ( $\alpha = .95$ ).

**Sexual goals.** Cooper et al.’s (1998) sexual motivation scale was used to measure approach and avoidance sexual goals. The scale consists of 29 items and was modified to assess the participants’ most recent sexual experience. This measure categorizes

<sup>9</sup> The 44 year-old participant was an outlier in terms of age. All analyses yielded identical conclusions when this person was excluded.

sexual goals using the approach/avoidance distinction as well as a self-focused/other-focused distinction. These two dimensions are crossed to yield four categories of goals (six discrete goals) for engaging in sex: (a) approach self-focused goals (e.g., "I have sex because it feels good" [Enhancement]), (b) approach other-focused goals (e.g., "I have sex to feel emotionally close to my partner" [Intimacy]), (c) avoidance self-focused goals (e.g., "I have sex to reassure myself that I am attractive" [Self-Affirmation], and "I have sex to help me deal with disappointments in my life" [Coping]), and (d) avoidance other-focused goals, "I have sex because I don't want my partner to be angry with me" [Partner Approval], and "I have sex just because all of my friends are having sex" [Peer Approval]). The reliability coefficients for Enhancement, Intimacy, Self-Affirmation, Coping, Partner Approval, and Peer Approval were .90, .93, .84, .91, .84, and .78, respectively.

*Positive and negative relationship events.* Participants completed measures of positive and negative events adapted from previous research (Gable, Reis, & Downey, 2003). Each day, participants indicated whether they experienced each of nine positive relationship events and nine negative relationship events. Positive event items included: "My partner told me that he/she loves me," "My partner and I participated in an activity that I really enjoy," "During a discussion, I felt understood and appreciated by my partner," "My partner did something that made me feel wanted," "My partner and I did something fun," "My partner did something special for me," "My partner complimented me," "My partner made me laugh," and "My partner and I talked about making our relationship more serious or committed." Negative event items included: "My partner and I had a minor disagreement," "My partner was inattentive and unresponsive to me," "My partner tried to control what I did," "We had a major disagreement," "My partner's behavior made me question his or her commitment to me," "My partner criticized me," "My partner went out with his/her friends instead of spending time with me," "My partner did something that made me feel irritated or angry," and "My partner gave me the silent treatment." Responses to these questions were summed to create separate indices of the total number of positive events and the total number of negative events that participants experienced in their relationships each day.

### Results

Participants reported a total of 283 sexual interactions. On average, participants reported engaging in sexual intercourse on 3.4 days during the 2-week study ( $SD = 2.0$ ; range = 1–14 days). As in Study 2, the data set was hierarchically nested, with days nested within persons. Multilevel modeling in the HLM computer program (HLMwin, Version. 5.02; Raudenbush et al., 2000) was used to examine the hypotheses linking social goals, sexual goals, relationship events, and sexual desire. Level-1 (i.e., daily) predictors were centered around each individual's mean across the 14-day study, enabling us to determine whether day-to-day changes from a participant's own mean were associated with changes in the outcome variable. As in Studies 1 and 2, all variables were standardized prior to analyses.

#### *Social Goals and Daily Sexual Desire*

As in Studies 1 and 2, we predicted that approach social goals would predict increased daily sexual desire. To test this hypothe-

sis, we entered approach and avoidance social goals as simultaneous predictors of daily sexual desire. The results showed that approach social goals were positively associated with sexual desire,  $\beta = .19$ ,  $t(69) = 2.50$ ,  $p < .05$ . In contrast, avoidance goals were not associated with sexual desire,  $\beta = -.01$ ,  $t(69) = .71$ ,  $p = .48$ .<sup>10</sup> As in Studies 1 and 2, we then conducted two sets of follow-up analyses. In the first analysis, we controlled for relationship satisfaction and duration, and the association between approach relationship goals and sexual desire remained significant,  $\beta = .17$ ,  $t(67) = 2.08$ ,  $p < .05$ . In the second analysis, we controlled for the frequency with which participants engaged in sexual intercourse across the 14-day study, and the association between approach goals and desire also remained significant,  $\beta = .19$ ,  $t(67) = 2.22$ ,  $p < .05$ , pointing to the robust nature of these findings.

As in Studies 1 and 2, we explored gender as a moderator of the association between approach social goals and sexual desire. As in Studies 2 and 3, approach social goals, avoidance social goals, gender, and two interaction terms (Approach Goals  $\times$  Gender; Avoidance Goals  $\times$  Gender) were used to predict sexual desire. Neither interaction term reached significance (Approach  $\times$  Gender:  $\beta = -.05$ ,  $p = .76$ ; Avoidance  $\times$  Gender:  $\beta = .14$ ,  $p = .65$ ). This result suggests that the gender effects found in Studies 1 and 2 may be specific to approach goals in romantic relationships, not in social relationships in general.

#### *Sexual Goals and Daily Sexual Desire*

The second major goal of this study was to determine which specific sexual goals were associated with daily sexual desire. Although we were primarily interested in the distinction between self-focused and other-focused approach sexual goals, we also examined the four different measures of avoidance sexual goals. Therefore, we simultaneously entered all six types of sexual goals (Enhancement, Intimacy, Self-Affirmation, Coping, Partner Approval, and Peer Approval) as well as the control variables (relationship duration, relationship satisfaction, and sexual frequency) to predict daily sexual desire. Table 1 displays the results of this analysis. When all six sexual goals were entered simultaneously, both of the measures of approach sexual goals (i.e., Enhancement and Intimacy) significantly predicted daily sexual desire. On days when participants engaged in sexual intercourse more often to pursue positive outcomes either for themselves (i.e., for enhancement goals) or for their relationships (i.e., for intimacy goals), they reported increased sexual desire. Furthermore, these associations remained significant even after we controlled for relationship satisfaction, relationship duration, and frequency of sexual intercourse over the course of the 14-day study. In contrast, two of the measures of avoidance sexual goals (i.e., Self-Affirmation and Coping) were not significantly associated with sexual desire, and

<sup>10</sup> We conducted additional analyses in which we analyzed each of the three sexual desire items separately (i.e., wanting sex, enjoying sex, being sexually aroused). When we included both approach and avoidance goals simultaneously, approach social goals significantly predicted daily arousal,  $\beta = .18$ ,  $t(69) = 2.39$ ,  $p < .05$ , and desire for sex,  $\beta = .15$ ,  $t(69) = 2.04$ ,  $p < .05$ , and marginally predicted daily enjoyment,  $\beta = .15$ ,  $t(69) = 1.91$ ,  $p < .10$ . There were no significant associations between avoidance social goals and any of the individual-item dependent measures of sexual desire.

Table 1  
Associations Between Sexual Goals and Daily Sexual Desire in Study 3

Variable	Outcome: daily sexual desire	
	$\beta$	$t$
Approach sexual goals		
Enhancement goals	.65 <sup>****</sup>	7.87 <sup>a</sup>
Intimacy goals	.21 <sup>**</sup>	2.95 <sup>a</sup>
Avoidance sexual goals		
Self-affirmation goals	-.12 <sup>†</sup>	-1.74 <sup>a</sup>
Coping goals	.04	0.86 <sup>a</sup>
Partner approval goals	-.11 <sup>†</sup>	-1.24 <sup>a</sup>
Peer approval goals	.02	0.11 <sup>a</sup>
Control variables		
Relationship duration	.01	0.08 <sup>b</sup>
Relationship satisfaction	.12 <sup>*</sup>	1.88 <sup>b</sup>
Sexual frequency	-.17 <sup>*</sup>	-1.85 <sup>b</sup>

Note. All numbers are standardized hierarchical linear model coefficients.  
<sup>a</sup>  $df = 244$ . <sup>b</sup>  $df = 68$ .  
<sup>†</sup>  $p < .10$ . <sup>\*</sup>  $p < .05$ . <sup>\*\*</sup>  $p < .01$ . <sup>\*\*\*\*</sup>  $p < .001$ .

the other two measures of avoidance sexual goals (i.e., Self-Affirmation and Partner Approval) were marginally negatively associated with sexual desire.

### Approach Sexual Goals as a Mediator

Another hypothesis, supported in Study 2, was that approach sexual goals would mediate the association between approach social goals and sexual desire. Study 3 used a more detailed measure of sexual goals than that included in Study 2, with many items distinguishing between self-focused (i.e., Enhancement) and other-focused (i.e., Intimacy) approach sexual goals. Before testing for mediation, we examined associations between approach social goals and both types of approach sexual goals. Approach social goals were not associated with enhancement sexual goals,  $\beta = .04$ ,  $p = .72$ , but were associated with intimacy sexual goals,  $\beta = .40$ ,  $t(69) = 4.43$ ,  $p < .001$ . Therefore, in the following analyses, we examined intimacy sexual goals as a mediator of the association between approach social goals and sexual desire. We used the aggregated data and the composite measure of sexual desire.

As in Study 2, standard (OLS) hierarchical regression analysis based on the principles of Baron and Kenny (1986) was used to test mediation. Approach social goals were marginally associated with sexual desire ( $r = .20$ ,  $p = .08$ ). Approach social goals were significantly associated with intimacy sexual goals ( $r = .42$ ,  $p < .001$ ). Finally, intimacy sexual goals significantly predicted sexual desire after we controlled for approach social goals,  $\beta = .39$ ,  $p < .01$ , and the marginally significant direct effect from approach social goals to sexual desire dropped to nonsignificance,  $\beta = .04$ ,  $p = .76$ . A significant Sobel (1982) test indicated that the drop in the value of the betas was significant ( $z = 2.36$ ,  $p < .05$ ), providing evidence for mediation. The pattern of results is similar to the one found in Study 2, which is displayed in Figure 3.

### Relationship Events and Daily Sexual Desire

A third aim of this study was to examine whether daily relationship events predicted daily sexual desire and whether approach social goals moderated these associations. Participants reported an average of 4.23 positive events and 1.25 negative events each day. The most common positive events included “my partner told me that he/she loves me” and “my partner made me laugh.” The most common negative events included “my partner did something that made me feel irritated or angry” and “my partner and I had a minor disagreement.” As predicted, on days when participants reported more frequent positive events (than their own average across the 14-day study), they reported significantly greater sexual desire,  $\beta = .26$ ,  $t(249) = 2.69$ ,  $p < .01$ . On days when participants reported more frequent negative events, they reported significantly less sexual desire,  $\beta = -.12$ ,  $t(249) = -2.34$ ,  $p < .05$ .

We further predicted that approach social goals would moderate the association between daily positive relationship events and sexual desire. To test this hypothesis, we predicted daily sexual desire from positive events at Level 1. At Level 2, we included approach social goals (grand mean centered) as a predictor of both the intercept of sexual desire and the slope of positive events with sexual desire. A similar model was used for negative events.

For positive events, approach social goals were a marginally significant predictor of the slope between sexual desire and positive events,  $\beta = .18$ ,  $t(247) = 1.83$ ,  $p = .07$ , such that compared with those with weak approach goals, individuals with strong approach goals experienced a marginally greater increase in sexual desire on days when they reported more positive events (see Figure 4). When relationship duration, sexual frequency, and relationship satisfaction were added as covariates to Level 2, this effect remained marginally significant,  $\beta = .16$ ,  $t(244) = 1.65$ ,  $p < .10$ . We also tested whether approach social goals moderated the association between negative events and desire. Approach social goals were a significant predictor of the slope between sexual desire and negative events,  $\beta = .12$ ,  $t(247) = 2.14$ ,  $p < .05$ , such that compared with those with weak approach goals, individuals with strong approach goals experienced less of a decrease in sexual desire on days when they reported more negative events (see Figure 5). When relationship duration, sexual frequency, and relationship satisfaction were added as covariates to Level 2, this effect remained significant,  $\beta = .12$ ,  $t(244) = 2.08$ ,  $p < .05$ . Additional analyses conducted to determine whether the interactions between approach goals and positive and negative events were further moderated by gender revealed no significant effects.

### Brief Discussion

Study 3 extended the results of the previous two studies in several important ways. First, it showed that approach social goals measured more generally predict daily sexual desire. Second, it extended the findings from Study 2 by showing that approach sexual goals that focus on the self (e.g., to pursue one’s own sexual pleasure) and approach sexual goals that focus on the partner/relationship (e.g., to please one’s partner or enhance intimacy) were both associated with increased sexual desire. Third, it revealed that other-focused approach sexual goals (intimacy goals) mediated the association between approach social goals and daily sexual desire. Fourth, it replicated the results of Studies 2 and 3

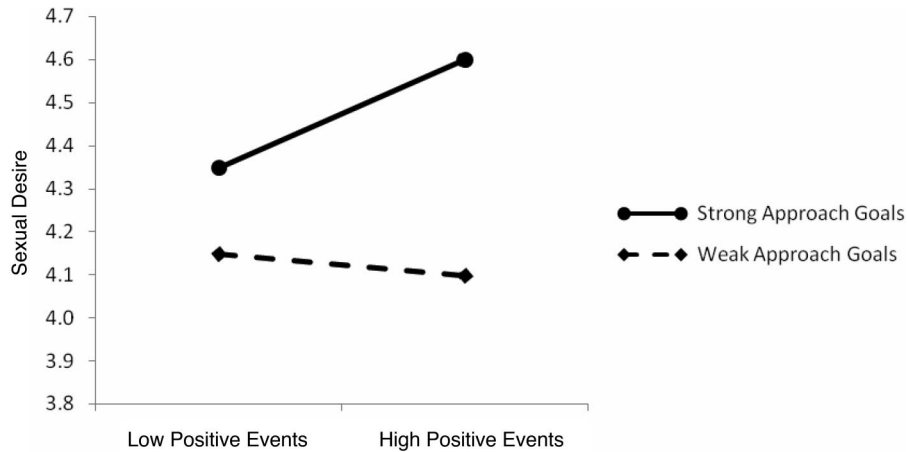


Figure 4. Approach social goals as a moderator of the association between positive events and sexual desire (Study 3).

showing that avoidance social and sexual goals were not significantly associated with daily sexual desire. Finally, it showed that relationship events are an important moderator of the link between approach social goals and daily sexual desire. More specifically, people with strong approach goals experienced even greater sexual desire on days that they reported many positive events and less of a decrease in sexual desire on days that they reported many negative events than individuals with weak approach social goals.

General Discussion

Numerous studies have documented the importance of sexual desire in promoting satisfaction and stability in long-term relationships (e.g., Yeh et al., 2006). Many individuals report that their own or a partner’s low sexual desire creates problems for their relationships (Laumann et al., 1994), and some couples seek sex therapy in order to deal with one or both partners’ lack of sexual desire (McCarthy, 1999). The three studies described in this article provide converging support for the importance of approach goals

in enabling dating couples to maintain high levels of sexual desire. Study 1 showed that the adoption of approach relationship goals buffered against declines in sexual desire over a 6-month period in relationships. Whereas people with weak approach goals (i.e., those possessing a lack of interest in pursuing growth, fun, and development in their relationships) experienced declines in sexual desire over the course of the 6-month study, people with strong approach goals (i.e., those who possessed a great deal of interest in pursuing positive outcomes in their relationships) maintained high levels of sexual desire over the course of the study.

Study 2 showed that approach relationship goals predicted elevated sexual desire during daily sexual interactions and that this association was mediated by approach sexual goals. That is, people who are generally oriented toward creating positive outcomes in their relationships may view sexual interactions as one way to create closeness and intimacy, and their approach sexual goals may, in turn, predict greater desire during daily sexual interactions. Finally, Study 3 showed that approach sexual goals that focus on

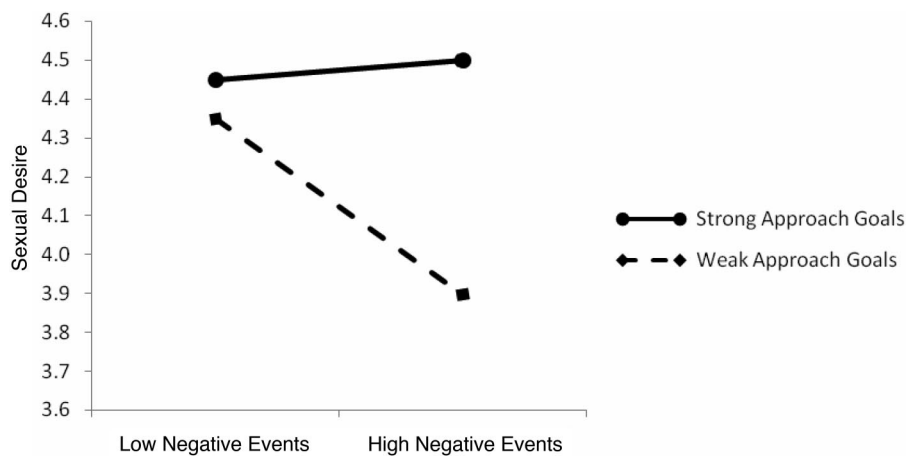


Figure 5. Approach social goals as a moderator of the association between negative events and sexual desire (Study 3).



the self (e.g., to pursue one's own sexual pleasure) and approach sexual goals that focus on others (e.g., to please one's partner or to enhance intimacy) were both associated with daily sexual desire. Moreover, Study 3 showed that people with strong approach goals experienced even greater sexual desire on days that they reported many positive events. This effect is consistent with previous research that has shown that strong approach tendencies are associated with even greater increases in approach behaviors when signals of movement toward the goal (i.e., gains) are experienced (Förster, Higgins, & Idson, 1998). Finally, approach goals seemed to buffer against the deleterious effect that negative relationship events had on sexual desire, such that individuals with strong approach goals reported less of a decrease in desire on days that they reported many negative events than individuals with weak approach goals. Although we did not specifically predict this finding, it is consistent with previous work that has found that approach goals are associated with interpreting ambiguous or neutral information in a positive manner (Strachman & Gable, 2006). Thus, those with strong approach goals may have reframed negative events more positively, which may have attenuated the association between negative events and sexual desire.

The current studies used a combination of longitudinal and daily experience methods to examine the link between approach goals and sexual desire. In Study 1, participants provided biweekly assessments of sexual desire, enabling us to examine the influence of approach goals measured early in relationships on the maintenance of sexual desire over a 6-month period. In Studies 2 and 3, participants provided daily accounts of their sexual desire, enabling us to obtain accurate, daily accounts of sexual desire. The use of a daily experience method enabled us to study relationship processes within the context of daily life in a way that is not possible with more traditional, cross-sectional designs (Bolger, Davis, & Rafaeli, 2003).

These studies contribute to a growing body of research demonstrating the utility of approach-avoidance models of motivation in understanding a broad range of phenomena in everyday life (e.g., Elliot & Sheldon, 1997; Gable et al., 2000). More specifically, the current studies are part of an emerging area of research that focuses on motivation and close relationships (Gable, 2006b; Gable & Strachman, 2007; Impett, Gable, & Peplau, 2005). Previous research guided by Gable's (2006b) model of social motivation has shown that approach (but not avoidance) motives and goals are associated with positive outcomes including positive emotions and relationship satisfaction (Gable, 2006a, 2006b; Impett, Gable, & Peplau, 2005). Our results show that sensitivity to positive relationships processes, such as intimacy, growth, and fun, has important implications for close relationships that are independent and separate from sensitivity to negative processes, such as conflict and rejection. It is particularly important to note that there are far fewer studies focusing on the role of positive processes than those focused on negative processes in the field of close relationships, reflecting possible empirical and theoretical oversights (Gable & Haidt, 2005; Reis & Gable, 2003).

### *Limitations and Future Directions*

The results of these studies provide several interesting directions for future research. First, similar to most of the available research on sexual desire, the current research focused on only one member

of the couple. Oftentimes, the assessment of sexual desire in couples is relative; that is, people perceive that their sexual desire is either too low or too high only after comparing their own desire with their partner's desire (Davies, Katz, & Jackson, 1999; Ellison, 2001). Future research should obtain sexual desire reports from both members of dating or married couples. We also measured the relationship and sexual goals of only one member of the couple; however, goals in relationships are different than goals in other domains such as achievement or other life tasks in that they involve coordinating with another person who has his or her own goals. For example, what are the implications for sexual functioning in a relationship if one partner has strong approach goals and the other partner has weak approach goals? Future research should examine the joint contribution of both partners' goals to both partners' sexual desire, sampling the partners' feelings at specific moments in their daily lives as well as over longer periods of time.

Most of the participants in these studies were college students in relatively new relationships in which sexual desire may have been near its peak. It is possible that the effect of relationship goals on desire might be even more magnified in relationships of greater duration and commitment, such as in married couples. It is also possible that approach goals fail to promote sexual desire in long-term couples who have already experienced steep declines in sexual desire. Future research focusing on relationships of greater duration and commitment is needed to examine these ideas. Another important direction for future research to examine is the benefits of adopting approach goals for other aspects of relationships in addition to sexuality. Desires to pursue growth and development in relationships may also be associated with other positive behaviors and processes such as relationship commitment (Strachman & Gable, 2006), willingness to sacrifice (Impett, Gable, & Peplau, 2005), and willingness to forgive a partner's wrongdoings (Finkel, Rusbult, Kumashiro, & Hannon, 2002).

Another limitation stemmed from the fact that participants' sexual desire was only assessed on days when they engaged in sexual intercourse (in Studies 2 and 3). Individuals sometimes choose to engage in sexual activity in order to please the partner or to avoid conflict rather than out of personal sexual interest (Levine, 2002). Indeed, research has shown that both men and women report having engaged in sexual behavior in the absence of desire (see review by Impett & Peplau, 2003), suggesting that the experience of sexual desire does not entirely overlap with sexual behavior. An interesting direction for future research would be to assess sexual desire both on days that couples engage in sexual activity and on days that sexual activity does not occur. Future research would also benefit from the use of a measure of sexual desire that distinguishes between desire in solitary and dyadic contexts (e.g., Spector, Carey, & Steinberg, 1996). Finally, this research was centrally concerned with the motivational component of the human sexual response (i.e., sexual desire), but the measures used in each of the studies included related sexual constructs such as sexual enjoyment and arousal. Although auxiliary analyses using individual items (i.e., sexual arousal, desire, and enjoyment) did not change the pattern of results, it will be important for future research to include more nuanced measures to capture possibly meaningful distinctions among these interrelated sexual constructs.

Although our theoretical framework proposes that motivation influences sexual desire, our data do not provide a definitive test of this direction of causality. It is also possible that experiencing high

levels of sexual desire may also cause people to pursue approach goals in their relationships. Future research in which both approach and avoidance goals are experimentally manipulated (Strachman & Gable, 2006) would provide a more refined explanation of the findings reported in the current studies. Finally, while the results of the two daily experience studies suggest that the association between approach goals and sexual desire applies equally well to White and Asian participants, it will be important for future research to replicate these effects in a sample of greater racial/ethnic diversity and in non-Western cultures.

### Implications

The results from three studies document the importance of approach goals for predicting elevated levels of sexual desire on a daily basis and maintaining desire over time. Unfortunately, the current study cannot address the question of whether it is possible for people with chronically low levels of approach goals to learn to focus on the positive things to be experienced in their relationships. Nevertheless, it is important to note that, by definition, goals are short-term cognitive representations of wants and fears that should be malleable and sensitive to situational cues (Gable, 2006b). Moreover, previous research has shown that goals can be experimentally manipulated in the achievement domain (e.g., Elliot & Harackiewicz, 1996) and in the highly similar area of regulatory focus research (e.g., Shah, Higgins, & Friedman, 1998). Experimental evidence for changing relationship goals in situ has yet to be conducted, but on the basis of theory and previous experimental research, we expect that it is possible for people's goals in their relationships to change over time.

This research also points to the central importance of considering the role of gender in understanding sexual desire in intimate relationships. Approach goals were a stronger predictor of sexual desire for women than for men in the two studies that used a measure of approach goals in romantic relationships. Thus, the results of this study support a growing body of research that demonstrates the importance of relationship dynamics for women's sexual desire relative to men's (e.g., Basson, 2002, 2006; Peplau, 2003). In recent years, publicity about treatments for men's erection problems focused attention on women's sexuality and provoked a competitive commercial hunt for "the female Viagra" (Tiefer, 2002). This hunt reflects a general medicalization of sexuality; many people are trying to find pharmaceutical "solutions" to what in some cases may be relationship problems. Because women's sexual desire is much more closely tied to their goals in relationships than men's sexual desire, attempts to boost women's sexual desire through pharmacological intervention may be misguided. The results of this research highlight the importance of considering the interpersonal aspects of relationships when thinking about how to treat problems of low sexual desire—for women but also for men.

### Concluding Comments

While a wealth of research has documented important links between sexual desire and relationship quality in intimate relationships (e.g., Regan, 2000; Sprecher, 2002; Yeh et al., 2006), much less research has investigated factors that may help promote and sustain sexual desire in relationships over time. In this article, three

studies documented the utility of approach–avoidance motivational theory as well as the important roles of both approach relationship and sexual goals in helping individuals to maintain high levels of sexual desire.

### References

- Aron, A., Norman, C. C., Aron, E. N., McKenna, C., & Heyman, R. E. (2000). Couples' shared participation in novel and arousing activities and experienced relationship quality. *Journal of Personality and Social Psychology, 78*, 273–284.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173–1182.
- Basson, R. (2002). Women's sexual desire: Disordered or misunderstood? *Journal of Sex and Marital Therapy, 28*, 17–28.
- Basson, R. (2006). Sexual desire and arousal disorders in women. *New England Journal of Medicine, 354*, 1497–1506.
- Basson, R., Leiblum, S., Brotto, L., Derogatis, L., Fourcroy, J., Fugl-Meyer, K., et al. (2004). Revised definitions of women's sexual dysfunctions. *Journal of Sexual Medicine, 1*, 40–48.
- Baumeister, R. F., Catanese, K. R., & Vohs, K. D. (2001). Is there a gender difference in strength of sex drive? Theoretical views, conceptual distinctions, and a review of relevant evidence. *Personality and Social Psychology Review, 5*, 242–273.
- Beck, J. G. (1995). Hypoactive sexual desire disorder: An overview. *Journal of Consulting and Clinical Psychology, 63*, 919–927.
- Beck, J. G., Bozman, A. W., & Qualtrough, T. (1991). The experience of sexual desire: Psychological correlates in a college sample. *Journal of Sex Research, 28*, 443–456.
- Bolger, M., Davis, A., & Rafaeli, E. (2003). Diary methods: Capturing life as it is lived. *Annual Review of Psychology, 54*, 579–616.
- Boyatzis, R. E. (1973). Affiliation motivation. In D. C. McClelland & R. S. Steele, (Eds.) *Human motivation: A book of readings* (pp. 252–276). Morristown, NJ: General Learning Press.
- Brezsnyak, M., & Whisman, M. A. (2004). Sexual desire and relationship functioning: The effects of marital satisfaction and power. *Journal of Sex and Marital Therapy, 30*, 199–217.
- Carver, C. S., Sutton, S. K., & Scheier, M. F. (2000). Action, emotion, and personality: Emerging conceptual integration. *Personality and Social Psychology Bulletin, 26*, 741–751.
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS scales. *Journal of Personality and Social Psychology, 67*, 319–333.
- Clayton, A. H., Seagraves, R. T., Leiblum, S., Basson, R., Pyke, R., Cotton, D., et al. (2006). Reliability and validity of the Sexual Interest and Desire Inventory—Female (SIDI-F), a scale designed to measure severity of female hypoactive sexual desire disorder. *Journal of Sex and Marital Therapy, 32*, 115–135.
- Cooper, M. L., Shapiro, C. M., & Powers, A. M. (1998). Motivations for sex and risky sexual behavior among adolescents and young adults: A functional perspective. *Journal of Personality and Social Psychology, 75*, 1528–1558.
- 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.
- Diamond, L. M. (2004). Emerging perspectives on distinctions between romantic love and sexual desire. *Current Directions in Psychological Science, 13*, 116–119.
- Dowson, M., & McInerney, D. M. (2003). What do students say about their motivational goals? Towards a more complex and dynamic perspective on student motivation. *Contemporary Educational Psychology, 28*, 91–113.

- Elliot, A., & Harackiewicz, J. M. (1996). Approach and avoidance achievement goals and intrinsic motivation: A mediational analysis. *Journal of Personality and Social Psychology, 70*, 461–475.
- Elliot, A. J., & Covington, M. V. (2001). Approach and avoidance motivation. *Educational Psychology Review, 13*, 73–92.
- Elliot, A. J., Gable, S. L., & Mapes, R. R. (2006). Approach and avoidance motivation in the social domain. *Personality and Social Psychology Bulletin, 32*, 378–391.
- Elliot, A. J., & Sheldon, K. M. (1997). Avoidance achievement motivation: A personal goals analysis. *Journal of Personality and Social Psychology, 73*, 171–185.
- Ellison, C. R. (2001). A research inquiry into some American women's sexual concerns and problems. *Women and Therapy, 24*, 147–159.
- Finkel, E. J., Rusbult, C. E., Kumashiro, M., & Hannon, P. A. (2002). Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal of Personality and Social Psychology, 82*, 956–974.
- Förster, J., Higgins, E. T., & Idson, L. C. (1998). Approach and avoidance strength during goal attainment: Regulatory focus and the “goal looms larger” effect. *Journal of Personality and Social Psychology, 75*, 1115–1131.
- Fredrickson, B. L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science, 13*, 172–175.
- Gable, S. L. (2006a). *Approach and avoidance relationship goals*. Unpublished manuscript, University of California, Los Angeles.
- Gable, S. L. (2006b). Approach and avoidance social motives and goals. *Journal of Personality, 74*, 175–222.
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? *Review of General Psychology, 9*, 103–110.
- Gable, S. L., Reis, H. T., & Downey, G. (2003). He said, she said: A quasi-signal detection analysis of daily interaction between close relationship partners. *Psychological Science, 14*, 100–105.
- Gable, S. L., Reis, H. T., & Elliot, A. J. (2000). Behavioral activation and inhibition in everyday life. *Journal of Personality and Social Psychology, 78*, 1135–1149.
- Gable, S. L., & Strachman, A. (2007). Approaching social rewards and avoiding social punishments: Appetitive and aversive social motivation. In J. Shah & W. Gardner (Eds.) *Handbook of motivation science* (pp. 561–575). New York: Guilford.
- Goldstein, A., & Brandon, M. (2004). *Reclaiming desire: Four keys to finding your lost libido*. New York: Rodale.
- Gray, J. (1987). *The psychology of fear and stress* (2nd ed.). New York: Cambridge.
- Gray, J. A. (1990). Brain systems that mediate both emotion and cognition. *Cognition and Emotion, 4*, 269–288.
- Hawton, K., Catalan, J., & Fagg, J. (1991). Low sexual desire: Sex therapy results and prognostic factors. *Behavioral Research and Therapy, 29*, 217–224.
- Impett, E. A., Gable, S. L., & Peplau, L. A. (2005). Giving up and giving in: The costs and benefits of daily sacrifice in intimate relationships. *Journal of Personality and Social Psychology, 89*, 327–344.
- Impett, E. A., & Peplau, L. A. (2003). Sexual compliance: Gender, motivational, and relationship perspectives. *Journal of Sex Research, 40*, 87–100.
- Impett, E. A., Peplau, L. A., & Gable, S. L. (2005). Approach and avoidance sexual motivation: Implications for personal and interpersonal well-being. *Personal Relationships, 12*, 465–482.
- Impett, E. A., & Tolman, D. L. (2006). Late adolescent girls' sexual experiences and sexual satisfaction. *Journal of Adolescent Research, 6*, 628–646.
- Johnson, A. M., Wadsworth, J., Wellings, K., & Field, J. (1994). *Sexual attitudes and lifestyles*. London: Blackwell.
- Julien, D., Bouchard, C., Gagnon, M., & Pomerleau, A. (1992). Insiders' views of marital sex: A dyadic analysis. *Journal of Sex Research, 29*, 343–360.
- Kaplan, H. S. (1979). Hypoactive sexual desire. *Journal of Sex and Marital Therapy, 19*, 3–24.
- Klusmann, D. (2002). Sexual motivation and the duration of partnership. *Archives of Sexual Behavior, 31*, 275–287.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago Press.
- Leitenberg, H., & Henning, K. (1995). Sexual fantasy. *Psychological Bulletin, 117*, 469–496.
- Levine, S. B. (2002). Reexploring the concept of sexual desire. *Journal of Sex and Marital Therapy, 28*, 39–51.
- Levine, S. B. (2003). The nature of sexual desire: A clinician's perspective. *Archives of Sexual Behavior, 32*, 279–285.
- Littell, R. C., Milliken, G., Stroup, W. W., & Wolfinger, R. D. (1996). *SAS system for mixed models*. Cary, NC: SAS Institute.
- Masters, W. H., & Johnson, V. E. (1966). *Human sexual response* (p. 311). Boston: Little, Brown.
- McCabe, M. P. (1997). Intimacy and quality of life among sexually dysfunctional men and women. *Journal of Sex and Marital Therapy, 23*, 276–290.
- McCarthy, B. W. (1999). Marital style and its effects on sexual desire and functioning. *Journal of Family Psychotherapy, 10*, 1–12.
- McCarthy, B. W., & McCarthy, E. (2003). *Rekindling desire: A step-by-step program to help low-sex and no-sex marriages*. New York: Brunner-Routledge.
- Mehrabian, A. (1976). Questionnaire measures of affiliative tendency and sensitivity to rejection. *Psychological Reports, 38*, 199–209.
- Peplau, L. A. (2003). Human sexuality: How do men and women differ? *Current Directions in Psychological Science, 12*, 37–40.
- Raudenbush, S. W., & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage.
- Raudenbush, S. W., Bryk, A. S., Cheong, Y. F., & Congdon, R. T. (2000). *HLM5: Hierarchical linear and nonlinear modeling*. Chicago, Scientific Software.
- Regan, P. C. (2000). The role of sexual desire and sexual activity in dating relationships. *Social Behavior and Personality, 28*, 51–59.
- Regan, P. C., & Berscheid, E. (1999). *Lust: What we know about human sexual desire*. Thousand Oaks, CA: Sage.
- Reis, H. T., & Gable, S. L. (2000). Event-sampling and other methods for studying everyday experience. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (pp. 190–222). New York: Cambridge University Press.
- Reis, H. T., & Gable, S. L. (2003). Toward a positive psychology of relationships. In C. L. Keyes & J. Haidt (Eds.), *Flourishing: The positive person and the good life* (pp. 129–159). Washington, DC: American Psychological Association.
- 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*, 357–391.
- Shah, J., Higgins, T., & Friedman, R. S. (1998). Performance incentives and means: How regulatory focus influences goal attainment. *Journal of Personality and Social Psychology, 74*, 285–293.
- Singer, J. D., & Willett, J. B. (2003). *Applied longitudinal data analysis*. New York: Oxford University Press.
- Snijders, T., & Bosker, R. (1999). *Multilevel analysis: An introduction to basic and advanced multilevel modeling*. London: Sage.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. In S. Leinhardt (Ed.), *Sociological methodology* (pp. 290–312). Washington, DC: American Sociological Association.

Sorkin, D. H., & Rook, K. S. (2004). Interpersonal control strivings and vulnerability to negative social exchanges in later life. *Psychology and Aging, 19*, 555-564.

Spector, I. P., Carey, M. P., & Steinberg, L. (1996). The Sexual Desire Inventory: Development, factor structure, and evidence of reliability. *Journal of Sex and Marital Therapy, 22*, 175-190.

Sprecher, S. (2002). Sexual satisfaction in premarital relationships: Associations with satisfaction, love, commitment and stability. *Journal of Sex Research, 39*, 190-196.

Sprecher, S., & Cate, R. M. (2004). Sexual satisfaction and sexual expression as predictors of relationship satisfaction and stability. In J. Harvey, A. Wenzel, & S. Sprecher (Eds.), *Handbook of sexuality in close relationships*. Mahwah, NJ: Erlbaum.

Sprecher, S., & Regan, P. C. (1996). College virgins: How men and women perceive their sexual status. *Journal of Sex Research, 33*, 3-15.

Strachman, A., & Gable, S. L. (2006). What you want (and do not want) affects what you see (and do not see): Avoidance social goals and social events. *Personality and Social Psychology Bulletin, 32*, 1-13.

Tiefer, L. (2002). Beyond the medical model of women's sexual problems: A campaign to resist the promotion of "female sexual dysfunction." *Sexual and Relationship Therapy, 17*, 127-135.

Trudel, G., Landry, L., & Larose, Y. (1997). Low sexual desire: The role of anxiety, depression, and marital adjustment. *Sexual and Marital Therapy, 12*, 95-99.

Yeh, H.-C., Lorenz, F. O., Wickrama, K. A. S., Conger, R. D., & Elder, G. H. (2006). Relationships among sexual satisfaction, marital quality, and marital instability at midlife. *Journal of Family Psychology, 20*, 339-343.

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