Gettin’ It On vs. Givin’ It Up: The Association Between Sexual Goals, Interdependence and Sexual Desire in Long-Term Relationships

by

Amy Muise

A Thesis
presented to
The University of Guelph

In partial fulfillment of requirements
for the degree of
Doctor of Philosophy
in
Applied Social Psychology

Guelph, Ontario, Canada

© Amy Muise, August, 2011
ABSTRACT

THE ASSOCIATION BETWEEN SEXUAL GOALS, INTERDEPENDENCE AND SEXUAL DESIRE IN LONG-TERM RELATIONSHIPS

Amy Muise
University of Guelph, 2011
Advisors: Dr. Serge Desmarais
Dr. Robin Milhausen

Love and sex change over the course of a relationship. The current research investigates the factors that contribute to sexual desire and sexual satisfaction in long-term couples. In two studies, the association between motivational goals for sex, interdependence, and sexual outcomes were explored. Study 1 was a cross-sectional survey. The results of Study 1 revealed that participants who engaged in sex more often for approach goals reported higher levels of desire, whereas participants who engaged in sex more often for avoidance goals reported lower levels of desire. Study 2 was a 21-day daily experience study involving a subset of the participants from Study 1. The results of Study 2 indicated that on days when participants reported engaging in sex more for approach goals they reported greater sexual desire, whereas on days when participants reported engaging in sex more for avoidance goals they reported lower levels of sexual desire. Partner-focused, as opposed to self-focused sexual goals, were primarily responsible for these associations. In both studies, relationship satisfaction was also associated with higher desire, and this was mediated by the tendency of people who are more satisfied to engage in sex more often for approach goals. In Study 2, approach goals moderated the impact of avoidance goals on sexual desire, and this association differed by gender. Stronger approach goals buffered against declines in sexual desire associated with avoidance goals for women, but not for men. The findings support the utility of
applying a motivational framework to the study of sexuality in established couples and the greater relevance of partner-focused sexual goals in long-term relationships.
Acknowledgments

Many people contributed to the success of this dissertation. Serge Desmarais, you have been a truly wonderful advisor. This process would not have been as successful or enjoyable without your involvement. I am holding you to your promise of lifelong mentorship.

Emily Impett, our connection has been perfect in both timing and research interests. You have helped shaped this project and I look forward to our future collaborations. Your mentorship and friendship has been incredibly valuable this past year.

Robin Milhausen, your passion for sex research continues to inspire me. Thank you for being a mentor on both professional and personal matters, and a friend.

Lorne Campbell, as an honour’s thesis advisor you were key in encouraging me to pursue graduate school. Thank you for bringing everything full circle and being involved in my dissertation.

Ed Herold, you came out of retirement to teach the graduate sexuality course and have been a wonderful mentor ever since that time. You have always believed in my success. Thank you for all of you support, encouragement and research ideas.

Emily Christofides, our research collaboration and friendship have been one of the best parts of my graduate career. My PhD program would have been nearly as enjoyable or successful without your involvement. Thank you for being a great friend and collaborator.

To the two women who I affectionately refer to as my sex researcher bffs, Jocelyn Wentland and Kristen Mark, thank you for all of the inspiration and support over the years. I am in very good company.
To my family, Mom, Dad, Rebecca, thank you for your unconditional support and love. As always, you have helped me make my dreams come true. I could not have done it without you.

And to the person who makes studying long-term relationships personally relevant, James Loewen, your passion and ambition continue to inspire me. I appreciate all of the support and encouragement you have given me over the years. This is only the beginning, I love you.

And lastly, to all the wonderful couples who opened up their relationship and participated in this study, thank you. You made this all possible.
# Table of Contents

Introduction  
  Background: Sexual Desire in Long-Term Relationships 1  
  Sexual Desire 7  
  Sexual Satisfaction 9  
  Motivational Theories of Relationships 11  
  Approach/Avoidance Goals and Sexual Desire 13  
  Interdependence in Relationships 16  
  Interdependence and Sexuality 20  
  Additional Factors Contributing to Sexual Aspects of a Relationship 22  
  The Role of Gender 25  
  Limitations of Past Research and Contributions of the Current Research 26  

The Current Research 27  
Study 1 Overview and Summary of Hypotheses 27  
  Individual Hypotheses 28  
  Partner Hypotheses 29  
  Mediation Hypotheses 29  
Study 1 Method 30  
  Participants and Procedure 30  
  Measures 31  
    Demographic variables 31  
    Interdependence 31  
    Approach and avoidance sexual goals 33  
    Sexual desire 33  
    Sexual satisfaction 34  
    Sexual frequency 34  
Study 1 General Analytic Strategy 34  
Study 1 Results 36  
  Descriptive Statistics 36  
  Sexual Goals and Sexual Outcomes 39  
  The Association Between Sexual Goals and Sexual Desire and Satisfaction 40  
  Interactions Between Gender and Sexual Goals 43  
  Interdependence and Sexual Outcomes 47  
  Mediational Analyses 48  
Study 1 Discussion 52  
Study 2 Overview and Summary of Hypotheses 55  
  Individual Hypotheses 56  
  Partner Hypotheses 57  
  Mediation Hypotheses 58  
Study 2 Method 58  
  Participants and Procedure 58  
  Background Measures 59  
    Demographic variables 59  
    Interdependence 59  
  Daily Measures 60
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interdependence</td>
<td>60</td>
</tr>
<tr>
<td>Sexual desire</td>
<td>60</td>
</tr>
<tr>
<td>Approach and avoidance sexual goals</td>
<td>61</td>
</tr>
<tr>
<td>Study 2 General Analytic Strategy</td>
<td>61</td>
</tr>
<tr>
<td>Study 2 Results</td>
<td>62</td>
</tr>
<tr>
<td>Descriptive Statistics and Correlations</td>
<td>62</td>
</tr>
<tr>
<td>Daily Sexual Goals and Sexual Desire</td>
<td>66</td>
</tr>
<tr>
<td>Interactions Between Gender and Sexual Goals</td>
<td>69</td>
</tr>
<tr>
<td>Sexual Frequency as a Moderator</td>
<td>73</td>
</tr>
<tr>
<td>Lagged-Analyses of Sexual Goals and Desire</td>
<td>73</td>
</tr>
<tr>
<td>Interdependence and Daily Sexual Desire</td>
<td>75</td>
</tr>
<tr>
<td>Mediation Analyses</td>
<td>77</td>
</tr>
<tr>
<td>Lagged-Day Analyses of Interdependence and Sexual Desire</td>
<td>81</td>
</tr>
<tr>
<td>Study 2 Discussion</td>
<td>83</td>
</tr>
<tr>
<td>General Discussion</td>
<td>88</td>
</tr>
<tr>
<td>Methodological Considerations</td>
<td>88</td>
</tr>
<tr>
<td>Approach and Avoidance Goals</td>
<td>88</td>
</tr>
<tr>
<td>Interdependence Theory</td>
<td>91</td>
</tr>
<tr>
<td>Strengths of the Current Study</td>
<td>96</td>
</tr>
<tr>
<td>Limitations</td>
<td>97</td>
</tr>
<tr>
<td>Implications and Future Directions</td>
<td>98</td>
</tr>
<tr>
<td>Conclusions</td>
<td>101</td>
</tr>
<tr>
<td>References</td>
<td>102</td>
</tr>
<tr>
<td>Appendix A. Study 1 Survey</td>
<td>118</td>
</tr>
<tr>
<td>Appendix B. Study 2 Survey</td>
<td>125</td>
</tr>
</tbody>
</table>
List of Tables

Table 1. Means and Standard Deviations of Predictor and Criterion Variables 37

Table 2. Bivariate Correlations for Male and Female Partner’s Sexual Desire, Sexual Satisfaction and Predictor Variables 38

Table 3. Associations Between Sexual Goals and Sexual Outcomes, Controlling for Gender and Sexual Frequency 41

Table 4. Associations Between Partner- and Self-Focused Sexual Goals and Sexual Outcomes, Controlling for Gender and Sexual Frequency 42

Table 5. Gender X Sexual Goals Interaction on Sexual Desire and Sexual Satisfaction 44

Table 6. Association Between Interdependence and Sexual Desire and Satisfaction, Controlling for Gender and Sexual Frequency 48

Table 7. Means and Standard Deviations of Predictor and Outcome Variables for Meal and Female Partner 64

Table 8. Correlations Between Daily Level Predictor and Criterion Variables 65

Table 9. Associations Between Daily Sexual Goals and Sexual Desire 68

Table 10. Associations between Self- and Partner-Focused Daily Goals and Daily Sexual Desire 69

Table 11. Interactions Between Gender and Daily Sexual Goals and Daily Sexual Desire 70

Table 12. Association Between Daily Interdependence and Sexual Desire, Controlling for Daily Sexual Activity 76

Table 13. Association Between Interdependence (Background) and Daily Sexual Desire, Controlling for Gender and Sexual Frequency 77
List of Figures

Figure 1. 
Gender moderating approach goals (self-focused) 

Figure 2. 
Gender moderating approach goals (partner-focused) 

Figure 3. 
Approach X avoidance on sexual desire 

Figure 4. 
Approach X avoidance on sexual satisfaction 

Figures 5-8. 
Sexual goals mediating the association between relationship satisfaction and sexual outcomes 

Figure 9. 
3-way interaction between gender, approach and avoidance goals 

Figures 10 & 11. 
Interactions between approach and avoidance goals, separated by gender 

Figure 12. 
Daily approach goals mediating the association between daily relationship satisfaction and sexual desire 

Figure 13. 
Daily approach goals mediating the association between relationship satisfaction at background and daily sexual desire
Introduction

"During the first year of the wedding, put a quarter in a jar each time you make love. Then during the second year, take a quarter out each time you make love. At the end of the second year go to a good restaurant with what's left..." ~ Anonymous

"Q: What food sucks 80% of the sex drive from a woman?
   A: The wedding cake." ~Anonymous

“What do I know about sex? I'm a married man." ~ Tom Clancy

Popular perception suggests that marriage (or a long term partnership) marks the end of sex in a relationship. Although the frequency, meaning, or nature of sex may look different in long-term partnerships than in newer relationships, the wedding day (or any other specific marker of relational commitment) does not inevitably remove the desire for sex with a partner. What then, are the factors that influence and sustain sexual desire in long-term partnerships? In a relationship, an individual may pursue sex with his or her partner for a variety of reasons, including: to experience physical pleasure, to feel closer to their partner, to avoid having an argument with their partner, or to avoid feeling guilty. Is seeking out positive experiences the same as avoiding negative experiences when it comes to sexual desire in long-term relationships? My interests lie in exploring how pursuing sex for different reasons influences sexual desire in couples and how the quality of romantic relationships shapes an individual’s specific goals for sex. More broadly, I am interested in applying social psychological theories of sexual motivation and interdependence to study sexual desire in long-term couples.

Background: Sexual Desire in Long-Term Relationships

Romantic love and sexual desire have always existed (Hatfield & Rapson, 2007), although it is only in modern times that both have come to be valued and encouraged. Marriage for love and the combining of love and sex within the same relationship is a fairly recent phenomenon (Hatfield & Rapson, 2007). In North America, the relationship
between love and sex has seen several shifts in recent history. Modern ideals have moved from the free love of the sexual revolution in the 1960s, where sex could be experienced outside the bounds of love and a committed relationship; through the sexual oppression of the early 1980s where sex was tied to morality (particularly for women); to the current milieu in which it is commonly held that love and sex can be both detached and highly interconnected (Wouters, 1998). Although it is generally accepted that sex and love can exist separately, for many, sexual desire is highly valued in romantic relationships. As such, in recent years there has been a growing interest among researchers in the relational context of sexuality (Feeney & Noller, 2004).

When asked, university student research participants often indicate that sexual desire is a key feature of romantic love (Meyers & Berscheid, 1997; Regan, 1998a; Regan, Kocan, & Whitlock, 1998). Nevertheless, the predominance of sexual desire in a romantic relationship tends to vary with length of relationship or stage of love. In the social psychology literature, love has often been conceptualized as either passionate or companionate (Hatfield & Walster, 1978). Passionate love, an intensely emotional state of longing for union with another person, is characterized by strong sexual desire between partners. Companionate love, in contrast, is a less intense state of connectedness, trust and reciprocal respect, where strong sexual desire is replaced by increased intimacy. Passionate love is most closely associated with the early stages or “honeymoon” period of a relationship, and companionate love with the later stages (Hatfield, Traupmann, & Sprecher, 1984; Sprecher & Regan, 1998). The transition from passionate to companionate love over the course of a relationship is closely in line with predominant socio-cultural notions that sexual desire fades over time.
Passionate and companionate love stages are consistent with evolutionary perspectives about the formation of adult pair bonds. Since pair bonds require time and close physical proximity to form, the characteristics of the early stage of a relationship include an intense longing for closeness with a partner (Hazan & Diamond, 2000; Tennov, 1979). If partners remain together over time, an attachment bond is formed, which, by definition, is less intense and more predictable and familiar (Eagle, 2007). Therefore, from an evolutionary perspective, feelings of passionate love (which include strong sexual desire) are the mechanism by which attraction becomes attachment. Social and evolutionary psychologists even agree on a timeframe for this shift. Passionate love is thought to last two years, plus or minus six months (Tennov, 1979), and researchers have found that attachment bonds typically form one and a half to three years after a relationship is initiated (Winston, 2004). Predominant social and evolutionary approaches suggest that sexual desire fades over the course of a relationship and is replaced by companionship.

Eagle (2007) argues that the features of attachment work against sexual desire. She suggests that, as infants, humans typically form an attachment bond to a biological parent. The parent and infant are very similar to one another, as a result of sharing half of their genetic material. Nevertheless, it is not advantageous to mate with someone who shares a high proportion of our genes; therefore sexual attraction is not part of the attachment bond. Eagle’s point is that in order for a romantic partner to serve as an attachment figure (which would be important in long-term romantic relationships) they need to be available, familiar and predictable. These characteristics, however, counteract feelings of sexual desire, which she argues is conversely ignited by novelty and
unpredictability. If, in fact, familiarity and predictability are key features of an attachment figure and sexual desire is diminished by these characteristics, then once an attachment bond is formed in a relationship (i.e., one moves to the companionate love stage), it is likely that sexual desire will decrease.

Some anecdotal evidence supports this idea. In his book, *Can Love Last?*, couples’ therapist Stephen Mitchell (2002) argued that sexual desire is strongest in the early stage of a relationship because of the novelty and insecurity that is characteristic of this stage. As couples progress in a relationship, they aim to reduce their insecurities and place boundaries on each other in order to make the relationship more predictable and secure. The factors that make a relationship more comfortable and secure (such as propinquity and predictability) may also be the factors that diminish sexual desire. In *Mating in Captivity*, Ester Perel (2006) suggested that domesticity is incompatible with eroticism. She believes that once a close bond is formed in a relationship, it can feel as though the individual members of the couple no longer exist and instead have become one being. This lack of separateness leaves no room for the mystery necessary to foster desire.

Aron and Aron’s (1996) self-expansion model of love is consistent with this idea. Aron and Aron conceptualize love as a desire to expand the self by including the other (one’s partner) in the self. In the early stages of a relationship, the rate of expansion is rapid and exhilarating because there is a great deal to learn about and share with a new partner. As a relationship progresses, opportunities for expansion decrease; Aron and Aron suggest this is part of the reason why some couples experience declines in relationship satisfaction over time. Baumeister and Bratslavsky (1999) theorize that
passion is a function, not of intimacy itself, but changes in intimacy; as such, passion should be highest during periods of rapid increases in intimacy, such as the early stages of a relationship.

There is also evidence that sexual desire does not inevitably wane in a relationship. Some researchers suggest that sexual desire can remain high over the course of a long-term relationship. Through interviews with long-term couples, Kleinplatz and Ménard (2007) found that some couples reported strong passion in relationships of 35 years or more. Similarly, Aron and Acevedo (2009) found an association between brain activity and the experience of strong desire among long-term, married couples (as cited in Hillier, 2009). In 2005, Aron and colleagues identified the reward and motivational systems in the brain that are activated when individuals are passionately in love. In Aron and Acevedo’s unpublished study, this same brain activity was found in 16 couples who had been married for an average of 20 years and who reported still experiencing strong sexual desire for each other (Hillier, 2009).

By examining research on long-term couples, Acevedo and Aron (2005) identified that passionate love, as measured by the Passionate Love Scale (PLS; Hatfield & Sprecher, 1986), is comprised of two factors: obsession and feelings of romantic love. Passionate love in the early stage of a relationship involves obsessive preoccupying elements, in addition to high engagement with a partner, sexual liveliness, and the perception of the partner as central to one’s life. From their review of the literature, Acevedo and Aron (2005) concluded that while the obsessive element of passionate love decreases over time, the romantic elements (including strong sexual desire) may be maintained in long-term relationships. Couples in long-term marriages reported that
sexual activity remained an important component of the relationship, albeit not as prominent as during the earlier stages of the relationship (Hinchliff & Gott, 2004). According to this research, love does not inevitably shift from intensely and obsessively passionate to comfortable and companionate; certain elements of passionate love, such as sexual desire, can be maintained as commitment and intimacy grow.

Currently, there is limited social psychological research on the factors that contribute to the experience of sexual desire in long-term relationships. I am interested in further understanding sexual desire in couples who are beyond the initial passion phase of their relationship. Later stages of a relationship are often characterized by increased interdependence between partners and high levels of commitment (Berscheid, 1983; Zeifman & Hazan, 2000), factors that have been shown to predict relationship satisfaction and stability (e.g., Impett, Beals, & Peplau, 2001; Rusbult, 1980, 1983). Interdependence refers to the degree of influence partners have on each other, including the extent that partners are interconnected and rely on each other for emotional, physical, financial, and social support (Kelley et al., 1983). Long-term couples in Kleinplatz and Ménard’s sample highlighted the importance of intimacy, a deep sense of caring for one another, and being best friends (possible indicators of interdependence) as being important to their experience of sexual desire. In contrast, the 16 couples in Acevedo and Aron’s (2009) research who maintained high levels of sexual desire for each other described their love in a way that closely matches conceptions of passionate love – intense and exciting.

Recently motivational theories have been applied to the study of sexual desire in relationships (Impett et al., 2008). This research suggests that an individual’s reasons or goals for engaging in sex with their partner impact their sexual desire to a greater extent.
than sexual frequency. To date, the association between sexual goals and sexual desire has not been studied in long-term couples. As well, an additional understanding of the relationship factors associated with one’s sexual goals is warranted. Interdependence in relationships has been associated with longevity and stability (Impett et al., 2001; Rusbult 1980, 1983), but the application of interdependence to sexual aspects of the relationship has been limited. The current study aims to directly test the associations among interdependence, sexual goals, and sexual outcomes in long-term couples.

**Sexual Desire**

Master and Johnson’s (1966) original model of the human sexual response (excitement, plateau, orgasm, resolution) focused exclusively on physical aspects of the sexual response, and did not include psychological components such as sexual desire. In 1977, Kaplan updated this model to include a phase in which the need to initiate or partake in sexual activity was accounted. Sexual desire is the first phase in her model of sexual response. Kaplan (1977) indicated that desire is the “central or psychic erotic component” (p. 7) and the excitement and orgasm phases are the physiological components. She felt that desire is the force that initiates sexual activity. Levin (2000) challenged the placement of the desire phase indicating that desire does not always have an initiation role. He suggested that desire may occur spontaneously (as suggested by Kaplan’s model) or instead could be activated by sexual excitement, and therefore occur at various phases in the sexual response cycle. Michael, Gagnon, Laumann, and Kolata (1994) found that some people (especially women) have never experienced spontaneous sexual desire. Additionally, in a sample of college students, both men and women agreed that sexual desire could serve as a motivator for sexual behaviour, but many described participating in sexual activity when desire was not present (Beck, Bozman, &
Qualtrough, 1991). Researchers suggest that sexual compliance, engaging in sex with a romantic partner in the absence of a personal desire for sex, is not uncommon in heterosexual relationships (O’Sullivan & Allgeier, 1998). Sexual compliance can be considered an act of relationship sacrifice or relationship maintenance (Impett & Peplau, 2003), and demonstrates that desire is only one motivator for sexual activity.

Although sexual desire has become a central feature of modern concepts of the sexual response cycle, it has been difficult for researchers and clinicians to develop a clear definition of sexual desire. Often, desire and arousal are strongly linked and are difficult to distinguish (Levine, 2002). The common approach from a sociobiological perspective is to consider sexual desire as a motivational state that leads an individual to seek out opportunities to engage in sexual activities (Diamond, 2003, 2004; Gonzaga, Turner, Kelter, Campos & Altemus, 2006). As discussed above, sexual desire may also occur as the result of arousal (e.g., Levin, 2000). Stephen Levine (2003) put it simply, “Sexual desire is the sum of the forces that lean us toward and away from sexual behaviour” (p.279). In a focus group study, women discussed sexual desire as sexual interest that was “more thoughtful” and sexual arousal as “more physical,” but many women did not clearly distinguish these two constructs (Graham, Sanders, Milhausen & McBride, 2004). Sexual desire has been described as having both physical and emotional aspects. Some women have reported feeling physical indicators of sexual desire. These were often non-genital, including increased heartbeat and “butterflies” in the stomach. Nevertheless, sexual desire was commonly described as an interest or willingness to participate in sex as opposed to a physical readiness for sex or a feeling of being “turned on.” Some women did not experience sexual desire as embodied and equated physical
readiness for sex with arousal (Wood, Mansfield & Koch, 2007). Both men and women have reported gauging sexual desire via genital arousal (Beck et al., 1991), although women’s physiological arousal has been shown to be less congruent with their subjective reports of arousal than men’s (Chivers, 2005; Chivers, Rieger, Latty, & Bailey, 2004). In light of this research evidence showing that sexual desire is commonly linked with an emotional experience, in the current research, sexual desire will be measured as an individual’s interest in engaging in sexual activity (both in general and with a current partner) that may or may not include physiological arousal (Apt & Hurlbert, 1992).

**Sexual Satisfaction**

A distinct, but related outcome variable that is also of interest in the proposed research is sexual satisfaction. Lawrance and Byers (1995) defined sexual satisfaction as “an affective response arising from one’s subjective evaluation of the positive and negative dimensions associated with one’s sexual relationship” (p. 268). Using the Interpersonal Exchange Model of Sexual Satisfaction (IEMSS), Lawrance and Byers found that individuals who perceived more sexual rewards and less sexual costs, experienced a greater number of sexual rewards than expected, and perceived equality between one’s own and one’s partner’s costs and rewards, were the most sexually satisfied.

It is commonly held by both researchers and the general public that sexual satisfaction is an important component of overall relationship quality (e.g., Sprecher, 1998, 2002). Both sexual and relationship satisfaction have been shown to contribute to overall health and well-being (Apt, Hurlbert, Pierce & White, 1996) and are therefore highly relevant in research on long-term couples. Using the IEMSS, Lawrance and Byers
(1995) demonstrated that relationship satisfaction (one of the bases of interdependence) is positively related to sexual satisfaction. More recently, Byers (2005) suggested that changes in sexual satisfaction and relationship satisfaction occur concurrently in long-term relationships.

Although sexual and relationship satisfaction have been shown to be closely associated, they are distinct and can be experienced separately. Apt et al. (1996) used cluster analysis to identify five different profiles of married women who varied in their sexual and relationship satisfaction. Whereas the most sexually satisfied women experienced the highest levels of relationship satisfaction and the most sexually dissatisfied women experienced the lowest levels, two of the groups experienced clear discrepancies between their levels of sexual and relationship satisfaction. Some women reported being satisfied with their sex lives, but not with their relationship, whereas others reported relationship satisfaction without sexual satisfaction. The latter finding is consistent with anecdotal evidence suggesting that some couples who seek counseling are very satisfied with their relationship, but no longer desire sex (e.g., Perel, 2007). As such, levels of relationship satisfaction are not sufficient to account for the experience of sexual satisfaction in all individuals.

Researchers have also identified an association between sexual desire and sexual satisfaction. In one study on desire discrepancies in couples, women who perceived that their level of desire was similar or greater than their partners’ level of desire experienced greater relationship satisfaction than women who perceived their desire as lower than their partners’. For both men and women, sexual satisfaction mediated the association between perceived desire discrepancies and relationship satisfaction (Davies et al., 1999).
This suggests that a sexual desire discrepancy between partners affects relationship satisfaction only to the extent that sexual satisfaction is affected. Sexual desire and sexual satisfaction were both included as outcome variables in the two studies in order to provide a more detailed picture of the function of interdependence and sexual goals in long-term relationships.

**Motivational Theories of Relationships**

Interdependence theory posits that relationship stability and longevity grow as a function of relationship partners’ willingness to sacrifice self-interests for pro-relationship goals (Impett et al., 2001; Rusbult et al., 2004; Tran & Simpson, 2009). Recent research suggests that an individual’s willingness to sacrifice for his or her partner is not sufficient to obtain positive relational benefits, but instead it is an individual’s motives for sacrifice that are important in determining relational outcomes (Impett, Gable, & Peplau, 2005). Motives for sacrifice can either be focused on achieving a desirable outcome (approach) or avoiding an undesired outcome (avoidance). The approach and avoidance distinction is grounded in research on appetitive and aversive motivational systems. Gray (1987) refers to these as the Behavioural Activation System (BAS), the system that is related to approach goals and responds to signals of reward, and the Behavioural Inhibition System (BIS), the system that is related to avoidance goals and responds to signals of punishment. Recently, researchers (Gable, 2006; Gable & Impett, forthcoming) have applied the approach-avoidance distinction to the study of social relationships. Approach social goals direct individuals toward positive outcomes, such as closeness in their relationship, whereas avoidance social goals direct individuals away from negative outcomes, such as conflict. For example, if a couple were sitting down to
discuss their finances, a partner who adopts approach goals might think, “I want us to have a pleasant and productive discussion about this and come to a mutually agreeable decision,” whereas a partner with avoidance goals might think, “I want to avoid an argument about this and for neither of us to be upset by the decision.” While both of these strategies are directed at reaching an amicable solution to a problem, it is clear that these are two different means of conceptualizing this goal. This distinction is important because it recognizes that having an incentive is different than the absence of a threat, and that the presence of a threat is different than the absence of an incentive.

At a dispositional level, the approach and avoidance systems are largely independent from each other (Gable, 2008); although at the level of goals, short-term representations of wants and fears, approach and avoidance goals are not independent. In the development of a measure of approach and avoidance social goals, Gable (2006) found that approach and avoidance social goals were positively correlated. That is, individuals for whom social goals were important were likely to endorse both approach and avoidance goals. Further, Impett et al. (2010) found the correlation between approach and avoidance goals to be quite high (.56 in one study and .35 in another).

Approach and avoidance goals have important implications for interpersonal relationships and general well-being. Being motivated toward approach goals, rather than avoidance goals, is related to greater relationship satisfaction and a higher frequency of positive relational events (Elliot, Gable, & Mapes, 2006). Approach goals also predict more frequent experiences of positive emotions (Gable, Reis, & Elliot, 2000) and generally being happier (Carver & White, 1994). Conversely, avoidance goals are related to loneliness and negative relationship events (Elliot et al., 2006), negative emotions
(Gable et al., 2000) and nervousness (Carver & White, 1994). Studying romantic relationships through an approach-avoidance lens contributes valuable insights to understanding why some relationships persist and others end. In two daily diary studies and a laboratory study, Impett and colleagues (2010) demonstrated that approach goals help to maintain feelings of daily satisfaction and higher levels of satisfaction over time. Further, research participants asked to observe a couple’s interactions rated individuals who were higher in approach goals as more satisfied and more responsive to their partner’s needs, while they rated individuals who were higher in avoidance goals as less satisfied and responsive. Impett and colleagues’ findings also demonstrated the dyadic nature of these outcomes, as the partners’ of people higher in approach goals were also rated as more satisfied and more likely to have their needs met.

**Approach/Avoidance Goals and Sexual Desire**

Recently the approach-avoidance framework has been applied to sexual motivation. Meston and Buss (2007) reported that there are 237 expressed reasons for having sex. These ranged from wanting to experience physical pleasure to wanting to please a partner to trying to get rid of a headache. Impett and Peplau (2003) suggest that sexual compliance—that is, willingly engaging in undesired sex—may be used as a relationship maintenance strategy. As such, having sex with a partner when you are not “in the mood” may be one form of sacrifice in a relationship. In these instances, people may engage in sex with a partner for approach goals (e.g., to foster closeness in the relationship) or for avoidance goals (e.g., to avoid upsetting a partner). As has been demonstrated in research about sacrifice in other aspects of the relationship, sexual sacrifice for approach goals seems to result in more positive relational consequences than
sexual sacrifice for avoidance goals (Impett, Peplau, & Gable, 2005; Impett, Strachman, Finkel & Gable, 2008). These studies did not focus on unwanted consensual sex, but instead investigated individuals’ motives for engaging in sex with their romantic partner. Approach motives for sex focus on gaining positive outcomes from sex such as experiencing physical pleasure or satisfying a partner. Avoidance motives for sex, by contrast, focus on avoiding negative outcomes such as an argument or a partner’s loss of interest.

Several positive consequences of approach sexual motives have been demonstrated. In a study of undergraduate students in dating relationships, Impett and colleagues (2005) found that on days when people engaged in sex for approach motives more than they typically did across a 14-day period in their relationships, they experienced more positive emotions and greater relationship satisfaction. But on days when they engaged in sex for avoidance motives more than usual, they experienced more negative emotions, less relationship satisfaction and more conflict. Also, late adolescent girls who engaged in sex for approach motives experienced greater sexual satisfaction (Impett & Peplau, 2006). In addition to daily positive experiences, approach motives have been found to help maintain sexual desire in relationships over time. Impett and colleagues (2008) demonstrated that strong approach goals (a high interest in pursuing positive relationship outcomes) buffered against declines in sexual desire over a six-month period of time in a relationship. The effect of approach relationship goals on sexual desire was mediated by approach sexual goals, suggesting that those who are motivated toward positive outcomes in their relationship may view sexual activity as one way to foster intimacy and satisfaction in their relationships. Thus, approach relationship
goals seem to promote engaging in sex for approach-related goals, which in turn predicts experiencing greater sexual desire for a partner during daily sexual interactions.

Impett and colleagues (2010) demonstrated that the relational benefits of approach goal pursuit are most pronounced when both partners are high in general approach relationship goals. However, to date, research has only assessed the sexual goals of one member of the couple; a study design that does not capture the dyadic nature of sexual interactions in romantic relationships. In previous research, individuals whose partners are high in approach goals experienced positive relationship outcomes (Impett et al., 2010); in addition, individuals’ daily sexual goals were influenced by their partner’s attachment orientation, demonstrating the importance of pursuing these research questions from a dyadic perspective (Impett & Gordon, 2010).

Recently, Cooper, Barber, Zhaoyang and Talley (2010) considered a second dimension, in addition to approach vs. avoidance, by which to distinguish sexual goals. Approach and avoidance goals can also be distinguished by the extent that a goal focuses on individual or self-focused reinforcement vs. external or partner-focused reinforcement. Cooper et al. (2010) demonstrated a four-motive typology: (1) self-focused approach goals (e.g., to experience physical pleasure); (2) partner-focused approach goals (e.g., to enhance intimacy in my relationship); (3) self-focused avoidance goals (e.g., to avoid feeling guilty); and (4) partner-focused avoidance goals (e.g., to avoid getting in fight with my partner). In addition to exploring the influence of approach and avoidance goals in general, in the current study, sexual goals were considered in terms of self- and partner-focused goals and their impact on sexual desire.
Interdependence in Relationships

Researchers have exerted considerable effort attempting to understand the factors that contribute to relationship stability and satisfaction. Caryl Rusbult devoted much of her research career to understanding the reasons why some relationships persist and others end. As a result, she identified several key factors that contribute to the maintenance of healthy, long-term relationships. Rusbult’s (1980, 1983) investment model of relationship commitment employs the principles of interdependence theory (Kelley & Thibaut, 1978; Thibaut & Kelley, 1959) to identify the features of long-lasting relationships. Interdependence theory posits that interdependent couples, those who rely highly on and are influenced by each other, are more likely to depart from self-interests to pursue goals that strengthen the relationship. In the investment model, Rusbult discusses the factors that contribute to interdependence in relationships and has used this model to predict several relationship processes and outcomes, such as commitment (Agnew et al., 1998), pro-relationship motivations (Rusbult, Olsen, Davis & Hannan, 2004), and relationship stability and longevity (Impett et al., 2001). In this model, she discusses the three bases of interdependence as satisfaction, investment and alternatives (Lin & Rusbult 1995; Rusbult, 1980, 1983; Rusbult, et al., 1986; Rusbult, Martz & Agnew, 1998). That is, individuals become increasingly dependent on their relationships to the extent that they are highly satisfied, are heavily invested in the relationship, and perceive poor alternate means of having their needs met.

In her research, Rusbult distinguishes between relationship satisfaction (i.e., positive feelings about one’s partner and relationship) and commitment (i.e., intentions to persist in a relationship). The investment model asserts that individuals should feel more
satisfied with their relationship to the extent that rewards are high and costs are low, although high rewards are a more consistent predictor of satisfaction than low costs (Rusbult, Johnson, & Morrow, 1986). Interdependent couples also have higher investment in their relationships, which can include financial investments (such as joint ownership of property) and emotional investments (such as ties to mutual friends and family). Finally, interdependence includes the perception that there are few quality alternative options to a current relationship. Evolutionary theorists suggest that individuals possess an evolved mechanism that involves being inattentive to attractive alternatives in order to maintain commitment in their current relationship (Maner, Rouby & Gonzaga, 2008). Therefore, as a relationship maintenance strategy, interdependent couples are motivated to perceive their alternatives as less than ideal.

The investment model extends interdependence theory by identifying strong commitment to a relationship as a mechanism of increasing dependence on that relationship (Agnew et al., 1998). The three bases of interdependence strongly and consistently predict relationship commitment. Commitment is positively associated with satisfaction and investment size, and negatively correlated with quality of alternatives. In fact, committed individuals even evaluate attractive alternative partners unfavourably if they are believed to pose a threat to their relationship. Lydon, Fitzsimmons and Naidoo (2003) asked undergraduate students who were single and in dating relationships (both low and high in commitment) to rate the attractiveness of members of the other sex in photographs. The photos were of people who had previously been rated as highly attractive by others. All of the participants (single, low commitment, high commitment) initially rated them as attractive as well. However, when committed individuals were told
the person in the photos was available and interested in meeting them, they rated the person as less attractive than high commitment participants who were not told the person was interesting in meeting them, and the single and low commitment participants in both conditions. This was seen as a protection strategy against threats to a committed relationship. As such, committed couples are more likely to persist in their relationship than those who are less committed. Strong relationship commitment even seems to quell the negative effects of anxious attachment in a relationship, and enhances positive emotional outcomes for both partners (Tran & Simpson, 2009).

According to interdependence theory, the true test of interdependence in a relationship occurs when partners have incompatible preferences or conflicting interests (Kelley & Thibaut, 1978). In this situation, an individual must choose between maximizing his or her own self-interests or shifting toward pro-relationship motivations to maximize a partner’s interests or joint interests (Rusbult et al., 2004). This process is referred to as transformation of motivation and has been used to reveal an individual’s goals in an ongoing relationship (Holmes & Rempel, 1989). One’s willingness to sacrifice for their partner or their relationship is one means of providing diagnostic information about pro-relationship goals (Wieselquist, Rusbult, Foster & Agnew, 1999). Individuals who are more interdependent have a greater willingness to sacrifice and are more likely to engage in accommodation behaviours (e.g., compromising) than those who are less interdependent (Tran & Simpson, 2009; Van Lange et al., 1997). Research has shown this process to be dyadic in nature where one partner’s motives influence the other partner’s feelings of interdependence. One partner will perceive pro-relationship acts by
the other partner, which increases the partner’s trust and willingness to become dependent on the relationship (Wieselquist et al., 1999).

Interdependence (as indicated by high satisfaction, high investment, and low perceived quality of alternatives) has been shown to predict relationship stability, longevity and commitment (e.g., Impett et al., 2001). People do not enter relationships with high levels of commitment, but instead engage in everyday tasks to foster commitment and maintain their relationship (Duck, 1988). A long-term, well-functioning relationship is sustained through specific relationship maintenance mechanisms. Rusbult and colleagues (2001) have identified both behavioural and cognitive mechanisms that help couples foster commitment in their romantic relationships. These include: 1) willingness to react constructively to a partner’s deconstructive behaviour; 2) willingness to sacrifice self-interests to promote partner and relationship well-being; 3) forgiveness of betrayal; 4) collective thinking (e.g., we, us, our) over individual thinking (e.g., I, me, mine); 5) positive illusions about the relationship; and 6) derogation of tempting alternatives. Couples who use more relationship maintenance strategies tend to exhibit greater satisfaction and commitment in their relationships (Canary, Stafford, & Semic, 2002; Rusbult et al., 2001; Weigel & Ballard-Reisch, 1999; Weigel & Ballard-Reisch, 2008).

The investment model has consistently demonstrated the central role of interdependence and commitment in relationship persistence. These findings have been replicated in several cultures, and across relationship type (married and dating relationships) and length (Kurdek, 1993; Lin & Rusbult, 1995; Rusbult, 1980, 1983; Rusbult et al., 1998). Despite this, little is known about how interdependence factors
affect the sexual aspects of a relationship. With the exception of research linking relationship and sexual satisfaction (e.g., Byers, 1995, 2005), researchers have not yet explored the influence of interdependence on sexual outcomes.

**Interdependence and Sexuality**

The application of interdependence theory to sexual aspects of a relationship has been limited and has primarily focused on extradyadic sexual behaviours (i.e., infidelity) and sexual risk-taking (e.g., Davidovich, De Wit, & Stroebe, 2006; McAlister, Pachana, & Jackson, 2005). One component of interdependence in a relationship is the perception of poor alternative options to a current relationship (Rusbult, 1980, 1983). Consistent with this pattern is the finding that, both men and women who perceive fewer quality alternatives to their current relationship are less likely to engage in extradyadic sexual behaviours (McAlister, Pachana, & Jackson, 2005). The investment model has also proven useful in predicting sexually risky behaviours between steady gay male partners; high levels of commitment were associated with practicing safer sex (Davidovich, De Wit, & Stroebe, 2006). Nevertheless, the investment model has not been directly applied to the experience of sexual desire in relationships.

There is some research to suggest that commitment and relationship stability (two outcomes of interdependence) are positively related to sexual satisfaction (Sprecher, 2002), and there is a wealth of research linking relationship satisfaction to sexual satisfaction (e.g., Byers, 2005). According to Rusbult’s investment model, the level of costs and rewards in a relationship determines satisfaction. Couples should experience the most satisfaction in their relationships when rewards are high and costs are low (e.g., Rusbult et al., 1986). Lawrance and Byers (1995) have extended this aspect of the
investment model to sexual satisfaction. The Interpersonal Exchange Model of Sexual Satisfaction (IEMSS) proposes that sexual satisfaction is increased in a relationship to the extent that individuals perceive that their sexual costs are low and their sexual rewards are high. Further, sexual satisfaction is increased when costs and rewards compare favourably to expectations, and are equal between partners. Although not a direct test of the relationship between interdependence and a couple’s sexual relationship, these findings highlight the utility of extending aspects of this model to sexual aspects of a relationship.

Sprecher (1998) has also suggested that Rusbult’s (1980, 1983) investment model is applicable to sexual relationships. She argues that sexual involvement can be seen as one behavioural aspect of relationship commitment. Therefore, in newer dating relationships, the investment model variables (satisfaction, investment, quality of alternatives) should predict how sexually involved partners become. Although Sprecher does not extend these ideas to sexual involvement in long-term relationships, Birnbaum and Gillath (2006) indicate that the sub-goals of sexual behaviour include both relationship initiation and relationship maintenance, and long-term couples may engage in sexual activity as a relationship maintenance strategy. Couples who are bonded with each other continue to engage in regular sexual intercourse to maintain that bond. Therefore, interdependent couples should be more motivated to maintain a satisfying sex life than couples who are less interdependent, and perhaps to be more likely to pursue sex for approach goals (i.e., to promote closeness in their relationship), a process that has been shown to be associated with increased desire (Impett et al., 2008). Based on this it seems most plausible that satisfaction and commitment in particular would be associated
with engaging in sex for approach goals, and thus increased desire. It might be that high investment and perception of low quality alternatives may actually be associated with avoidance goals.

As discussed previously, there is some evidence to suggest an alternative hypothesis. Based on their experiences as couples’ therapists, Mitchell (2002) and Perel (2006) suggest that high levels of interdependence may quash feelings of sexual desire for a long-term partner. They report seeing individuals in therapy who are satisfied with their relationship, highly invested, and who do not wish to pursue other alternatives, and yet no longer experience sexual desire for their partner. Currently, these ideas are anecdotal without supporting empirical evidence, but these reports highlight the necessity of exploring the role of interdependence in influencing sexual aspects of long-term relationships.

**Additional Factors Contributing to Sexual Aspects of a Relationship**

A number of additional factors have been shown to impact sexual desire and sexual satisfaction in relationships. In this section, some of these key factors will be discussed, as it is important to take these factors into account when testing a model of sexual desire and satisfaction in long-term relationships. As previously discussed, length of relationship has been shown to impact sexual aspects of the relationship. It is commonly held that sexual desire peaks in the early stages of a relationship and often decreases over time (e.g., Eagle, 2007; Hatfield & Walster, 1978; Levine, 2003; Sprecher & Regan, 1998). In fact, relationship duration has been shown to be a stronger predictor of sexual frequency than age (Johnson, Wadsworth, Welling & Fields, 1994). The early stage of a relationship has been referred to as the passionate love stage and is often
characterized by high levels of sexual desire. The later stages of a relationship are thought to be more companionate, and characterized by high levels of commitment and intimacy, but lower levels of sexual desire (Hatfield & Walster, 1978). Social and evolutionary psychologists suggest that this shift occurs between 18 months and three years after a relationship has been initiated (Tennov, 1979; Winston, 2004).

It is also a common perception that having children influences the dynamics of the couples’ relationship. In fact, researchers have found that the transition to parenthood impacts relationship quality and satisfaction. Compared to couples who are childfree, couples with children were more likely to experience declines in love and marital satisfaction (MacDermid, Huston, & McHale, 1990). In an 8-year prospective study, Doss, Rhoades, Stanley and Markman (2009) found that many couples who had children experienced a sharp decline in relationship functioning following the birth of a child, whereas couples without children experienced a more gradual deterioration of relationship functioning. One explanation for this finding is that parents’ attention is often directed away from each other and onto the children (Anderson et al., 1983); activities become more child-oriented and the division of labor more traditional (MacDermid et al., 1990). From an evolutionary perspective, this outcome makes sense. If infant-caregiver attachment can be equated with adult attachment as research suggests (e.g., Hazan & Zeifman, 1994), then the first few years of a child’s life should be similar to the early “falling in love” stages of a romantic relationship and a parent’s attention would be focused on the child above all others.

The influence of children on relationship quality may change as children get older and parents move into a different life stage. Family life stage (beginning families, young
children, school-aged children, children preparing to leave home, and children who have moved out of the home) and the number of children in the home have been shown to predict marital satisfaction in a U-shaped pattern. Levels of satisfaction tend to be high during the family planning stage, then decrease over time as children are introduced to the family, and are once again restored as children get older and move out of the home (Anderson, Russell & Schumm, 1983).

The research discussed above primarily focuses on relationship satisfaction in general (and not sexual satisfaction specifically), however there is also evidence that sexual frequency declines over the course of a relationship (Call, Sprecher & Schwartz, 1995; Johnson et al., 1994). Life circumstances such as pregnancy and parenting small children partially contributed to these declines. Ahlborg, Rudebald, Linner and Linton (2008) reported that sexual frequency was low between partners at six months and four years after the birth of their first child, for couples both with and without additional children. Experiencing fatigue was cited as one hindrance to sex among these couples. Although sexual frequency cannot be equated with sexual desire or satisfaction, it can be considered a potential indicator. In Call et al.’s (1995) research, marital happiness was the second strongest predictor, after age, of sexual frequency (more frequent sex among happier couples), providing further evidence of the link between relationship and sexual satisfaction.

It is important to note that in the aforementioned studies, family life stage and number of children only accounted for a small amount of the variance in relationship quality (Andersen et al., 1983). Additionally, there was a great degree of individual variability in the association between parenthood and sexual functioning (Doss et al.,
This pattern of results indicates that there are additional factors besides number of children and life stage that account for changes in relationship satisfaction, sexual satisfaction and sexual desire. Nevertheless, it is important to consider the role of specific demographic factors such as relationship length and number of children when testing a model of sexual desire in long-term relationships.

**The Role of Gender**

Sex differences in sexual desire have been well documented by researchers (see review by Birnbaum, Catanese & Vohs, 2001). Men have been shown to think about sex more frequently (Laumann et al., 1994) and have more sexual fantasies than women (Beck et al., 1991). Differences in sexual desire are thought to stem from the greater emphasis that women place on relational factors for sexual desire than do men (see review by Peplau, 2003). Women more often engage in sex to enhance closeness or express love (Impett et al., 2005), whereas men are more likely to emphasize the physical pleasure associated with sex (Regan & Berscheid, 1999).

In relation to motivational goals, Impett et al. (2008) found that approach goals were a stronger predictor of sexual desire for women than for men. Men and women may also differ in terms of the strength of influence of interdependence on relationship and sexual goals. Although this study did not concern sexual desire specifically, Tran and Simpson (2009) found that, among married couples, the wife’s level of commitment had a greater impact on emotional outcomes, such feelings of acceptance, for both partners than the husband’s level of commitment. As such, it will be important to test whether gender moderates any of the associations between interdependence, sexual goals and sexual desire and satisfaction.
Limitations of Past Research and Contributions of the Current Research Program

There are three main limitations of previous research that will be addressed in the current research. First, although approach goals have been shown to have positive relational and sexual outcomes, including buffering against declines in sexual desire over time (Impett et al., 2008), the bulk of research on approach and avoidance motives in relationships has focused on university students in relatively new dating relationships. Gable and Impett (forthcoming) outline the importance of applying approach-avoidance models of social motivation to a wider variety of relationships, such as older, more established couples. Second, despite the dyadic nature of romantic relationships, the majority of past studies in this area have included data from only one member of the couple. Recently, Impett et al. (2010) demonstrated the importance of considering the relationship goals of both members of the couple in shaping the quality of relationships over time. Finally, although interdependence is well established as a predictor of relationship stability, longevity and commitment (e.g., Impett et al., 2001; Rusbult, 1980, 1983), it has not yet been assessed in relation to sexual outcomes in relationships, such as sexual desire and satisfaction. Since there is some disagreement in the literature about the association between passion and intimacy (see Baumeister & Bratslavsky, 1999), it is relevant to explore how a well-established predictor of relationship success, such as interdependence, is associated with sexual aspects of a relationship. Therefore, my dissertation research includes two studies investigating the influence of sexual goals and interdependence on sexual outcomes in a sample of long-term couples from the community. The current research also explores the impact of more nuanced sexual goals
by considering approach and avoidance goals as both self-focused and partner-focused in nature.

The Current Research

The purpose of my dissertation research is to apply motivational and interdependence theories of relationships to the study of sexual desire and sexual satisfaction in long-term couples. Study 1 is a cross-sectional survey of 207 couples in long-term relationships, and Study 2 is a daily experience study of 44 couples conducted over a 21-day period. In order to account for the dyadic nature of romantic relationships, data from both partners was collected. Participants in Study 2 were recruited from Study 1 and all were married or cohabiting couples who have been in a relationship for at least three years. A relationship length of at least three years was chosen for inclusion in the current study because it is generally agreed that by this point in a relationship, the “honeymoon period” is over. Passionate love is said to transition to companionate love after two years plus or minus six months (Tennov, 1979) and attachment bonds typically form between one and half to three years after the initiation of a relationship (Winston, 2004).

Study 1 Overview and Summary of Hypotheses

Approach goals have been associated with positive sexual outcomes for individuals in relationships (Impett et al., 2008). In Study 1 I will extend this past research and explore the dyadic association between sexual goals and both sexual desire and sexual satisfaction. I expect that engaging in sex more for approach goals will be associated with greater desire for the individual and their partner. In a sample of undergraduate students, avoidance sexual goals were not significantly associated with
sexual desire (e.g., Impett et al., 2008), however avoidance goals in general are shown to predict negative relationship events (Elliot et al., 2006) and interpersonal outcomes (e.g., Gable, 2006; Impett et al., 2005, 2010). Therefore, the association between avoidance goals and desire will also be tested in the current study.

Past research has demonstrated that interdependent couples are more committed (Agnew et al., 1998), more willing to sacrifice for their partner (Van Lange et al., 1997) and more likely to engage in relationship maintenance strategies than those who are less interdependent (e.g., Rusbult et al., 2001). Sexual activity has been identified as one relationship maintenance strategy in committed relationships (Birnbaum & Gillath, 2006) and, if pursued for approach motives, sexual activity may protect against declines in sexual desire in long-term relationships (Impett et al., 2008). Therefore, approach goals are also expected to mediate the associations between interdependence and sexual desire and sexual satisfaction. Individual, partner and meditational hypotheses are outlined below:

**Individual Hypotheses**

1. Based on past research (Impett et al., 2008), I predict that individuals who report engaging in sex more for approach goals will report higher levels of sexual desire and sexual satisfaction, and that the association between approach goals and the sexual outcomes will be stronger for women than for men.

2. Consistent with past research that demonstrating a link between avoidance goals and negative relationship outcomes (Elliot et al., 2006), I predict that individuals who report engaging in sex more for avoidance goals will experience lower levels of sexual desire and satisfaction.
3. Consistent with past research that links interdependence to positive relationship outcomes (e.g., Rusbult et al., 2004), I predict that individuals who are more interdependent in their relationships (high satisfaction, high investment, low perceived quality of alternatives, and high commitment) will experience higher levels of sexual desire and sexual satisfaction.

**Partner Hypotheses**

5. Impett and colleagues (2005, 2008) found that participants who perceived their partner to engage in sex more for approach goals reported higher sexual desire and greater relationship satisfaction. Therefore, I expect that individuals whose partners report engaging in sex more for approach goals will experience higher levels of sexual desire and sexual satisfaction.

6. Impett et al. (2005) found that participants who perceived their partner to engage in sex more for avoidance goals reported more negative relational consequences. Therefore, I expect that individuals whose partners report engaging in sex more for avoidance goals will experience lower levels of sexual desire and sexual satisfaction.

7. Given the dyadic nature of interdependence in relationships (Wieselquist et al., 1999), I predict that individuals whose partners report being more interdependent will experience higher levels of sexual desire and sexual satisfaction.

**Mediation Hypotheses**

8. I also predict that approach goals will mediate the association between interdependence (specifically relationship satisfaction and commitment) and positive sexual outcomes. That is, individuals who are more satisfied and
committed will be more likely to pursue sex for approach goals, which will account for the association between interdependence and sexual desire and sexual satisfaction. The rationale for this hypothesis is that interdependent couples, compared to less interdependent couples, are more willing to sacrifice for their partner (Van Lange et al., 1997) and engage in relationship maintenance strategies (e.g., Rusbullt et al., 2001). Sex is considered a relationship maintenance strategy in long-term relationships (Birnbaum & Gillath, 2006), and when sex is pursued for approach goals, it has positive consequences for sexual desire (Impett et al., 2008).

**Study 1 Method**

**Participants and Procedure**

Two hundred and twelve couples (N=424 participants) were recruited at the Ontario Science Center in Toronto, Canada. The inclusion criteria were English-speaking heterosexual couples over the age of 18 who have been in a relationship for at least three years, and are currently married or living together. To be eligible both members of the couple had to agree to participate. Couples who met these criteria were asked to complete a paper-and-pencil survey about various aspects of their relationship (see Appendix A). Partners completed the survey on-site, but independently from each other. The survey took approximately 15 minutes to complete. Couples who participated in the study were given a small token of appreciation for their time and a debriefing pamphlet at the conclusion of the survey that provided them with additional information about the study.

Two couples were removed from the current analyses because they were in a same-sex relationship, and three couples were removed because one or both partners
completed less than 50% of the survey. The final sample included 207 couples (N=414; 207 men and 207 women). Participants ranged in age from 24 to 77 years old (M=37.68 years, SD=10.39) and primarily identified as White/Caucasian (75%). Other ethnicities represented included: Asian/Southeast Asian/South Asian (10.8%), Aboriginal (3.4%), Black (3.2%), Latin American (2.2%), Arab/West Asian (.4%) and multi-ethnic or “other” (5%). All of the couples were living together at the time of the survey; the majority were married (73.1%) 10 couples (4.7%) reported being engaged. The average relationship length was approximately 10 years (M=121.23 months, SD=95.62 months, range = 40 to 604 months), and 67% of the sample had children. Most of the couples who reported having children had one or two children living in the home (M=1.48, SD=1.34).

Measures

Demographic variables. In order to provide descriptive information about the current sample and to control for other factors that may be related to levels of sexual desire, a number of demographic questions were included in the survey. Participants were asked to indicate their current relationship status, length of relationship, and number of children.

Interdependence. All the components of interdependence were measured using Rusbult’s (1980, 1983) investment model of commitment. The measure includes the items for the four constructs (satisfaction, alternatives, investments, and commitment) validated by Rusbult et al. (1998). The items were rated on 9-point scales (1 = Do not agree to 9 = Completely agree) and the subscales are outlined below.

Satisfaction. Six items were included to measure participants’ satisfaction with their current relationship. The items asked how satisfied participants are with certain
aspects of their relationship (e.g., affection, security etc.) and how close participants felt their relationship is to their ideal (e.g., “My relationship is close to ideal.”). The items were averaged to calculate an overall subscale score, with higher values indicating higher satisfaction. This subscale was highly reliable in the current sample ($\alpha = .95$).

**Quality of alternatives.** Six items were included to measure participants’ perceptions of the quality of alternatives available to their current relationship. Specifically the items assessed the extent to which participants feel they could have their needs met outside of their current romantic relationship (e.g., “If I weren’t dating my partner I would find another appealing person to date.”). The items were averaged to calculate an overall subscale score, with higher values indicating higher perceived quality of alternatives. This subscale was highly reliable in the current sample ($\alpha = .89$).

**Investments.** Six items were included to measure how invested participants feel they are in their relationships. The questions considered joint activities, memories, and friends (e.g., “My sense of personal identity (who I am) is linked to my partner and our relationship.”). The items were averaged to calculate an overall subscale score, with higher values indicating higher investment. The items yielded high reliability in the current sample ($\alpha = .93$)

**Commitment.** Seven items were included to assess participants’ levels of commitment to their current romantic relationship. These items captured participants’ intentions to persist in the relationship (e.g., “I want our relationship to last for a very long time.”), and yielded good reliability in the current sample ($\alpha = .94$). The items were averaged to calculate an overall subscale score, with higher values indicating higher commitment.
Approach and avoidance sexual goals. A measure of sexual goals was adapted from the daily measure used by Impett et al. (2005) and consistent with the four subscales outlined by Cooper et al. (1998). Participants were asked to rate the importance of a series of factors in influencing why they typically engage in sex. The measure was adapted to include approach and avoidance items that are both self-focused and partner-focused. The self-focused items included items such as “to pursue my own sexual pleasure,” (approach) and “to avoid feeling bad about myself” (avoidance). The partner-focused items included items such as “to feel emotionally closer to my partner” (approach) and “to avoid conflict in my relationship” (avoidance). Participants rated the importance of 12 approach (6 self-focused, 6 partner-focused) and 11 avoidance (5 self-focused, 6 partner-focused) goals in influencing their decision to engage in sex on 7-point scales (1 = not at all important to 7 = extremely important). The items were average for each subscale and higher scores indicated a greater likelihood of endorsing the specified motives for having sex with a partner. Overall the approach (α = .93) and avoidance (α = .91) scales yielded high reliability in the current sample. The subscales of self-focused approach (α = .85), partner-focused approach (α = .95), self-focused avoidance (α = .75), and partner-focused avoidance goals (α = .89) also demonstrated good reliability.

Sexual desire. Sexual desire was measured using the Hurlbert Index of Sexual Desire (Apt & Hurlbert, 1992). This 25-item Likert-type scale measures the overall emotional, behavioural and cognitive components of sexual desire. The items primarily focused on sexual desire toward a specific partner (“My desire for sex with my partner is strong”), which is in line with the purpose of the current study, and were rated on a 5-point scale (0 = all of the time to 4 = never). The items were averaged to create an overall
scale score, with higher scores indicating higher sexual desire. In past samples this instrument has evidenced high internal consistency ($\alpha = .89$) and good test-retest reliability (e.g., Hurlbert, Apt & Rombough, 1996). In the current sample, the scale was also highly reliable ($\alpha = .96$).

**Sexual satisfaction.** Sexual satisfaction was measured using the Index of Sexual Satisfaction (Hudson, Harrison & Crosscup, 1981). Twenty-five items were rated on a 7-point scale (1 = *never* to 7 = *all the time*). Items assessed satisfaction with sexual aspects of a relationship (“I feel our sex life really adds a lot to our relationship”). The items were averaged to create an overall scale score, with higher values indicating greater sexual satisfaction. This measure has yielded high reliability in numerous samples, with alphas of .90 or greater (e.g., Hudson et al., 1981), including the current sample ($\alpha = .98$).

**Sexual frequency.** One item was included to assess sexual frequency: “On average, how many times per month do you and your partner have sex?” The item was rated on a 6-point scale (1 = *less than once a month*, 2 = *about once a month*, 3 = 2-3 *times per month*, 4 = *about once a week*, 5 = *multiple times per week*, 6 = *daily*).

**Study 1 General Analytic Strategy**

The Actor-Partner Interdependence Model (APIM; Kenny, Kashy & Cook, 2006) guided the analyses for Study 1. The APIM considers both the effect that a person’s independent variable has on their *own* dependent variable (actor effect) and the effect that a person’s independent variable has on *their partner’s* dependent variable (partner effect). The current study assessed both partner’s sexual goals to determine not only how a person’s own goals influence their sexual desire and satisfaction, but how their partner’s goals influence them as well. The APIM assumes that the data from two members of a couple are not independent and treats the dyad as the unit of analysis. Therefore, actor
and partner effects were estimated simultaneously. For example, a partner effect of approach goals on sexual desire is the association between a person’s approach goals and their partner’s sexual desire, while controlling for their partner’s own approach goals.

Hierarchical Linear Modeling (HLM; HLMwin v. 6.08; Bryk, Raudenbush & Congdon, 2000; Kenny, Kashy & Bolger, 1998; Raudenbush & Bryk, 2002) was used to analyze the data, as other researchers using APIM with dyadic data have suggested (e.g. Campbell & Kashy, 2002; Kenny, Kashy & Cook, 2006). Traditional analysis of variance methods assume independence of observations, an assumption that is violated in a study of both members of a romantic couple. HLM addresses the non-independence of dyadic data by nesting each individual within a couple. HLM provides independent estimates of the associations among level 1 (individual) variables and models them at level 2 (couple level) as a random effect using maximum likelihood estimation. Therefore, in these analyses I am able to model two sources of variance: differences between individuals and differences between couples.

In HLM, outcome variables are always at the lowest level, in this case the individual level, and predictor variables are entered at either the individual or couple level. Gender was coded as 0 = men, 1 = women and was entered into the model as an uncentered variable. Gender was also tested as a moderator of the key predictor variables. All continuous level 1 variables and level 2 variables were centered around the grand mean, which allows the model to account for both within- and between-persons variance (Kenny, Kashy, & Cook, 2006). Consequently the resulting coefficients are unstandardized HLM coefficients (standardized coefficients are not available in HLM). All significance tests in HLM were conducted using robust standard errors, which adjust
for nonnormal data.

**Study 1 Results**

**Descriptive Statistics**

To provide an initial assessment of the data, the means, standard deviations and correlations were calculated for the criterion and predictor variables. Simple paired t-tests of differences between male and female partners’ responses on each of the variables were conducted using a Bonferroni correction for inflated type 1 error (See Table 1). Sexual desire is the only variable where male and female partners significantly differed; male participants reported significantly higher levels of sexual desire than their female partners.

Correlational analyses were conducted separately for men and women to examine the associations between sexual desire, sexual satisfaction and the predictor variables (See Table 2). In addition, actor-partner bivariate correlations were examined to determine significant correlations between male and female partners’ scores on the variables of interest. A number of significant correlations were found. Nevertheless, the reader should be cautioned that simple bivariate correlations may fail to reflect the nature of complex multilevel relationships. Multilevel modeling is specifically designed to deal with these relationships and should be considered a more reliable reflection of the data. Descriptive analyses were conducted only to provide an initial overview of the data.
Table 1

Means and Standard Deviations of Predictor and Criterion Variables

<table>
<thead>
<tr>
<th></th>
<th>Female Partner</th>
<th></th>
<th>Male Partner</th>
<th></th>
<th>Couple</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (Range)</td>
<td>SD</td>
<td>M (Range)</td>
<td>SD</td>
<td>M (Range)</td>
<td>SD</td>
</tr>
<tr>
<td><strong>Individual Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Desire***</td>
<td>2.41 (0.67 - 3.91)</td>
<td>.69</td>
<td>3.00 (0.82 - 4.00)</td>
<td>.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Satisfaction</td>
<td>5.65 (2.86 - 7.00)</td>
<td>.92</td>
<td>5.45 (2.81 - 7.00)</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPROACH</td>
<td>5.45 (2.62 - 7.00)</td>
<td>.83</td>
<td>5.36 (2.50 - 7.00)</td>
<td>.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVOIDANCE</td>
<td>3.11 (1.00 - 7.00)</td>
<td>1.44</td>
<td>2.98 (1.00 - 7.00)</td>
<td>1.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Goals (self-focused)</td>
<td>4.90 (1.43 - 7.00)</td>
<td>1.11</td>
<td>4.75 (1.00 - 7.00)</td>
<td>1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Goals (partner-focused)</td>
<td>6.20 (3.00 - 7.00)</td>
<td>.84</td>
<td>6.22 (3.00 - 7.00)</td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance Goals (self-focused)</td>
<td>3.20 (1.00 - 7.00)</td>
<td>1.67</td>
<td>3.00 (1.00 - 7.00)</td>
<td>1.59</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance Goals (partner-focused)</td>
<td>3.07 (1.00 - 7.00)</td>
<td>1.44</td>
<td>2.95 (1.00 - 7.00)</td>
<td>1.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Satisfaction</td>
<td>7.67 (1.60 - 9.00)</td>
<td>1.29</td>
<td>7.66 (1.50 - 9.00)</td>
<td>1.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>7.57 (3.33 - 9.00)</td>
<td>1.04</td>
<td>7.46 (1.00 - 9.00)</td>
<td>1.23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>3.30 (1.00 - 9.00)</td>
<td>1.73</td>
<td>3.43 (1.00 - 7.40)</td>
<td>1.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>6.74 (3.14 - 9.00)</td>
<td>.81</td>
<td>6.70 (1.00 - 9.00)</td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Frequency</td>
<td>3.77 (1.00 - 6.00)</td>
<td>1.06</td>
<td>3.69 (1.00 - 6.00)</td>
<td>1.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Couple Level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Frequency</td>
<td></td>
<td></td>
<td></td>
<td>3.73 (1.00 - 6.00)</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Relationship Length (months)</td>
<td></td>
<td></td>
<td></td>
<td>121.23 (40 - 604)</td>
<td>95</td>
<td></td>
</tr>
<tr>
<td>Number of Children</td>
<td></td>
<td></td>
<td></td>
<td>1.48 (0 - 7.00)</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Couple-level sexual frequency is the aggregate score of partners' individual reports of sexual frequency; *n* = 426 participants (213 heterosexual couples). ***p<.001
Table 2
Bivariate Correlations for Male and Female Partner’s Sexual Desire, Sexual Satisfaction and Predictor Variables

<table>
<thead>
<tr>
<th></th>
<th>Desire</th>
<th>Sex Satis</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual Desire</td>
<td>-.06</td>
<td>.62***</td>
<td>-.08</td>
<td>.42***</td>
<td>.41***</td>
<td>.43***</td>
<td>-.11</td>
<td>-.27***</td>
<td>.34***</td>
<td>-.10</td>
<td>.09</td>
<td>.17*</td>
</tr>
<tr>
<td>Sexual Satisfaction</td>
<td>.31***</td>
<td>.20***</td>
<td>.07</td>
<td>.42***</td>
<td>.16*</td>
<td>.43***</td>
<td>-.31***</td>
<td>-.30***</td>
<td>.66***</td>
<td>-.25***</td>
<td>.26***</td>
<td>.30***</td>
</tr>
<tr>
<td>1. Relationship Length</td>
<td>.02</td>
<td>.02</td>
<td>.91***</td>
<td>-.13</td>
<td>.01</td>
<td>.05</td>
<td>.09</td>
<td>.18**</td>
<td>.05</td>
<td>-.08</td>
<td>.15*</td>
<td>.08</td>
</tr>
<tr>
<td>2. Sexual Frequency</td>
<td>.17*</td>
<td>.37***</td>
<td>-.18**</td>
<td>.33***</td>
<td>.21**</td>
<td>.33***</td>
<td>-.05</td>
<td>-.09</td>
<td>.33***</td>
<td>-.07</td>
<td>.15*</td>
<td>.19**</td>
</tr>
<tr>
<td>3. Approach Goals</td>
<td>.31***</td>
<td>.01</td>
<td>.04</td>
<td>.01</td>
<td>.10</td>
<td>.35***</td>
<td>.40***</td>
<td>.19**</td>
<td>-.06</td>
<td>.08</td>
<td>-.04</td>
<td>-.08</td>
</tr>
<tr>
<td>(self-focused)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Approach Goals</td>
<td>.25***</td>
<td>.37***</td>
<td>.05</td>
<td>.14*</td>
<td>.32***</td>
<td>.04</td>
<td>.01</td>
<td>-.04</td>
<td>.35***</td>
<td>-.20**</td>
<td>.22**</td>
<td>.30***</td>
</tr>
<tr>
<td>(partner-focused)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Avoidance Goals</td>
<td>-.03</td>
<td>-.24***</td>
<td>.05</td>
<td>-.20**</td>
<td>.55***</td>
<td>.16*</td>
<td>.04</td>
<td>.61***</td>
<td>-.31***</td>
<td>.17*</td>
<td>-.16*</td>
<td>.01</td>
</tr>
<tr>
<td>(self-focused)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Avoidance Goals</td>
<td>-.15*</td>
<td>-.11</td>
<td>.02</td>
<td>-.16*</td>
<td>.43***</td>
<td>.16*</td>
<td>.68***</td>
<td>.12</td>
<td>-.26***</td>
<td>.18*</td>
<td>-.02</td>
<td>-.04</td>
</tr>
<tr>
<td>(partner-focused)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Relationship</td>
<td>10</td>
<td>.67***</td>
<td>.07</td>
<td>.28***</td>
<td>-.15*</td>
<td>.17*</td>
<td>-.20**</td>
<td>-.13</td>
<td>.39***</td>
<td>-.34***</td>
<td>.52***</td>
<td>.45***</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Alternatives</td>
<td>.01</td>
<td>-.25**</td>
<td>-.04</td>
<td>.11</td>
<td>.19**</td>
<td>-.10</td>
<td>.08</td>
<td>.11</td>
<td>-.31***</td>
<td>.17*</td>
<td>-.32***</td>
<td>-.23**</td>
</tr>
<tr>
<td>9. Investment</td>
<td>.29***</td>
<td>.35***</td>
<td>.19**</td>
<td>-.03</td>
<td>.07</td>
<td>.27***</td>
<td>.01</td>
<td>-.02</td>
<td>.55***</td>
<td>-.24***</td>
<td>.19**</td>
<td>.36***</td>
</tr>
<tr>
<td>10. Commitment</td>
<td>.12</td>
<td>.25***</td>
<td>.11</td>
<td>-.04</td>
<td>.11</td>
<td>.16*</td>
<td>.18</td>
<td>.13</td>
<td>.46***</td>
<td>-.10</td>
<td>.50***</td>
<td>.08</td>
</tr>
</tbody>
</table>

Note. Male partners’ correlations on the lower portion of the diagonal; female partners’ correlations on the upper portion of the diagonal; Actor-Partner correlations on the diagonal.
In the initial assessment of the data, sexual frequency was considered both an individual variable and a couple-level variable. When inquiring about the frequency of sexual activity between partners in the same relationship, a high degree of consistency is expected. However, individual partners may estimate frequency differently for a number of reasons. In the current study participants were asked in general how many times per month they engage in sexual activity with their partner; a specific time period was not specified. One partner may estimate sexual frequency in their relationship by considering peak frequency over a given period of time (i.e., how often they have sex on a “good” month), whereas the other partner may estimate by averaging peak frequency times and lower frequency times. Additionally, partners may have different recollections of sexual frequency or different definitions of sexual activity. Partners’ reports of sexual frequency in the current study were significantly correlated ($r=0.33$, $p<0.001$), although this was a moderate association indicating that there is a noteworthy degree of discrepancy in partner’s perceptions of sexual frequency. Nevertheless, partners’ reports were significantly correlated, and male and female partners’ mean estimate of frequency were very similar (3.77 vs. 3.69), therefore individual partner’s reports were averaged and sexual frequency was aggregated to create a couple-level variable. Couples in the current study reported their typical sexual frequency to be nearly once a week ($M=3.74$, $SD=1.24$ on a 6 point scale, where 3 represents 2-3 times per month and 4 represents once a week).

**Sexual Goals and Sexual Outcomes**

On the whole, participants reported engaging in sex much more often for approach goals ($M=5.41$, $SD=.86$) than avoidance goals ($M=3.04$, $SD=1.43$), $t(425)=33.21$, $p<.001$). In addition, participants were more likely to have sex for partner-
focused approach goals ($M=6.20, SD=.84$) than self-focused approach goals ($M=4.90, SD=1.11$, $t(425)=-22.97, p<.01$), and more likely to have sex for self-focused avoidance goals ($M=3.20, SD=1.67$) than partner-focused avoidance goals ($M=3.07, SD=1.44$, $t(425)=2.32, p <.05$). There were no significant gender differences in sexual goals. For both men and women, approach and avoidance goals were significantly positively correlated (see Table 2) indicating that a person can be high in both approach and avoidance sexual goals.

**The Association Between Sexual Goals and Sexual Desire and Satisfaction**

The first set of hypotheses concerned associations between sex motives and sexual desire and satisfaction. As discussed above, to address the non-independence of couples’ data, I used HLM to analyze the data. First, a covariate model was tested. Gender, sexual frequency, relationship length and number of children were explored as predictors of sexual desire and sexual satisfaction. Gender and sexual frequency were significant predictors of both sexual desire and satisfaction. Increased sexual frequency predicted higher desire (*unstandardized HLM coefficient* $=.19$, $t(207)=7.38, p<.001$), and greater sexual satisfaction (*unstandardized HLM coefficient* $=.39$, $t(207)=8.56, p<.001$). Men reported significantly higher sexual desire than women (*unstandardized HLM coefficient* $=-.31$, $t(414)=-9.67, p<.001$), whereas women reported significantly higher sexual satisfaction than men (*unstandardized HLM coefficient* $=.08$, $t(414)=2.16, p<.05$). Therefore in subsequent analyses, gender and sexual frequency were entered as covariates.
Table 3

*Associations between Sexual Goals and Sexual Outcomes, Controlling for Gender and Sexual Frequency*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Sexual Desire</th>
<th></th>
<th>Sexual Satisfaction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(b)</td>
<td>(t(414))</td>
<td>(b)</td>
<td>(t(414))</td>
</tr>
<tr>
<td>Gender</td>
<td>-.31***</td>
<td>-11.88</td>
<td>.05</td>
<td>1.60</td>
</tr>
<tr>
<td>Sexual Frequency</td>
<td>.12***</td>
<td>4.91</td>
<td>.29**</td>
<td>9.47</td>
</tr>
<tr>
<td>APPROACH</td>
<td>.44***</td>
<td>13.00</td>
<td>.26***</td>
<td>5.15</td>
</tr>
<tr>
<td>AVOIDANCE</td>
<td>-.17***</td>
<td>-7.80</td>
<td>-.18***</td>
<td>-5.86</td>
</tr>
<tr>
<td>Partner APPROACH</td>
<td>.02</td>
<td>.69</td>
<td>.00</td>
<td>.03</td>
</tr>
<tr>
<td>Partner AVOIDANCE</td>
<td>.03</td>
<td>1.72</td>
<td>-.01</td>
<td>-.27</td>
</tr>
</tbody>
</table>

*Note.* All variables were entered into the model simultaneously along with the covariates gender and sexual frequency (individual level). **\(p<.01\); ***\(p<.001\)

Table 3 displays the unstandardized HLM coefficients relating the measures of sexual desire and sexual satisfaction to actor and partner sexual goals. The HLM unstandardized coefficient (shown as \(b\)) for the association between APPROACH goals and sexual desire can be interpreted as follows: Each unit increase in partner-focused approach goals was associated with a .44 increase in sexual desire. In the following analyses, gender and sexual frequency were entered as covariates. Sexual frequency was entered as an individual (level 1) variable as opposed to a couple variable (level 2) because only predictor variables entered at the same level can account for the same portions of variance. Therefore in order to adequately “control for” sexual frequency in the following analyses, it had to be entered as at level 1 with the sexual goal variables.

The results indicated that engaging in sex more often for approach goals is associated with increased sexual desire. In addition, approach goals were shown to be
associated with greater sexual satisfaction, and avoidance goals with lower desire and satisfaction. There were no significant partner effects of sexual goals on desire or satisfaction. To explore more nuanced influences of sexual goals, approach and avoidance goals were also considered in terms of self-focused and partner-focused goals. The associations between partner-focused and self-focused approach and avoidance goals and sexual desire are shown in Table 4.

Table 4

*Associations Between Partner- and Self-focused Sexual Goals and Sexual Outcomes, Controlling for Gender and Sexual Frequency*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Sexual Desire</th>
<th></th>
<th>Sexual Satisfaction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>b</td>
<td>t(414)</td>
<td>b</td>
<td>t(414)</td>
</tr>
<tr>
<td>Gender</td>
<td>-.31***</td>
<td>-11.63</td>
<td>.08*</td>
<td>2.16</td>
</tr>
<tr>
<td>Sexual Frequency</td>
<td>.11***</td>
<td>4.89</td>
<td>.29***</td>
<td>9.67</td>
</tr>
<tr>
<td>Approach (self-focused)</td>
<td>.21***</td>
<td>7.36</td>
<td>.07</td>
<td>1.88</td>
</tr>
<tr>
<td>Approach (partner-focused)</td>
<td>.16***</td>
<td>4.04</td>
<td>.35***</td>
<td>6.26</td>
</tr>
<tr>
<td>Avoidance (self-focused)</td>
<td>-.04</td>
<td>-1.68</td>
<td>-.14***</td>
<td>-4.32</td>
</tr>
<tr>
<td>Avoidance (partner-focused)</td>
<td>-.11***</td>
<td>-4.23</td>
<td>-.05</td>
<td>-1.49</td>
</tr>
<tr>
<td>Partner Approach (self)</td>
<td>-.01</td>
<td>-.50</td>
<td>.00</td>
<td>.07</td>
</tr>
<tr>
<td>Partner Approach (partner)</td>
<td>.05</td>
<td>1.50</td>
<td>.02</td>
<td>.55</td>
</tr>
<tr>
<td>Partner Avoidance (self)</td>
<td>.02</td>
<td>.84</td>
<td>.00</td>
<td>.10</td>
</tr>
<tr>
<td>Partner Avoidance (partner)</td>
<td>.02</td>
<td>.91</td>
<td>-.01</td>
<td>-.19</td>
</tr>
</tbody>
</table>

*Note.* All variables were entered into the model simultaneously along with the covariates gender and sexual frequency (individual level). *p<.05; ***p<.01; ***p<.001

Engaging in sex more for partner-focused approach goals was associated with increased sexual desire and sexual satisfaction. Self-focused approach goals were associated with greater sexual desire, but not sexual satisfaction. Having sex more for avoidance goals was associated with lower levels of sexual desire and sexual satisfaction,
however, there was a differential impact of self- and partner-focused goals where self-focused avoidance goals were associated with lower sexual satisfaction whereas partner-focused avoidance goals were associated with lower sexual desire. After controlling for actor effects, no significant partner effects were found for sexual desire or satisfaction. Since partner- and self-focused goals had differential impact on desire and satisfaction, these are considered in subsequent analyses.

Gender and sexual frequency were tested as moderators of the association between sexual goals and sexual outcomes. The analysis for gender is reported in the next section. Sexual frequency did not moderate the associations between sexual goals and sexual outcomes ($p$s all $>.10$), indicating that these associations hold regardless of sexual frequency.

**Interactions Between Gender and Sexual Goals**

Table 5 reports the interactions between gender and sexual goals predicting sexual desire and satisfaction. Consistent with the hypothesis that approach goals would have a greater impact on women’s desire than men’s, the results indicate that gender significantly moderated the effect of approach goals on sexual desire. In the current sample, approach goals (both self-focused and partner-focused) had a stronger effect on women’s sexual desire than men’s desire; engaging in sex for high vs. low approach goals increases women’s sexual desire to a greater extent than men’s (see Figures 1 and 2).
### Table 5

*Gender X Sexual Goals Interaction on Sexual Desire and Sexual Satisfaction*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Sex. Desire</th>
<th>p</th>
<th>Sex. Satisfaction</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender X Approach (self-focused)</td>
<td>.06*</td>
<td>2.18</td>
<td>.03</td>
<td>.75</td>
</tr>
<tr>
<td>Gender X Approach (partner-focused)</td>
<td>.08*</td>
<td>2.26</td>
<td>.04</td>
<td>1.42</td>
</tr>
<tr>
<td>Gender X Avoidance (self-focused)</td>
<td>-.02</td>
<td>-1.30</td>
<td>.02</td>
<td>.07</td>
</tr>
<tr>
<td>Gender X Avoidance (partner-focused)</td>
<td>-.02</td>
<td>-1.25</td>
<td>.03</td>
<td>-.30</td>
</tr>
<tr>
<td>Approach X Avoidance (partner-focused)</td>
<td>.06*</td>
<td>2.30</td>
<td>.07*</td>
<td>2.01</td>
</tr>
<tr>
<td>Approach X Avoidance (self-focused)</td>
<td>.00</td>
<td>.12</td>
<td>.01</td>
<td>.30</td>
</tr>
<tr>
<td>Gender X Approach X Avoidance (partner)</td>
<td>.02</td>
<td>.57</td>
<td>.01</td>
<td>.34</td>
</tr>
<tr>
<td>Gender X Approach X Avoidance (self)</td>
<td>-.01</td>
<td>-.75</td>
<td>-.01</td>
<td>-.49</td>
</tr>
</tbody>
</table>

*Note.* Main effects of gender and sexual goals were controlled in these analyses. *p*<.05

*Figure* 1. Gender moderating the association between self-focused approach goals and sexual desire
Since approach and avoidance goals were significantly correlated, interactions between approach and avoidance sexual goals were also tested (see Table 5). Significant interactions between partner-focused approach and avoidance goals were found for sexual desire and sexual satisfaction. Approach goals significantly moderated the effect of avoidance goals on sexual desire and satisfaction. Avoidance goals had a greater impact on sexual desire and satisfaction for those who are low vs. high in approach goals. That is, having high approach goals seemed to buffer against declines in sexual desire and satisfaction associated with having high avoidance goals (see Figures 3 and 4). There were no significant three-way interactions in Study 1.
Figure 3. Partner-focused approach goals moderating the association between avoidance goals and sexual desire.

Figure 4. Partner-focused approach goals moderating the association between avoidance goals and sexual desire.
Interdependence and Sexual Outcomes

The next set of hypotheses was related to the association between interdependence and sexual outcomes in long-term relationships. In general, participants were highly satisfied and invested in their relationships, highly committed to their partners, and did not perceive high quality alternatives to their relationships (see Table 1). Many of the interdependence variables were significantly correlated for both men and women (see Table 2, as has been found in past research, Agnew et al., 1998).

Table 6 reports the association between actor and partner interdependence and sexual desire and satisfaction, controlling for gender and sexual frequency. Relationship satisfaction was significantly positively associated with sexual desire and sexual satisfaction as predicted. There were no significant associations for investment, commitment or alternatives. After controlling for actor effects, no significant partner effects of the investment model variables were found. Therefore the individual hypotheses about these three interdependence variables were not supported, nor were the partner hypotheses.
Table 6

Association Between Interdependence and Sexual Desire and Satisfaction, Controlling for Gender and Sexual Frequency

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Sexual Desire</th>
<th></th>
<th>Sexual Satisfaction</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$b$</td>
<td>$t(412)$</td>
<td>$b$</td>
<td>$t(412)$</td>
</tr>
<tr>
<td>Gender</td>
<td>-.31***</td>
<td>-9.45</td>
<td>.05</td>
<td>1.82</td>
</tr>
<tr>
<td>Sexual Frequency</td>
<td>.11***</td>
<td>4.89</td>
<td>.29***</td>
<td>9.67</td>
</tr>
<tr>
<td>Actor Relationship Satisfaction</td>
<td>.11***</td>
<td>3.72</td>
<td>.43***</td>
<td>13.04</td>
</tr>
<tr>
<td>Actor Investment</td>
<td>.03</td>
<td>.98</td>
<td>-.04</td>
<td>-1.09</td>
</tr>
<tr>
<td>Actor Alternatives</td>
<td>.02</td>
<td>.76</td>
<td>-.04</td>
<td>-1.69</td>
</tr>
<tr>
<td>Actor Commitment</td>
<td>.04</td>
<td>.82</td>
<td>-.03</td>
<td>-0.48</td>
</tr>
<tr>
<td>Partner Relationship Satisfaction</td>
<td>.00</td>
<td>.01</td>
<td>.01</td>
<td>.24</td>
</tr>
<tr>
<td>Partner Investment</td>
<td>-.04</td>
<td>-1.16</td>
<td>-.03</td>
<td>-.74</td>
</tr>
<tr>
<td>Partner Alternatives</td>
<td>-.01</td>
<td>-.78</td>
<td>.01</td>
<td>.38</td>
</tr>
<tr>
<td>Partner Commitment</td>
<td>-.02</td>
<td>-.37</td>
<td>-.02</td>
<td>-.53</td>
</tr>
</tbody>
</table>

Note. All variables were entered into the model simultaneously. ***$p<.001$

Mediational Analyses

To test the hypothesis that sexual goals mediate the association between interdependence and sexual outcomes, a meditational model was tested. Since relationship satisfaction was the only interdependence variable that was significantly associated with the sexual outcomes, sexual goals could only be tested as a mediator of this association. Although discussed separately, approach and avoidance goals were entered into the model simultaneously. The first requirement in demonstrating mediation is that the predictor variable be significantly associated with the outcome variable (Baron & Kenny, 1986). As demonstrated in Table 6, relationship satisfaction significantly predicts sexual desire. The second requirement is that the predictor variable be
significantly associated with the mediator. Relationship satisfaction significantly predicted partner-focused approach goals ($b = .15, t(412)=4.56, p<.001$) and partner-focused avoidance goals ($b = -.20, t(412)=-4.00, p<.001$). The third requirement is that the mediator be associated with the outcome variable, controlling for the predictor variable, and that this effect could plausibly account for the association between the predictor variable and the outcome variable. Controlling for relationship satisfaction, partner-focused approach and partner-focused avoidance goals significantly predicted sexual desire. The association between relationship satisfaction and sexual desire did not drop to nonsignificance ($b = .07, t(412)=2.77, p<.01$) suggesting that full mediation did not occur. Nevertheless, Sobel’s test indicated that this drop was significant for both partner-focused approach ($z=2.55, p<.01$) and avoidance goals ($z=3.19, p<.01$) as mediators. Therefore, partner-focused approach and avoidance goals partially mediate the association between relationships satisfaction and sexual desire. Participants who were higher in relationship satisfaction engaged in sex more often for approach goals and less often for avoidance goals and this partially accounted for increases in sexual desire (see Figures 5 and 6).

Partner-focused approach goals also mediated the association between relationship satisfaction and sexual satisfaction. Relationship satisfaction was significantly associated with sexual satisfaction (see Table 6). As stated above, relationship satisfaction also significantly predicted partner-focused approach goals ($b = .15, t(412)=4.56, p<.001$) and partner-focused avoidance goals ($b = -.20, t(412)=-4.00, p<.001$). When sexual goals were entered into the model as predictors of sexual satisfaction, the association between relationship satisfaction and sexual satisfaction
decreased in strength, but did not drop to non-significance ($b = .36$, $t(412)=12.88$, $p<.001$). Nevertheless, Sobel’s test indicated that this drop was significant for both partner-focused approach ($z=4.17$, $p<.01$) and avoidance goals ($z=2.13$, $p<.05$), indicating partial mediation. Participants who were higher in relationship satisfaction engaged in sex more often for partner-focused approach goals and less often for partner-focused avoidance goals and this partially accounted for increases in sexual satisfaction (see Figures 7 and 8). Although displayed separately, approach and avoidance goals were entered into the analyses simultaneously. Self-focused approach and avoidance goals did not significantly mediate the association between relationship satisfaction and the sexual outcomes variables.
Figure 5-8. Partner-focused approach goals and avoidance goals as mediators between relationship satisfaction and sexual outcomes (desire and satisfaction). Note that all numbers are unstandardized hierarchical linear modeling coefficients. The coefficient on the bottom line outside of the parentheses represents the direct effect of the actor’s relationship satisfaction on the actor’s sexual outcome. The coefficient inside of the parentheses represents the indirect effect after accounting for the actor’s sexual goals as a mediator. * $p < 0.05$ **$p < 0.01$ ***$p < 0.001$. 
Study 1 Discussion

Consistent with past research on sexual goals and positive sexual outcomes (Copper et al., 1998; Cooper, Talley, Sheldon, Levitt, & Barber, 2008; Impett et al., 2008), engaging in sex more for approach goals was associated with higher sexual desire and satisfaction. The link between approach goals and sexual desire was stronger for women than for men. Past research indicates that women’s desire is more strongly impacted by relational factors (Impett, Peplau, & Gable, 2005; Peplau, 2003; Regan & Berscheid, 1996), more malleable and more sensitive to situational or reinforcing factors than men’s desire (Basson, 2001; Baumeister, 2000; Diamond, 2008). In general, men’s desire is thought to be more spontaneous and may appear in the absence of an apparent stimuli, whereas women’s desire is more responsive (Basson, 2001), perhaps explaining the greater impact of sexual goals on women’s desire.

The findings of Study 1 also extended past findings in several important ways. In a sample of undergraduate students in relationships, avoidance goals were not significantly associated with sexual desire (Impett et al., 2008). In the current sample of long-term couples, many of whom are married and have children, engaging in sex more for avoidance goals was associated with greater sexual desire and satisfaction. This pattern of results is consistent with previous findings that avoidance goals in general have negative relational outcomes (Elliot et al., 2006). Early stages of a relationship are typically characterized by strong, intense sexual desire, an intensity that declines somewhat over the course of the relationship (Hatfield et al., 1984; Sprecher & Regan, 1998). This early intensity may mean that it is more difficult for avoidance goals to
substantially decrease desire in newer relationships, whereas in long-term relationships, desire may be more sensitive to the negative consequences of avoidance goals.

Approach and avoidance goals were also considered in terms of self- and partner-focused motives, in line with Cooper et al.’s (2010) conceptualization, and these had different associations with sexual outcomes in a relationship. Whereas both self- and partner-focused approach goals were associated with higher levels of desire, only partner-focused avoidance goals were associated with less desire. Further, participants who engaged in sex more for partner-focused approach goals also reported greater sexual satisfaction, whereas self-focused avoidance goals were associated with decreased sexual satisfaction. Sex in long-term relationships can be considered a relationship maintenance strategy (Birnbaum & Gillath, 2006), a finding that explains why goals focused on the partner and relationship may have a greater impact on desire and satisfaction in the current sample. Cooper suggested that partner-focused approach goals increased as relational commitment increased and thus may be more relevant for long-term couples (Cooper et al., 1998). In the current study, there was also a significant correlation between partner-focused approach goals and commitment; a correlation that was not found between commitment and any of the other sexual goal subscales.

As in past research (Gable, 2006; Impett et al., 2008), approach and avoidance goals were significantly correlated in the current study, meaning that a person can be high in both approach and avoidance goals. Approach goals also significantly moderated the effect of avoidance goals on desire and satisfaction. Avoidance goals had a greater impact on sexual desire when an individual was low vs. high in approach goals. Having high approach goals seemed to buffer against declines in sexual desire and satisfaction that
were associated with high avoidance goals. This finding is somewhat consistent with Impett et al.'s (2008) findings that individuals with strong approach goals experienced less of a decline in sexual desire on days when they experienced negative relationship events compared to individuals with weak approach goals. Together with the current results, these findings suggest that strong approach goals can make sexual desire more robust to declines in response to negative experiences in relationships. People with strong approach goals may be better able to reinterpret or reframe negative relationship events and use them to foster closeness with their partner, instead of distance.

Of the interdependence variables, only relationship satisfaction was significantly associated with the sexual outcomes in the current sample. This is consistent with the large body of research that demonstrates a link between relationship and sexual satisfaction (e.g., Byers, 2005). Approach and avoidance sexual goals partially mediated this association, suggesting that sexual goals are one mechanism responsible for the association between relationship and sexual satisfaction. Individuals who were higher in relationship satisfaction were more likely to engage in sex for approach goals and less likely to engage in sex for avoidance goals, and these effects partially accounted for the association between relationship satisfaction and sexual desire and sexual satisfaction.

In Study 1, the individual and mediation hypotheses were partially supported; however the partner hypotheses were not. The actor effects of sexual goals and relationship satisfaction on the sexual outcomes were as predicted, although there were no significant associations of the sexual outcomes with investments, commitment and alternatives. Sexual goals mediated the association between relationship satisfaction and positive sexual outcomes. There were no significant partner effects of sexual goals or
interdependence on sexual desire or satisfaction, suggesting that perhaps individuals do not accurately perceive their partner’s goals for sex or that a person’s own goals overshadow the influence of a partner’s goals. Approach and avoidance sexual goals were significantly positively correlated, indicating that people report a wide range of general goals for sex. Given this, it may be challenging to accurately detect a partner’s sexual goals. It is possible that goals for a specific sexual encounter are less varied and easier to detect in a partner, a hypothesis that I will test in Study 2.

Study 1 is limited by the use of a retrospective cross-sectional design. This design required participants to accurately recall their goals for sex and assesses these at only one point in time. In addition, only individual-level comparisons are considered; how one person compares to another person, and do not inform how changes in an individuals goals influence sexual desire. In Study 2, I used a daily diary methodology to determine the impact of sexual goals for a specific sexual encounter on desire, and how daily fluctuations in a person’s goals for sex influence their desire.

**Study 2 Overview and Summary of Hypotheses**

The purpose of Study 2 was to extend the findings of Study 1 by testing the associations between daily goals and interdependence on daily sexual desire. Daily experience (or daily “diary”) studies have been found to be a particularly strong methodology for studying sexual interactions (Vannier & O’Sullivan, 2008). Often, sexual aspects of a relationship cannot be ethically studied in a laboratory setting, and surveys are limited by retrospective self-report (Kahneman, 2000). Daily diary methods allow individuals to report on sexual aspects of their relationship as close as possible to
the time the sexual event occurred. The individual, partner and mediation hypotheses are outlined below.

**Individual Hypotheses**

1. Consistent with previous research (Impett et al., 2008) and the findings from Study 1, I expect that on days when participants report engaging in sex more for approach goals (compared to their own mean) they will report higher sexual desire, and that this association will be moderated by gender, with approach goals having a greater impact on women’s desire than men’s.

2. Consistent with the findings from Study 1, I expect that on days when participants report engaging in sex more for avoidance goals (compared to their own mean) they will report lower sexual desire.

3. Based on the association between relationship satisfaction and sexual desire found in Study 1, and past research that associates the interdependence factors with positive relational outcomes (e.g., Rusbult et al., 2004), I predict that on days when participants report higher levels of interdependence (greater satisfaction, commitment, investments, and fewer alternatives) they will report higher sexual desire.

4. In line with the findings from Study 1 and past research linking interdependence and positive relational outcomes (Rusbult et al., 2004), I expect that participants who report higher levels of interdependence in the background survey will experience higher levels of daily desire.
Partner Hypotheses

5. Although I did not find partner effects for approach goals in Study 1, I will test these in study 2 as previous daily diary studies have found that on days when participants perceived their partner to engage in sex more for approach goals they reported higher sexual desire and greater relationship satisfaction (Impett et al., 2005, 2008). Therefore, I predict that on days when participants report engaging in sex more for approach goals (compared to their own mean) their partner will experience higher levels of sexual desire.

6. Although I did not find partner effects for avoidance goals in Study 1, Impett et al. (2005) found associations between avoidance goals and negative relational consequences at the daily level. On days when participants perceived their partner to engage in sex more for avoidance goals they reported more negative relational consequences. Therefore, I predict that on days when participants report engaging in sex more for avoidance goals (compared to their own mean) their partner will experience higher levels of desire.

7. Although I did not find significant partner effects of the interdependence factors in Study 1, I will also test these associations at the daily level. Given the dyadic nature of interdependence in relationships (Wieselquist et al., 1999), I expect that on days when participants report higher levels of interdependence their partner will report higher levels of desire.

8. Similarly, I expected that higher levels of interdependence in the background survey to be positively associated with a partner’s daily sexual desire.
Mediation Hypotheses

9. In Study 1, I found that approach goals partially mediated the association between relationship satisfaction and sexual outcomes. Therefore I predict that on days when participants report higher levels of interdependence, they will report engaging in sex more for approach goals and this will mediate the association between daily interdependence and daily desire.

10. Similarly, I predict that participants who are higher in interdependence in the background survey will experience engage in sex more often for approach goals and this will mediate the association between interdependence (at background) and daily sexual desire.

Study 2 Method

Participants and Procedure

Couples from Study 1 who indicated an interest in participating in future studies were contacted to participate in Study 2. If both partners expressed an interest in participating in future studies, I contacted them via email. The inclusion criteria were the same as those for Study 1. Participants had to be English-speaking, over the age of 18, in a heterosexual relationship for at least three years, and currently married or living together. In addition, participants had to have daily access to a computer and the Internet. To be eligible both members of the couple had to agree to participate.

Forty-four couples (44 men and 44 women) ranging in age from 24 to 60 years old ($M=35.25$ years, $SD=9.61$ years) participated in Study 2. Participants primarily identified as White/Caucasian (81.8%), with others identifying as Southeast/South Asian (4.3%), Chinese (2.3%), Japanese (1.1%), Latin American (2.3%), Aboriginal (1.1%) and
multi-ethnic or “other” (9.1%). All of the couples were living together at the time of the survey; the majority of the couples were married (67%) and three couples (6.8%) reported being engaged. The average relationship length was approximately 11 years ($M=132.32$ months, $SD=106.62$ months) and 49% of the sample had children. Of the couples who had children, most had one or two children ($M=1.83$, $SD=1.06$).

The survey from Study 1 served as the background measure for Study 2 (See Appendix A), and couples who agreed to participate in Study 2 completed daily measures online for 21 consecutive days (See Appendix B). Both partners completed a brief online survey each day about their relationship, but were asked to do this independently and not discuss their responses until after they had completed the study. On days when participants engaged in sex with their partner they answered questions about their sexual motives and desire. To bolster participation, each individual was paid $40 ($80 per couple) for participating in the 21-day study. On average, participants completed 18 diaries ($M=17.72$, $Range = 13-21$).

**Background Measures**

**Demographic variables.** In order to provide descriptive information about the current sample and to control for other factors that may be related to levels of sexual desire, a number of demographic questions were included in the survey. Participants were asked to indicate current relationship status, length of relationship, and number of children.

**Interdependence.** As in Study 1, interdependence was measured based on Rusbult’s (1980, 1983) investment model of commitment. All items from the subscales of satisfaction (6 items), alternatives (6 items), investments (6 items), and commitment (7
items) were included (as validated by Rusbult et al., 1998). The items were average for each subscale and higher scores indicated higher satisfaction, perceived quality of alternatives, investments and commitment, respectively. The items were rated on 9-point scales (1 = *Do not agree* to 9 = *Completely agree*) and all subscales yielded high reliability (α = .89 to .95).

**Daily Measures**

**Interdependence.** Each day participants were asked 12 questions related to daily levels of relationship satisfaction, investments, quality of alternatives and commitment. Sample items include: “I felt satisfied with my relationship” (satisfaction, 3 items, α = .94), “I felt like I invested a great deal of time in my relationship” (investment, 3 items, α = .79), “My alternatives to this relationship were attractive to me (e.g., dating another, spending time with friends or alone, etc.)” (alternatives, 3 items, α = .71), and “I felt a strong desire to continue my relationship for a long time” (commitment, 3 items, α = .94). The items were averaged for each subscale, with higher scores indicating higher satisfaction, perceived quality of alternatives, investments and commitment, respectively. These items were rated on a 7-point scale (1 = *not at all true* to 7 = *very true*) and all subscales yielded good reliability in the current sample.

**Sexual desire.** Participants were asked to rate their level of sexual desire for their partner each day, regardless of whether or not they engage in sex with their partner that day (“I felt a great deal of sexual desire for my partner today”). This measure of sexual desire was adapted from a previous daily diary study (Impett et al., 2008). In previous studies this item was used only on days when the couple engaged in sex, but in the current study, the word “today” was added to the item and participants were asked this
each day regardless of whether or not they engaged in sex. The item was rated from 1
(*strongly disagree*) to 7 (*strongly agree*).

**Approach and avoidance sexual goals.** On days when participants engaged in
sex, they responded to the 23-item measure of sexual goals described in Study 1 (adapted
from Impett et al., 2005; and Cooper et al., 1998). Participants rated the importance of 12
approach (6 self-focused, 6 partner-focused) and 11 avoidance goals (5 self-focused, 6
partner-focused) in influencing their decision to engage in sex each day on 7-point scales
(1 = *not at all important* to 7 = *extremely important*). Overall measures of approach (α = .83) and avoidance goals (α = .93) yielded high reliability in the current sample. The
subscales of self-focused approach (α = .80), partner-focused approach (α = .92), self-
focused avoidance (α = .70), and partner-focused avoidance goals (α = .89) also
demonstrated good reliability.

**Study 2 General Analytic Strategy**

Study 2 included dyadic data and was also guided by the APIM (Kenny et al.,
2006); therefore, HLM (HLMwin v. 6.08; Bryk et al., 2000; Kenny et al., 1998;
Raudenbush & Bryk, 2002) was used to analyze the data from Study 2 as well. HLM
addresses the non-independence of dyadic diary data by considering each daily diary as
nested within an individual and each individual nested within a couple. Additionally,
since participants provided data based on the number of days they engaged in sex
(meaning the number of data points will vary across participants), HLM is robust against
an unbalanced number of cases (i.e., number of surveys completed), giving greater
weighting to participants who provide more data (Snijders & Bosker, 1999).
In Study 1 I tested a 2-level HLM model where individuals were nested within a couple. In Study 2 I used a 3-level HLM model where multiple data points (daily surveys; level 1) are nested within individuals (level 2), who are nested within a dyad (level 3). Therefore, in this model, there were three sources of variance: daily fluctuations, individual differences, and couple level differences. As in Study 1, dichotomous variables such as gender were coded 0 and 1 and entered into the model as uncentered variables. Continuous variables at levels 2 and 3 were centered around the grand mean, and continuous variables at level 1 were centered around the group mean. Centering around the group mean allows daily fluctuations in variables to be the focus of the analyses. For example, a significant association ($b=.30$) between daily approach goals and sexual desire indicates that for a 1 unit increase in approach goals relative to the person’s own average, there is a .3 increase in daily desire. In other words, on days when participants engage in sex more for approach goals than their own average, they experience higher levels of desire.

**Study 2 Results**

**Descriptive Statistics and Correlations**

Means, standard deviations and correlations were examined for the daily level predictor and outcome variables. The daily level variables represent participants’ mean scores across the 21-day diary study. The individual variables represent participants’ mean scores from the background questionnaire. The couple variables represent variables that are consistent between partners, such as relationship length. Simple paired t-tests of differences between male and female partners’ responses on the daily and individual variables were conducted using a Bonferroni correction for inflated type 1 error (See
Table 7). As in Study 1, the only significant difference between male and female partners was their levels of sexual desire, with men reporting higher levels of daily desire than women.

Correlational analyses were conducted separately for men and women to examine the association between daily measures of sexual desire, sexual goals and interdependence (See Table 8). In addition, actor-partner bivariate correlations were examined to determine significant correlations between male and female partners’ scores on the variables of interest. A number of significant correlations were found. Nevertheless, as discussed in Study 1, the reader should be cautioned that simple bivariate correlations may fail to reflect the nature of complex multilevel relationships. Multilevel modeling is specifically designed to deal with these relationships and should be considered a more reliable reflection of the data. Descriptive analyses were conducted only to provide an initial overview of the data.
Table 7

Means and Standard Deviations of Predictor and Outcome Variables for Male and Female Partners

<table>
<thead>
<tr>
<th></th>
<th>Female Partner</th>
<th></th>
<th>Male Partner</th>
<th></th>
<th>Couple</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (Range)</td>
<td>SD</td>
<td>M (Range)</td>
<td>SD</td>
<td>M (Range)</td>
<td>SD</td>
</tr>
<tr>
<td>Daily Diary Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Desire***</td>
<td>4.62 (1.00 - 7.00)</td>
<td>1.72</td>
<td>4.92 (1.00 - 7.00)</td>
<td>1.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>APPROACH</td>
<td>5.09 (1.00 - 7.00)</td>
<td>.93</td>
<td>4.84 (1.00 - 7.00)</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AVOIDANCE</td>
<td>1.89 (1.00 - 6.00)</td>
<td>.93</td>
<td>1.91 (1.00 - 7.00)</td>
<td>1.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Goals (self-focused)</td>
<td>4.26 (1.00 - 7.00)</td>
<td>1.32</td>
<td>4.34 (1.00 - 7.00)</td>
<td>1.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Goals (partner-focused)</td>
<td>5.65 (1.00 - 7.00)</td>
<td>1.15</td>
<td>5.58 (1.00 - 7.00)</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance Goals (self-focused)</td>
<td>2.01 (1.00 - 5.00)</td>
<td>1.00</td>
<td>1.99 (1.00 - 6.00)</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Avoidance Goals (partner-focused)</td>
<td>1.83 (1.00 - 7.00)</td>
<td>1.23</td>
<td>1.79 (1.00 - 6.00)</td>
<td>1.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Satisfaction</td>
<td>5.98 (1.00 - 7.00)</td>
<td>1.05</td>
<td>5.92 (1.00 - 7.00)</td>
<td>1.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>4.93 (1.00 - 7.00)</td>
<td>1.30</td>
<td>5.03 (1.00 - 7.00)</td>
<td>1.18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>1.95 (1.00 - 7.00)</td>
<td>1.09</td>
<td>1.96 (1.00 - 7.00)</td>
<td>1.16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>6.32 (2.00 - 7.00)</td>
<td>.85</td>
<td>6.24 (1.00 - 7.00)</td>
<td>1.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relationship Satisfaction</td>
<td>7.99 (4.90 - 9.00)</td>
<td>.96</td>
<td>7.92 (4.90 - 9.00)</td>
<td>.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>7.48 (3.33 - 9.00)</td>
<td>1.09</td>
<td>7.34 (4.70 - 8.80)</td>
<td>.922</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alternatives</td>
<td>3.37 (1.20 - 6.40)</td>
<td>1.22</td>
<td>3.64 (1.00 - 6.80)</td>
<td>1.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>6.61 (4.29 - 7.86)</td>
<td>.65</td>
<td>6.81 (5.43 - 7.86)</td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Frequency (during diary)</td>
<td>3.29 (1.00 - 10.00)</td>
<td>2.28</td>
<td>3.27 (1.00 - 10.00)</td>
<td>2.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Couple Level</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual Frequency (during diary)</td>
<td>3.34 (1.00 - 10.00)</td>
<td></td>
<td></td>
<td></td>
<td>2.33</td>
<td></td>
</tr>
<tr>
<td>Relationship Length (months)</td>
<td>132.32 (48 - 529)</td>
<td>106.62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Children</td>
<td>1.83 (1.00 - 3.00)</td>
<td>1.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Paired samples t-tests were conducted to compare male and female partners on daily and individual level variables ***,p=.001
<table>
<thead>
<tr>
<th>Sexual Desire</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desire</td>
<td>.43***</td>
<td>.34***</td>
<td>.38***</td>
<td>-.20*</td>
<td>-.37***</td>
<td>.45***</td>
<td>-.10</td>
<td>.36***</td>
</tr>
<tr>
<td>1. Approach(self)</td>
<td>.35***</td>
<td>.09</td>
<td>.53***</td>
<td>.15</td>
<td>-.09</td>
<td>.29***</td>
<td>-.13</td>
<td>.29***</td>
</tr>
<tr>
<td>2. Approach(partner)</td>
<td>.30***</td>
<td>.35***</td>
<td>.22*</td>
<td>.07</td>
<td>-.02</td>
<td>.36***</td>
<td>-.06</td>
<td>.35**</td>
</tr>
<tr>
<td>3. Avoidance(self)</td>
<td>-.16</td>
<td>.20*</td>
<td>-.04</td>
<td>.20*</td>
<td>.72***</td>
<td>-.18*</td>
<td>.11</td>
<td>-.01</td>
</tr>
<tr>
<td>4. Avoidance(partner)</td>
<td>-.36***</td>
<td>-.08</td>
<td>-.03</td>
<td>.68***</td>
<td>.09</td>
<td>-.37***</td>
<td>.19*</td>
<td>-.06</td>
</tr>
<tr>
<td>5. Relationship Satisfaction</td>
<td>.46***</td>
<td>.22*</td>
<td>.43***</td>
<td>-.30***</td>
<td>-.41***</td>
<td>.49***</td>
<td>-.35***</td>
<td>.59***</td>
</tr>
<tr>
<td>6. Alternatives</td>
<td>-.27***</td>
<td>-.06</td>
<td>-.21*</td>
<td>.34***</td>
<td>.47</td>
<td>-.47***</td>
<td>.23***</td>
<td>-.23***</td>
</tr>
<tr>
<td>7. Investment</td>
<td>.41***</td>
<td>.32***</td>
<td>.31***</td>
<td>-.07</td>
<td>-.15</td>
<td>.46***</td>
<td>-.21*</td>
<td>.41***</td>
</tr>
<tr>
<td>8. Commitment</td>
<td>.49***</td>
<td>.17*</td>
<td>.27**</td>
<td>-.36***</td>
<td>-.45***</td>
<td>.70***</td>
<td>-.55***</td>
<td>.44***</td>
</tr>
</tbody>
</table>

*Note. Male partners’ correlations on the lower portion of the diagonal; female partners’ correlations on the upper portion of the diagonal; Actor-Partner correlations on the diagonal ***p<.001 ***p<.01 **p<.05*
The within-person correlations show that, with one exception, approach and avoidance sexual goals were not significantly correlated as they were in Study 1. This suggests that the correlation between general goals may be higher than when reporting goals for a specific sexual encounter. A non-significant correlation also suggests that being high in approach goals does not require an individual to be low in avoidance goals.

There were also many significant actor-partner correlations. With the exception of self-focused approach and partner-focused avoidance goals, partners’ scores on the study variables were significantly correlated.

**Daily Sexual Goals and Sexual Desire**

Participants reported engaging in sexual activity an average of three days during the three-week diary study ($M=3.34$, $SD=2.33$, *Range* = 1 to 10 days), a frequency that is consistent with couples estimated sexual frequency from the background survey ($M=3.98$, $SD=1.16$, with 4 representing *once a week*). On days when couples had sex they reported significantly higher sexual desire ($M=5.93$, $SD=1.29$) than on days when they did not have sex ($M=4.48$, $SD=1.66$), $t(1493)=-13.72$, $p<.001$. Men reported higher levels of sexual desire than women (see Table 7) and participants’ reports of their own desire and their perceptions of their partner’s desire were consistent with this gender difference. Women perceived their male partners to have higher desire ($M=4.68$, $SD=1.68$) than themselves ($M=4.59$, $SD=1.70$), although this was not a significant difference, $t(737)=-1.69$, $p=.09$. Men perceived their female partners to have significantly lower desire ($M=4.45$, $SD=1.78$) than themselves ($M=4.93$, $SD=1.67$), which was a significant difference, $t(725)=8.02$, $p<.001$.

Consistent with Study 1, participants in Study 2 also reported engaging in sex much more often for approach goals ($M=4.87$, $SD=1.13$) than avoidance goals ($M=1.75$, $SD=1.13$).
SD=1.06, \( t(144)=29.21, p<.001 \). In addition, participants were more likely to have sex for partner-focused approach goals (\( M=5.62, SD=1.12 \)) than self-focused approach goals (\( M=4.31, SD=1.34, t(144)=-22.97, p<.01 \)), but there were no significant differences between self-focused (\( M=1.78, SD=1.01 \)) and partner-focused avoidance goals (\( M=1.68, SD=1.19, t(144)=1.42, p=.16 \)). There were no significant gender differences for any of the sexual goals (See Table 7).

The first set of hypotheses concerned associations between daily sexual goals and daily sexual desire. First, a covariate model was tested. Gender, sexual frequency (at the couple level), relationship length and number of children were explored as predictors of daily sexual desire. Gender and sexual frequency were significantly associated with both daily sexual desire and sexual satisfaction. Couples who engaged in sex more frequently during the daily diary study experienced higher levels of daily desire (\( b=.16 \), \( t(44)=2.77, p<.01 \)). Men (\( M=4.92, SD=1.66 \)) also reported significantly higher levels of daily desire than women (\( M=4.62, SD=1.72 \); \( b=-.17 \), \( t(88)=-2.03, p<.05 \). Therefore, gender and sexual frequency were tested as moderators in subsequent analyses.

Table 9 reports the unstandardized HLM coefficients relating the measures of sexual desire and sexual satisfaction to actor and partner sexual goals. The coefficient for the association between APPROACH goals and sexual desire can be interpreted as follows: Each unit increase in partner-focused approach goals (i.e., engaging in sex for approach goals one unit more than a participant’s own average) was associated with a .27 increase in daily sexual desire. In Study 2, consistent with Study 1, approach goals were associated with increased desire. The findings regarding avoidance goals from Study 1 were also replicated at the daily level; avoidance goals were associated with decreased
desire. On days when an individual engaged in sex more for approach goals than their own average, they reported higher desire, and on days when an individual engaged in sex more for avoidance goals than their own average, they reported less desire.

Table 9

Associations Between Daily Sexual Goals and Sexual Desire

<table>
<thead>
<tr>
<th>Predictors</th>
<th>$b$</th>
<th>$t(264)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROACH</td>
<td>.27*</td>
<td>2.34</td>
</tr>
<tr>
<td>AVOIDANCE</td>
<td>-.54**</td>
<td>-2.74</td>
</tr>
<tr>
<td>Partner APPROACH</td>
<td>-.05</td>
<td>-.52</td>
</tr>
<tr>
<td>Partner AVOIDANCE</td>
<td>-.06</td>
<td>-.46</td>
</tr>
</tbody>
</table>

Note. All variables were entered into the model simultaneously. *$p<.05$  **$p<.01$

Next, the associations between both self- and partner-focused sexual goals and sexual desire were explored. Table 10 reports that an actor’s daily sexual desire was most strongly impacted by partner-focused sexual goals. On days when participants engaged in sex more for partner-focused approach goals than their own average, they experienced significantly higher levels of desire. On days when participants engaged in sex more for partner-focused avoidance goals than their own average, they experienced significantly lower levels of sexual desire. There was a marginally significant partner effect of partner-focused avoidance goals ($p=.059$); on days when participants engaged in sex more for partner-focused avoidance goals than their own average, their partner experienced lower levels of desire. Therefore, engaging in sex for partner-focused avoidance goals is associated with lower levels of desire for the individual as well as their partner. Since
self-focused and partner-focused sexual goals differentially impact daily desire, these more nuanced variables were the focus of subsequent analyses.

Table 10

*Associations Between Self- and Partner-focused Daily Sexual Goals and Daily Sexual Desire*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>$b$</th>
<th>$t(264)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach (self-focused)</td>
<td>.03</td>
<td>.27</td>
</tr>
<tr>
<td>Approach (partner-focused)</td>
<td>.27***</td>
<td>2.85</td>
</tr>
<tr>
<td>Avoidance (self-focused)</td>
<td>.01</td>
<td>.08</td>
</tr>
<tr>
<td>Avoidance (partner-focused)</td>
<td>-.40***</td>
<td>-2.58</td>
</tr>
<tr>
<td>Partner Approach (self-focused)</td>
<td>-.04</td>
<td>-.51</td>
</tr>
<tr>
<td>Partner Approach (partner-focused)</td>
<td>.03</td>
<td>-.39</td>
</tr>
<tr>
<td>Partner Avoidance (self-focused)</td>
<td>-.13</td>
<td>-1.13</td>
</tr>
<tr>
<td>Partner Avoidance (partner-focused)</td>
<td>-.16+</td>
<td>-1.89</td>
</tr>
</tbody>
</table>

*Note.* All variables were entered into the model simultaneously. ***$p<.001$  *$p<.06$

*Interactions Between Gender and Sexual Goals*

Table 11 reports the interactions between gender and daily sexual goals predicting daily sexual desire. A significant three-way interaction was found between gender, partner-focused approach goals and partner-focused avoidance goals. As shown in Figure 9, on days when women pursue sex for high approach goals, their avoidance goals are not significantly associated with their sexual desire (i.e., on days when women are high in approach goals, they experience similar level of daily desire regardless of whether they are also high or low in avoidance goals). However, for men, high avoidance goals decrease their daily desire, even when they are also high in approach goals. In other words, engaging in sex for approach goals helps to buffer against declines in desire that are associated with high avoidance goals for women, but not for men.
Table 11

*Interactions Between Gender and Daily Sexual Goals on Daily Sexual Desire*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>b</th>
<th>t(df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.10</td>
<td>-1.07(88)</td>
</tr>
<tr>
<td>Approach (self-focused)</td>
<td>.11</td>
<td>.81(264)</td>
</tr>
<tr>
<td>Approach (partner-focused)</td>
<td>.35***</td>
<td>2.64(264)</td>
</tr>
<tr>
<td>Avoidance (self-focused)</td>
<td>-.14</td>
<td>-1.32(264)</td>
</tr>
<tr>
<td>Avoidance (partner-focused)</td>
<td>-.27***</td>
<td>-1.93(264)</td>
</tr>
<tr>
<td>Gender X Approach (self-focused)</td>
<td>-.17</td>
<td>-1.14(264)</td>
</tr>
<tr>
<td>Gender X Approach (partner-focused)</td>
<td>.06</td>
<td>.44(264)</td>
</tr>
<tr>
<td>Gender X Avoidance (self-focused)</td>
<td>.13</td>
<td>1.19(264)</td>
</tr>
<tr>
<td>Gender X Avoidance (partner-focused)</td>
<td>.02</td>
<td>.16(264)</td>
</tr>
<tr>
<td>Approach X Avoidance (partner-focused)</td>
<td>.02</td>
<td>.23(264)</td>
</tr>
<tr>
<td>Approach X Avoidance (self-focused)</td>
<td>.08</td>
<td>1.22(264)</td>
</tr>
<tr>
<td>Gender X Approach X Avoidance (partner)</td>
<td>.20**</td>
<td>2.89(264)</td>
</tr>
<tr>
<td>Gender X Approach X Avoidance (self)</td>
<td>-.08</td>
<td>-1.31(264)</td>
</tr>
</tbody>
</table>

*Note. Main effects of gender and sexual goals were controlled in these analyses. Sexual frequency was entered as a covariate. **p<.01 ***p<.001*
Figure 9. Three-way interaction between gender, partner-focused approach and partner-focused avoidance goals.

Figure 9 depicts the three-way interaction between gender, approach and avoidance goals. The slope difference is significant between lines (1) and (2) ($t=6.63$, $p<.001$), lines (1) and (3) ($t=6.07$, $p<.001$), lines (1) and (4) ($t=2.50$, $p<.05$), lines (2) and (4) ($t=-3.60$, $p<.001$), and lines (3) and (4) ($t=-5.54$, $p<.001$), suggesting that gender moderates the association between different combinations of approach and avoidance goals and sexual desire. Lines (2) and (3) display that engaging in sex for these combinations of approach/avoidance goals is associated with higher daily sexual desire for men than for women. Conversely, engaging in sex for high approach/high avoidance goals (1) is associated with higher sexual desire for women than for men. Engaging in sex for low approach/low avoidance goals does not seem to be differentially associated to sexual desire by gender.
Figures 10 & 11. Interaction between partner-focused approach and partner-focused avoidance goals on sexual desire, separated by gender.
Figures 10 and 11 depict the association between sexual desire and both approach and avoidance goals separately for men and women to allow for easier interpretation of the three-way interaction. On days when women engaged in sex for high approach goals, their level of avoidance goals did not differentially impact their desire. High avoidance goals decreased women’s desire on days when their approach goals were low, but not when their approach goals were high. In other words, for women, being high in approach goals buffered against declines in sexual desire associated with high avoidance goals. Conversely, on days when men’s avoidance goals were high, high approach goals did not buffer against these declines; high avoidance goals had the same impact on men’s desire regardless of whether they had high or low approach goals.

**Sexual Frequency as a Moderator**

To test the alternative hypothesis that the association between sexual goals and sexual desire can be accounted for by a couple’s frequency of sex, sexual frequency was entered as a moderator of the association between sexual goals and desire. Sexual frequency did not significantly moderate any of the associations between daily sexual goals and sexual desire (all \( ps > .25 \)), and the main effects of partner-focused approach and partner-focused avoidance goals remained significant, \( b = .27, t(264)=2.91, p<.001; \)

\( b = -.38, t(264)=-3.48, p<.001 \) respectively. This suggests that association between sexual goals and desire is not driven by sexual frequency, and approach and avoidance goals influence sexual desire regardless of how often a couple engages in sex.

**Lagged Day Analyses of Sexual Goals and Desire**

Finding evidence of a daily association between sexual goals and sexual desire does not address the direction of causality. Based on theory and previous research
evidence, I hypothesized that on days when people engage in sex for approach goals they would experience more sexual desire. Nevertheless, it is also possible that on days when people feel more desire, they are more likely to engage in sex for approach goals. In order to compare these two alternatives I conducted lagged-day analyses, a statistical technique that examines the temporal sequences across days (West, Biesanz, & Pitts, 2000). Lagged day analyses cannot definitively demonstrate the casual sequence, but can rule out certain causal pathways. A significant association from one day to the next does not provide full evidence of a causal pathway, but suggests that it cannot be ruled out.

In their research on gratitude in relationships, Algoe, Gable and Maisel (2010) conducted lagged day analyses by testing today’s predictor on today’s outcome, controlling for yesterday’s outcome. We followed this strategy in the current analyses. To test this model, self- and partner-focused approach goals, and self- and partner-focused avoidance goals were entered as predictors of today’s desire, controlling for yesterday’s desire. This model tests whether sexual goals predict changes in sexual desire from the previous day. After controlling for yesterday’s desire, which was significantly associated with today’s desire, \( b = .12, t(234) = 2.00, p < .05 \), partner-focused approach \( (b = .36, t(234) = 3.35, p < .01) \) and partner-focused avoidance goals \( (b = -.36, t(234) = 3.43, p < .01) \) were significantly associated with today’s desire. Therefore, engaging in sex more for partner-focused approach goals than one’s average predicted increases in sexual desire from the previous day. Similarly, engaging in sex more for partner-focused avoidance goals predicted decreases in sexual desire from the previous day. Ideally, I would also test changes in approach goals from the previous day, however, approach goals for sex were only measured on days when participants engaged in sex whereas sexual desire was
measured each day. There were not enough instances of participants having sex multiple
days in a row to test for changes in approach goals from day to day.

Although lagged day analyses do not prove the theoretically predicted path of
causality (i.e., sexual goals predicting desire), the data pattern is more consistent with the
predicted path that the reverse path. In short, the results of the lagged day analyses
suggest that the hypothesized direction of approach goals predicting desire cannot be
ruled out.

**Interdependence and Daily Sexual Desire**

In general, participants’ daily levels of relationship satisfaction, investment and
commitment were high, and their daily perceptions of the desirability of alternatives were
low (see Table 7). There were no significant gender differences in the interdependence
variables, and many of these were significantly correlated for both men and women (see
Table 8), as has been found in past research (Agnew et al., 1998).

Table 12 reports the associations between sexual desire and both actor and partner
daily interdependence variables. The interdependence variables were assessed each day,
regardless of whether the couple had sex. As reported above, participants experienced
higher levels of desire on days when they engaged in sex than on days when they did not.
Therefore, in these analyses whether or not the couple engaged in sex that day was
controlled. The variable *sex today* was coded as 0 = no, 1 = yes. After controlling for
sexual activity, an actor’s daily relationship satisfaction and daily investment in the
relationship were significantly associated with sexual desire. On days when participants
were more satisfied and invested in their relationship than their own average, they
experienced higher levels of sexual desire. After controlling for actor effects of daily
relationship quality, partner’s daily relationship satisfaction was significantly associated
with actor’s daily desire. Controlling for participants own relationship satisfaction and
investment, on days when their partner was more satisfied with the relationship than their
own average, actors experienced higher levels of desire. The hypotheses about
alternatives and commitment were not supported. Gender and sexual frequency did not
significantly moderate any of these associations.

Table 12

*Association Between Daily Interdependence and Sexual Desire, Controlling for Daily Sexual Activity*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>t(1353)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex Today</td>
<td>.98***</td>
<td>7.26</td>
</tr>
<tr>
<td>Actor Daily Relationship Satisfaction</td>
<td>.46***</td>
<td>7.00</td>
</tr>
<tr>
<td>Actor Daily Investment</td>
<td>.15*</td>
<td>2.58</td>
</tr>
<tr>
<td>Actor Daily Alternatives</td>
<td>.04</td>
<td>.73</td>
</tr>
<tr>
<td>Actor Daily Commitment</td>
<td>.12</td>
<td>1.34</td>
</tr>
<tr>
<td>Partner Daily Relationship Satisfaction</td>
<td>.10*</td>
<td>1.97</td>
</tr>
<tr>
<td>Partner Daily Investment</td>
<td>.05</td>
<td>.89</td>
</tr>
<tr>
<td>Partner Daily Alternatives</td>
<td>-.02</td>
<td>-.50</td>
</tr>
<tr>
<td>Partner Daily Commitment</td>
<td>-.04</td>
<td>-.61</td>
</tr>
</tbody>
</table>

*Note. Sexual activity was controlled for and all actor and partner effects were entered into the model simultaneously. *p <.05 ***p <.001*

In addition to reporting their daily levels of interdependence for 21 consecutive
days, participants also reported their general feelings of interdependence in the
background survey. The following analyses test the association between relationship
quality reported in the background survey (a level 2 variable) and daily sexual desire (a
level 1 variable). Table 13 reports the association between interdependence (at
background) and daily sexual desire, controlling for gender and sexual frequency. The
results revealed significant actor and partner effects of relationship satisfaction on daily
sexual desire. Individuals who reported higher relationship satisfaction in the background survey (controlling for their partner’s relationship satisfaction), and individuals whose partners reported higher relationship satisfaction in the background survey (controlling for their own relationship satisfaction) experienced higher levels of daily desire. The hypotheses for the remaining interdependence variables were not supported.

Table 13

*Association Between Interdependence (Background) and Daily Sexual Desire, Controlling for Gender and Sexual Frequency*

<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>t(88)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-.09</td>
<td>-1.27</td>
</tr>
<tr>
<td>Sexual Frequency</td>
<td>-.12</td>
<td>-.27</td>
</tr>
<tr>
<td>Actor Relationship Satisfaction</td>
<td>.28</td>
<td>2.11</td>
</tr>
<tr>
<td>Actor Investment</td>
<td>-.03</td>
<td>-.23</td>
</tr>
<tr>
<td>Actor Alternatives</td>
<td>-.07</td>
<td>-.81</td>
</tr>
<tr>
<td>Actor Commitment</td>
<td>.28</td>
<td>1.22</td>
</tr>
<tr>
<td>Partner Relationship Satisfaction</td>
<td>.33</td>
<td>2.78</td>
</tr>
<tr>
<td>Partner Investment</td>
<td>-.08</td>
<td>-.60</td>
</tr>
<tr>
<td>Partner Alternatives</td>
<td>-.02</td>
<td>-.21</td>
</tr>
<tr>
<td>Partner Commitment</td>
<td>-.06</td>
<td>-.37</td>
</tr>
</tbody>
</table>

*Note.* All variables are entered simultaneously. *p*<.05 **p*<.01

**Mediational Analyses**

Next, I tested my hypothesis that daily sexual goals would mediate these associations between the interdependence variables and daily sexual desire. First I tested sexual goals as a mediator of the association between daily relationship satisfaction and sexual desire. To test this, Baron & Kenny’s (1986) steps for mediation were followed. The first requirement is that the predictor variable be significantly associated with the outcome variable. Both daily relationship satisfaction and daily feelings of investment
were significantly associated with daily sexual desire (See Table 13). The second requirement is that the predictor variable be significantly associated with the mediator. Daily relationship satisfaction was significantly associated with partner-focused approach goals, $b=.29$, $t(277)=3.84$, $p<.001$, but daily investment was not significantly associated with approach goals and therefore approach goals did not significantly mediate this association. The third requirement is that the mediator predicts the outcome variable, controlling for the predictor variable, and that this effect could plausibly account for the association between the predictor variable and the outcome variable. Controlling for relationship satisfaction, partner-focused approach goals significantly predicted sexual desire, $b=.17$, $t(397)=2.79$, $p<.01$. The association between relationship satisfaction and sexual desire did not drop to non-significance, $b=.32$, $t(277)=3.62$, $p<.01$, suggesting that full mediation did not occur. Nevertheless, Sobel’s test indicated this drop was significant ($z=2.25$, $p<.05$), suggesting that partner-focused approach goals partially mediated the association between daily relationship satisfaction and daily desire. On days when participants were higher in relationship satisfaction they engaged in sex more for approach goals and this partially accounted for the association between daily relationship satisfaction and sexual desire (see Figure 13).
Figure 12. Partner-focused approach goals as a mediator between daily relationship satisfaction and sexual desire. Note that all numbers are unstandardized hierarchical linear modeling coefficients. The coefficient on the bottom line outside of the parentheses represents the direct effect of the actor’s relationship satisfaction on the actor’s sexual desire. The coefficient inside of the parentheses represents the indirect effect after accounting for the actor’s approach goals as a mediator. **p<.01 ***p<.001.

In Study 2, relationship satisfaction was not a significant predictor of avoidance goals. Therefore, avoidance goals did not significantly mediate the association between interdependence and sexual desire as in Study 1. In addition, relationship satisfaction did not significantly predict partner’s approach or avoidance goals. As such, approach and avoidance daily goals did not mediate the association between partner satisfaction and actor’s daily desire.

Next, I tested sexual goals as a mediator of the association between general relationship satisfaction (at background) and daily sexual desire. In the mediation analyses above, all of the variables were predicting within-person differences (level 1), however in the following analyses, the predictor variable accounts for between-person variance (level 2), while the mediator and outcome variables are at level 1. Therefore, I tested for multilevel mediation based on the principles of Zhang, Zyphur and Preacher (2009). Specifically because the predictor variable (relationship satisfaction at background) can only predict between-person differences (level 2), the within- and
between-person effects were separated. At level 1 the mediator (daily partner-focused approach goals) was group centered, and at level 2 an aggregate of daily approach goals was entered. In the mediational analyses I concentrated on the aggregate variable (level 2) as the mediator between relationship satisfaction and daily sexual desire.

Analyses were then conducted to determine if the requirements of mediation were met (Baron & Kenny, 1986). As shown in Table 13, the first requirement is met; relationships satisfaction at background is significantly associated with daily desire. The second requirement is to demonstrate that relationship satisfaction significantly predicts daily partner-focused approach goals (level 1). As shown in Figure 13, it does. The third requirement is that the aggregated approach goals (level 2) significantly predict daily desire, while controlling for relationship satisfaction and daily partner-focused approach goals, and the direct effect of relationship satisfaction on daily desire drops to non-significance. Sobel’s test indicates that this drop is significant, $z = 2.01, p < .05$. Therefore, participants with higher overall relationship satisfaction engaged in sex more often for approach goals, and this accounts for the association between relationship satisfaction and daily desire.
Figure 13. Partner-focused approach goals as a mediator between relationship satisfaction and sexual desire. Note that all numbers are unstandardized hierarchical linear modeling coefficients. The coefficient on the bottom line outside of the parentheses represents the direct effect of the actor’s relationship satisfaction on the actor’s sexual desire. The coefficient inside of the parentheses represents the indirect effect after accounting for the actor’s approach goals as a mediator. * $p < .05$ ***$p < .001$.

Relationship satisfaction was not a significant predictor of avoidance goals, therefore avoidance goals did not significantly mediate the association between relationship satisfaction and daily sexual desire. In addition, relationship satisfaction did not significantly predict partner’s goals. As such the association between partner relationship satisfaction and daily sexual desire was not significantly mediated by sexual goals.

Lagged Day Analyses of Interdependence and Sexual Desire

Similar to the association between goals and sexual desire, the association between interdependence and sexual desire in the above analyses does not confirm causality. In order to compare causal pathways between interdependence and sexual desire, lagged day analyses were conducted. Since daily fluctuations in interdependence and desire are of interest in the current study, the analyses were conducted following the lagged day analyses in Algoe et al. (2010). Only the interdependence variables that were
significantly associated with desire were included in the lagged day analyses. Therefore, I tested a model where today’s desire was predicted by an actor’s relationship satisfaction and their partner’s relationship satisfaction that day, controlling for yesterday’s desire. After controlling for yesterday’s desire, both an actor’s own satisfaction, \( b = .64, \) \( t(1247) = 12.50, p < .001 \), and their partner’s satisfaction, \( b = .14, t(1247) = 2.76, p < .01 \), significantly predicted today’s desire. Therefore, increases in desire from one day to the next can be accounted for by increases in a person’s own relationship satisfaction and their partner’s relationship satisfaction.

Unlike sexual motives, which are only measured on days when participants engaged in sex, relationship satisfaction was measured each day that participants were involved in the study. Therefore, a lagged day analysis was also conducted predicting today’s relationship satisfaction from today’s desire, controlling for yesterday relationship satisfaction. After controlling for yesterday’s satisfaction, today’s desire was a significant predictor of today’s satisfaction, \( b = .26, t(1322) = 7.85, p < .001 \). Therefore, sexual desire predicted increases in relationship satisfaction from one day to the next. For the partner effects, although I hypothesize that on days when one’s partner reports more satisfaction, he or she will experience greater desire, it is also possible that on days when an individual is higher in sexual desire, his or her partner is more satisfied. To test this possibility, I conducted a lagged day analyses of the association between an actor’s desire and their partner’s satisfaction, controlling for their partner’s satisfaction on the previous day. An actor’s desire was a significant predictor of their partner’s satisfaction, \( b = .13, t(1322) = 4.50, p < .001 \), controlling for their partner’s satisfaction on the previous day.
Therefore, the reverse pathway is also supported; changes in satisfaction from one day to the next are associated with changes in a partner’s sexual desire.

The results of the lagged day analyses suggest that the hypothesized direction of relationship satisfaction predicting desire cannot be ruled out. Nevertheless, the results also suggest that the reverse casual pathway cannot be ruled out either. Changes in daily desire are predicted by changes in daily relationship satisfaction, and vice versa.

**Study 2 Discussion**

Study 2 replicated many of the findings from Study 1 utilizing a daily diary methodology. Study 2 also demonstrated that the daily level findings are primarily driven by partner-focused sexual goals. Although engaging in sex for approach goals was associated with higher desire, and avoidance goals with lower desire, analyses with the more nuanced goals (self-focused vs. partner-focused) revealed that the partner-focused goals accounted for these associations. Partner-focused approach goals were significantly associated with higher desire, and partner-focused avoidance goals with lower desire, but there were no significant associations between self-focused goals and desire. Cooper and colleagues (Cooper et al., 1998, 2010) found that partner-focused approach goals consistently predicted the likelihood of an individual being in a long term, committed relationship. Their evidence suggests a bidirectional relationship; individuals high in partner-focused approach goals seek out or create environments that match these needs (i.e., committed relationships) and ongoing, committed relationships in turn shape sexual goals. As such, partner-focused goals (approach goals specifically) may be particularly relevant to couples in long-term committed relationships, as in the current sample.
In Study 1, gender significantly moderated the association between approach goals and desire, and approach goals significantly moderated the influence of avoidance goals on desire. In Study 2, I found a three-way interaction between gender, approach and avoidance goals, indicating that approach goals moderated the association between avoidance goals and sexual desire differently for men and women. Although being high in approach and low in avoidance goals was associated with the highest levels of desire for both men and women, for women, high approach goals buffered against experiencing low levels of desire that are associated with high avoidance goals. As such, women who were high in approach goals were less sensitive to the influence of avoidance goals; women’s desire remained high when they had high approach goals regardless of their level of avoidance goals. Men, on the other hand were sensitive to the effect of avoidance goals even when they were high in approach goals. Their desire significantly decreased when they pursued sex for avoidance goals regardless of their level of approach goals. This is in line with the findings from Study 1 that approach goals have a greater impact on women’s desire than men’s.

Gender stereotypes or myths about sexuality may be partially responsible for the gender differences in the association between avoidance goals and desire when approach goals are high. “Macho” beliefs about sexuality state that men are always ready for and always desire sex (Nobre & Pinto-Gouveia, 2006; Ward, 2002). It is possible that men’s desire was more greatly impacted by avoidance goals because of gender biases about men’s sexuality that suggest men do not “avoid” sex. Engaging in sex for partner-focused avoidance goals is characterized by having sex to avoid disapproval from a partner, suggesting that their partner wants to engage in sex and they are simply complying.
Therefore, men engaging in sex for avoidance motives may be a greater departure from traditional gendered scripts of sexuality and thus may have a greater impact on their desire. Zilbergeld (1999) found an association between gendered sexual myths such as these and negative sexual outcomes. An alternate explanation is that men may experience more performance anxiety; a state that has been associated with avoidance and decreased sexual functioning (Bodinger et al., 2002), and one that might be robust to the positive influence of approach goals.

Although a daily diary study allows for the investigation of event-level sexual interactions, it cannot confirm cause and effect. Lagged day analyses were conducted to test the influence of goals and desire across days, a strategy that can provide some insight into direction of the association. Changes in desire on a given day from the previous day were significantly predicted by sexual goals on that day, and the previous day’s desire did not predict today’s sexual goals, suggesting that the hypothesized direction of the association (sexual goals predicting desire) could not be ruled out. Although this does not allow for the conclusion that sexual goals cause changes in daily desire, it provides support for this pathway and not the reverse.

As in Study 1, relationship satisfaction (assessed both at background and through daily surveys) was associated with increased desire, indicating that general relationship satisfaction and daily changes in relationship satisfaction both have an impact on sexual aspects of the relationship. Approach, but not avoidance goals, significantly mediated both of these associations. This is consistent with previous research that links relationship satisfaction and positive sexual outcomes (Byers, 2005; Lawrance & Byers, 1995; Sprecher, 2002), but suggests a new mechanism, approach sexual goals, through which
these are associated. A recent study (Yucel & Gassnov, 2009), although not a test of causality, found that marital satisfaction and sexual frequency predicted sexual satisfaction. The findings were explained using the Interpersonal Exchange Model of Sexual Satisfaction (IEMSS; Byers, 2005; Lawrance & Byers, 1995; MacNeil & Byers, 2005); relational satisfaction and sexual frequency act as rewards and are associated with increases in sexual satisfaction. Both actor and partner effects of relationship satisfaction were found. Therefore, as in the current study, relationship satisfaction was associated with positive sexual outcomes for both the individual and their partner.

Despite the breadth of research linking relationship and sexual satisfaction, a casual direction has not been established, with many researchers finding a concurrent or bidirectional association (e.g., Byers, 2005). Lagged day analyses were conducted in the current study to explore the directional nature of this association by testing effects across days. The results provided support for both pathways; controlling for the previous day’s desire, relationship satisfaction significantly predicted today’s desire, and controlling for yesterday’s relationship satisfaction, today’s desire significantly predicted today’s relationship satisfaction. Therefore, as in past research, the current findings provide support for a bidirectional association between relationship and sexual satisfaction.

Daily levels of investment were also significantly associated with daily desire, but this effect was not mediated by sexual goals. On days when participants felt more invested in their relationship, they felt more sexual desire for their partner. According to interdependence theory, high investment in a relationship can trigger pro-relationship goals and the desire to sacrifice for a partner (Impett et al., 2001 Rusbult et al., 2004; Tran & Simpson, 2009). Invested couples may engage in sex as a pro-relationship goal or
relationship maintenance strategy (Birnbaum & Gillath, 2006) to preserve closeness and intimacy with their partner, and this may be the mechanism responsible for the association between daily feelings of investment and enhanced sexual desire for a partner. Although in line with the hypotheses, these findings counter some anecdotal evidence about couples in long-term relationships. Perel (2007) and Mitchell (2002) suggest that feelings of security and stability may decrease feelings of desire because of a lack of mystery and excitement.

Consistent with Study 1, there were no significant effects of commitment or quality of alternatives on sexual desire. The association between commitment and sexual desire has been debated in the literature; some argue that high commitment and intimacy fosters desire (Kleinplatz & Ménard, 2007), whereas others argue that commitment and security squash desire in long-term relationships (Mitchell, 2002; Perel, 2007). It may be that commitment differential predicts desire for different people, and this was not illuminated in the current study. Perceiving a high quality of alternatives has been associated with infidelity and dissatisfaction in relationships (e.g., McAlister, Pachana, & Jackson, 2005), but has not been specifically linked to decreased desire for a partner. It is possible that some of interdependence variables show less variability in long-term couples and this is responsible for the non-significant effects.

In Study 2, there was a marginally significant partner effect of partner-focused avoidance goals, but no other partner effects were found. The limited partner effects in both Study 1 and Study 2 suggests that individuals may not easily or accurately assess their partner’s sexual goals, either in general or for a specific sexual encounter. Impett et al. (2008) found that individuals’ perceptions of their partner’s goals influenced their
desire, however it could not be confirmed whether their perceptions were accurate. Impett et al. (2005) did find a positive association (albeit weak) between approach sexual motives and a partner’s perceptions of these motives; however, further research is needed to explore the association between an individual’s sexual goals and their partner’s perceptions of these goals.

**General Discussion**

“Achieving life is not the equivalent of avoiding death.” ~Ayn Rand

Although on the surface approaching a positive outcome may be seen as having the same result as avoiding a negative outcome, Ayn Rand’s sentiments and the findings of the current research suggest that this is not the case. Taken together, the results of my dissertation research suggest that pursuing positive outcomes is not the same as avoiding negative outcomes, at least for the experience of sexual desire in long-term partnerships.

**Methodological and Theoretical Contributions**

*Approach and Avoidance Goals*

The associations between approach sexual goals and desire found in previous samples of undergraduate students (Impett et al., 2008) were replicated in a sample of long-term couples. In addition, avoidance goals had a negative impact on desire in the current sample. These findings are consistent with a growing body of research demonstrating that approach goals have positive consequences for relationships and avoidance goals have negative consequences (Carver & White, 1994; Gable et al., 2000; Elliot et al., 2006; Impett et al. 2005, 2008).

In long-term couples, partner-focused, as opposed to self-focused, goals were most relevant for sexual desire. Cooper et al. (1998) found that individuals who were
higher in partner-focused approach goals were more likely to be in a long-term committed relationship. Individuals who are higher in partner-focused approach goals seek out relational contexts that meet these needs (i.e., long-term committed relationships), and long-term committed relationships promote more partner-focused goals (Cooper et al., 2010). Conversely, those who are higher in self-focused approach motives were less likely to stay in a long-term relationship (Cooper et al., 1998); an association that suggests the distinction between self- and partner-focused goals has utility and may be moderated by relational context.

To my knowledge, the current study is the first to find that an individual’s approach and avoidance goals interact in a meaningful way to shape the dynamics of sexual desire. In Study 1, high approach goals were found to buffer against declines in desire associated with high avoidance goals. Meston and Buss (2007) found over 237 expressed reasons for having sex, and the current findings indicate that people engage in sex for multiple overlapping motives that interact to influence desire. Meston and Buss’ research focuses primarily on undergraduate students, and the current findings suggest that motives for sex in long-term relationships may also be vast and complex.

In Study 1, women’s desire was influenced by approach goals to a greater extent than men’s desire, a finding that is in line with previous research suggesting women’s desire is more affected by relational and situational factors, and more responsive (as opposed to spontaneous) than men’s desire (e.g., Basson, 2001; Baumeister, 2000). In Study 2, the interaction between approach and avoidance goals was moderated by gender; high approach goals buffered against declines in desire associated with avoidance goals for women but not for men. As discussed above, this difference may be explained by
gender stereotypes about sexual desire. According to these, men should always pursue and be ready for sex; avoiding or not wanting sex is more in line with biases about women’s sexuality (Nobre & Pinto-Gouveia, 2006; Ward, 2002). Avoidance goals may deviate to a greater degree from predominant male stereotypes about sex than female stereotypes, and therefore may negatively impact men’s desire despite their level of approach goals. In addition, avoidance may be related to performance anxiety for men; a state that may in turn decrease their sexual desire.

Previous research with community couples has found that an individual’s sexual goals influence their partner’s sexual experience as well as their own (Cooper et al., 2008), a finding that was not replicated in the current study. Cooper et al. (2008) found that male partners of women who engaged in sex for partner-focused avoidance goals experienced decreased mood and satisfaction, whereas male partners of women who engaged in sex for partner-focused approach goals reported greater sexual satisfaction. There are at least two explanations for the limited partner effects in the current research. It may be that participants were not correctly assessing their partner’s goals. Impett et al. (2008) found that individuals who perceived their partners to be engaging in sex more for approach goals experienced higher levels of desire. Nevertheless, perceptions of a partner’s goals for engaging in sex may not be consistent with partner’s actual goals. In Cooper et al.’s (2008) research, partner’s sexual goals were associated with actor outcomes, but it was not confirmed that this was due to actors accurately perceiving their partner’s goals; a third variable such as sexual frequency or relationship satisfaction could have been responsible for these associations. In research about preferences for sexual duration, individuals misperceived their partner’s desired duration of sex (Miller
& Byers, 2004). Individuals’ perceptions were more in line with gender stereotypes they held about sex (in this case that men enjoy less foreplay than women) than their partner’s reported preferences. Taken together, this could suggest that a partner’s goals have the potential to influence desire only to the extent that they are accurately perceived.

Conversely, research on “invisible support” indicates that positive effects of support from a romantic partner, such as a reduction in stress, can be strongest when the support is not detected by the supported partner (Bolger, Zuckerman & Kessler, 2000). The current findings do not indicate that this is the case for sexual desire since partner’s goals did not significantly predict actor’s desire, however Bolger et al.’s research suggests that an individual’s sexual goals may have positive effects for their partner even if their goals are not detected by their partner.

Another explanation for the limited partner effects is that goals for sex may have less of an impact on a partner’s daily fluctuations in desire than they do over a longer period of time. Sexual goals can vary across days, but people may also develop relatively stable motivational orientations toward sexuality. Impett et al., (2008) did not find daily partner effects on desire, but found that engaging in sex for approach goals helped to buffer against declines in desire over time. It could be, then, that repeatedly engaging in sex in pursuit of approach vs. avoidance goals either enhances or detracts from the partner’s levels of sexual desire over the long haul. The marginally significant partner effect of partner-focused avoidance goals in Study 2 suggests that, in long term couples, avoidance goals may have a stronger impact than approach goals on a partner’s desire.
The investment model of commitment, based on interdependence theory, has consistently demonstrated that satisfaction, investment, and perceived alternatives predict relationship persistence and longevity (Impett et al., 2001; Kurdek, 1993; Lin & Rusbult, 1995; Rusbult, 1980, 1983; Rusbult et al., 1998). Nevertheless, the application of this theory to sexual aspects of the relationship has been limited. With the exception of the well-documented association between relationship and sexual satisfaction (e.g., Byers, 2005; Sprecher, 2002), the majority of research on interdependence and sexuality has focused on the association between perceptions of alternatives and extra-dyadic sexual behaviour (e.g., McAlister, Pachana, & Jackson, 2005). The association between relationship and sexual satisfaction was replicated in the current study, both in general and at the daily level, and the findings support sexual goals as one mechanism responsible for this association.

According to interdependence theory, individuals who are more satisfied, invested, committed and perceive fewer desirable alternatives to their relationships, engage in more relationship maintenance strategies and have more pro-relationship goals (Impett et al., 2001 Rusbult et al., 2004; Tran & Simpson, 2009). In long-term relationships, sex can be considered a relationship maintenance strategy; interdependent couples engage in regular sexual activity to maintain their bond (Birnbaum & Gillath, 2006). Based on this, I hypothesized that interdependence in relationships would promote engaging in sex more for approach goals, and that this would mediate the association between the interdependence factors and positive sexual outcomes. Partial support was found for these hypotheses. General levels of relationship satisfaction and daily
fluctuations in relationship satisfaction were significantly positively associated with sexual desire. Participants who reported higher levels of baseline relationship satisfaction pursued sex more often for approach goals and less often for avoidance goals, and both of these factors partially accounted for the association between relationship satisfaction and sexual desire. Further, on days when participants reported higher levels of relationship satisfaction, they engaged in sex more for approach goals and this accounted for the association between relationship satisfaction and desire. Partner-focused approach goals (having sex to feel closer to a partner) primarily accounted for these associations, a finding that is consistent with interdependence theory and the concept of sex as a relationship maintenance strategy in long-term relationships.

Although there is a generally agreed upon positive association between relationship and sexual satisfaction, the association between relationship satisfaction and desire has been more contentious. Some clinicians and researchers view relational closeness and intimacy as promoting desire (Kleinplatz & Ménard, 2007), whereas others suggest that these same factors may be responsible for diminished desire in long-term relationships (Mitchell, 2002; Perel, 2007). In an attempt to understand why passion might wane in long-term relationships, Sims and Meana (2010) interviewed married women who reported having lost desire for their partner. They found that low desire was not necessarily attributed to decreased relationship satisfaction, but instead to the over-familiarity of a partner, the over-availability of sex, and the de-sexualization of their roles (as co-parents and roommates). It may be that certain relational or individual factors moderated the association between relationship satisfaction and sexual desire. For example, the majority of the research linking relationship satisfaction to positive sexual
outcomes has been conducted with individuals and couples who are relatively satisfied in their relationships and do not report any distressing sexual issues. Conversely, theories that suggest relational closeness has a negative association with sexual desire have been primarily developed from couples seeking therapy for one partner’s low desire (Perel, 2007; Mitchell, 2002) and women who self-identify as having low sexual desire (Sims & Meana, 2010). These contradictory ideas highlight the importance of exploring the association between sexual goals and sexual desire in less satisfied or distressed couples, and couples experiencing sexual issues such as low desire, in addition to satisfied couples.

Besides the positive association between daily investment and daily sexual desire, the remaining interdependence variables were not significantly associated with the sexual outcomes in the current study. As per the contradictory ideas in the literature about the association between relational closeness and sexual desire (e.g., Kleinplatz & Ménard, 2007; Mitchell, 2002; Perel, 2009), it is possible that the interdependence factors differentially predict sexual desire across people. For example, commitment may foster desire for some couples, whereas for others commitment may remove the excitement from the relationship and result in decreased desire. Individual and relational factors such as relationship expectations and the importance of sex, will be important to explore as moderators in future research.

Attachment orientation and personality traits are also relevant factors to consider in future research on approach and avoidance sexual goals and sexual outcomes. Attachment processes have been shown to influence sexual aspects of a relationship (Birnbaum, 2010), and Impett et al. (2008) found that both partners’ attachment
orientations influenced sexual goals in a relationship. In general anxious attachment was associated with having sex to please a partner and express love, and avoidance attachment with having sex to avoid conflict, although the impact on desire is not known. Research on attachment and sacrifice in relationships has found that an individual’s goals for sacrifice are characteristic of their attachment orientations (Impett & Gordon, 2010). For example, anxiously attached individuals are more likely to adopt goals that protect their feelings about themselves and avoid conflict with their partner, whereas avoidant individuals are more likely to adopt goals that minimize closeness and intimacy with their partner. It is possible that consistency between goals and individual’s attachment orientation, or a particular combination of attachment orientation and sexual goals leads to more positive or negative outcomes.

Previous research has indicated that the personality traits of both partners influence relationship quality (Robins, Caspi, & Moffitt, 2000; Robins, Caspi, & Moffitt, 2002; Watson, Hubbard, & Weise, 2000), but this has not been extended to sexual aspects of the relationship. In general, the presence of highly neurotic individuals is detrimental to relationships (Robins et al., 2000), and extroversion, conscientiousness and agreeableness are positively associated with relational satisfaction (Watson et al., 2000). Positive emotionality is also linked to greater satisfaction, and negative emotionality to poorer relationship quality (Robins et al., 2002). It is possible that certain aspects of personality moderate the association between sexual goals and relational outcomes. Identifying factors that predict one’s propensity towards certain sexual goals will allow for a greater understanding of the mechanisms that underlie approach-avoidance motivations.
The current study could not confirm the causal nature of the association between relationship satisfaction and desire. Lagged day analyses found support for both causal pathways; relationship satisfaction influenced desire (via sexual goals), and desire influenced relationship satisfaction. The current findings are in line with past research suggesting that relationship and sexual satisfaction are bidirectional and changes are experienced concurrently (Byers, 2005). Continuing to consider sex as a relationship maintenance strategy in a long-term relationship, a bidirectional association between relationship satisfaction and desire is supported by interdependence theory. Interdependent couples engage in more relationship maintenance strategies, and a long-term, well-functioning relationship is sustained through relationship maintenance mechanisms (Rusbult et al., 2001).

Consistent with recent research (Yucel & Gassanov, 2009), the current study provided support for the dyadic nature of relationship satisfaction and its association with sexual aspects of the relationship. An individual’s general relationship satisfaction and daily changes in that person’s relationship satisfaction were significantly associated with their partner’s sexual desire, a finding that highlights the importance of a dyadic approach to the study of romantic relationships. With the exception of the association between daily levels of investment and desire, there were no other significant associations between the interdependence factors and sexual desire.

**Strengths of the Current Study**

A major strength of the current research is the daily diary methodology. The bulk of sexuality research relies on retrospective reports, which are limited by a participant’s ability to accurately report past experiences (Kahneman, 2000). Daily surveys allow
participants to report on their sexual experiences as close in time as possible to when the experience occurred. In the current study, this allowed for a deeper understanding of the associations between sexual goals and sexual desire.

Second, because participants in the current study included both members of long-term couples, a truly dyadic approach was taken. Although few partner effects were found, this research raises new questions about the connection between an individual’s perception of their partner’s goals and their partner’s actual goals for sex.

Third, this research adds to the growing body of literature that applies approach-avoidance motivational theory to the study of sexuality in relationships. It extends findings from dating couples (Impett et al., 2008) to a sample of long-term couples, many of whom are married. Further, the findings provide support for utility of focusing on self vs. partner goals within the approach-avoidance framework (Cooper et al., 1998, 2008, 2010).

Limitations

Although the current research attempts to address the limits of retrospective reports by using daily diary methodology, the research is still limited to some degree by the self-reported nature of the data. Although problems of recall and accurate reporting are reduced with the use of daily diaries, participants may still be challenged to recall events accurately or may answer based on social desirability (Catania, Gibson, Chitwood, & Coates, 1990). Similarly, participants were reporting on personal sexual experiences and may be embarrassed or want to maintain privacy about certain aspects of their relationship. Individuals who choose to participate in research on sexuality may be
different than those who decline (Dunne, 2002), and this limits the generalizability of the findings.

Another potential bias in the current study is that in general the couples studied were highly satisfied in their relationships. Distressed or less satisfied couples may evidence different associations between sexual goals and sexual outcomes. A comparison of satisfied and less satisfied couples, and couples who report high vs. low levels of desire is an important direction for future research.

Finally, although I attempted to provide support that sexual goals predict sexual outcomes; a causal pathway cannot be confirmed in a daily diary study. The reverse pathway, desire influencing sexual goals, is also possible. Further research is needed to provide a more definitive test of the causal direction of this relationship.

**Implications and Future Directions**

In addition to the directions mentioned above, future studies utilizing experimental and longitudinal designs to inform the causal nature of the association between sexual goals and desire are an important direction for future research. In previous research on social goals, Strachman and Gable (2006) manipulated approach and avoidance goals in the lab. Participants were told that the study was about first impressions and to write a brief statement about themselves to be presented to a person they were meeting for the first time. Participants in the approach condition were primed toward approach social goals (to have a good time, to make a good impression) and participants in the avoidance condition were primed toward avoidance social goals (not to have a bad time, not make a bad impression). After reading a description of the person they were meant to meet, participants in the avoidance condition remembered more
negative descriptors and expressed more dislike toward the person than those in the approach condition. Although manipulating sexual goals may present some additional challenges, these findings suggest that approach and avoidance goals can be manipulated and that the findings are consistent with the associations implied by correlational research.

One strategy for studying the causal nature of the association between sexual goals and desire, since it would not be possible to manipulate participants’ actual goals for sex, would be to have couples recall a sexual experience where they engaged in sex for approach or avoidance goals, and then to rate their self-reported level of desire for their partner at the time. Individuals could also be provided with scenarios where a hypothetical person engages in sex for either approach or avoidance goals, and then be asked to rate the perceived level of desire for both individuals in the scenario. Another strategy would be to have romantic couples participate in videotaped discussions about times when they have engaged in sex for approach vs. avoidance motives in the lab. Then, independent observers could use an established coding scheme to code for behavioural markers of sexual desire. For example, Gonzaga and colleagues (Gonzaga, Keltner, Londahl, & Smith, 2001; Gonzaga & Haselton, 2008) have identified distinct behavioural markers that differentiate between romantic love and sexual desire. Romantic love is denoted by affiliation cues (e.g., Duchenne smiles, head nods) and desire by sexual cues (e.g., licking the lips); these are distinct and have been shown to predict more commitment-related behaviours and more sexual desire respectively. More behavioural markers of desire in the approach condition, and fewer in the avoidance condition, would lend support to the association found in the current study.
Although sexual frequency is associated with sexual satisfaction (Laumann et al., 1994), the current research demonstrates that sexual goals predict positive sexual outcomes above and beyond the overall frequency with which couples engaged in sex. One implication of these findings is that modifying goals for sex may help to improve levels of desire. In a study on positive and negative sexual cognitions, Clark, Purdon and Byers (2000) indicated that negative cognitions were more intrusive and resulted in more frequent attempts to control them, but this research could not conclude whether these attempts were successful. Brotto, Krychman, and Jacobson’s (2008) research on mindfulness, suggests that when women who were experiencing low sexual desire or arousal engaged in a series of mindfulness exercises including “trying on” a more positive sexual self schema, they experienced positive consequences for desire and arousal. These findings provide further evidence of the influence of positive and negative cognitions on sexual response, and suggest that it may be possible to modify these to improve sexual outcomes.

Finally, the lack of partner effects found in the current study raises questions about an individual’s ability to detect their partner’s goals and the consistency between one’s goals and their partner’s perception. Future research might focus on the consistency between an individual’s sexual goals and their partner’s perceptions of those goals. Sexual self-disclosure is one mechanism that helps to maintain sexual satisfaction in long-term relationships (MacNeil & Byers, 2009); therefore accurate perceptions of a partner’s goals for sex may have implications for desire and satisfaction.
Conclusions

The current research demonstrates the utility of applying motivational and interdependence theories to the study of sexual desire in long-term couples. Couples engage in sex for a variety of reasons, including to express love, to avoid a fight, to relieve stress, and to feel sexually desirable. Approaching positive outcomes in relationships has a unique influence on desire from avoiding negative outcomes, and in long-term couples partner-focused goals are particularly important. Sexual goals are also one mechanism that link relational factors to sexual outcomes in long-term couples.
References


Basson, R. (2001). Using a different model for female sexual response to address


Levin, R. J. (2000). Sexual desire and the deconstruction and reconstruction of the


Meyers, S. A., & Berscheid, E. The language of love: The difference a preposition makes. 


Postmenopausal women’s meaning and experience of sexual desire. *Qualitative Health Research, 17*, 189-200.


Appendix A
Study 1 Survey

Please indicate how you identify:
__Male
__Female
__Transgendered
__I do not identify as any of the above
__I choose not to answer

What year were you born in? _________

My racial/ethnic background is (please check all that apply):
__Aboriginal (Inhuit, Metis, North American Indian)
__Arab/West Asian (e.g. Armenian, Egyptian, Iranian, Lebanese, Moroccan)
__Black (e.g. African, Haitian, Jamaican, Somali)
__Chinese
__Filipino
__Japanese
__Korean
__Latin American
__South Asian
__South East Asian
__White (Caucasian)
__I choose not to answer
Other (please specify)________________________

I would describe myself as:
__Heterosexual
__Gay or lesbian
__Bisexual
__Queer
__Uncertain or questioning
__I choose not to answer
Other (please specify)________________________

What is your current relationship status?
__I am not currently in a relationship
__In a relationship, but not living together
__Living with a partner, but not married or engaged
__Engaged
__Married
Other (please specify)________________________

How long have you been in a relationship with your current partner? Please answer in months and years (e.g. 4 years, 2 months). ______________________________
Do you have children?  __Yes  __No

If yes, how many children do you have? _________________

Relationship Satisfaction

Please indicate the degree to which you agree with each of the following statements regarding your current relationship.

1 2 3 4 5 6 7 8 9
Do not agree  Agree completely

__ My partner fulfills my needs for intimacy (sharing personal thoughts, secrets, etc.).
__ My partner fulfills my needs for companionship (doing things together, enjoying each other’s company, etc.).
__ My partner fulfills my sexual needs (holding hands, kissing, etc.).
__ My partner fulfills my needs for security (feeling trusting, comfortable in a stable relationship, etc.).
__ My partner fulfills my needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.).
__ I feel satisfied with our relationship.
__ My relationship is much better than others’ relationships.
__ My relationship is close to ideal.
__ Our relationship makes me very happy.
__ Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.

Quality of Alternatives

Please indicate the degree to which you agree with each statement regarding your fulfillment in alternative relationships (e.g., by another dating partner, friends, family).

1 2 3 4 5 6 7 8 9
Do not agree  Agree completely

__ My needs for intimacy (sharing personal thoughts, secrets, etc.) could be fulfilled in alternative relationships.
__ My needs for companionship (doing things together, enjoying each other’s company, etc.) could be fulfilled in alternative relationships.
__ My sexual needs (holding hands, kissing, etc.) could be fulfilled in alternate relationships.
__ My needs for security (feeling trusting, comfortable in a stable relationship, etc.) could be fulfilled in alternative relationships.
__ My needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.) could be fulfilled in alternative relationships.
__ The people other than my partner with whom I might become involved are appealing.
My alternatives to our relationship are close to ideal (dating another, spending time with friends or on my own, etc.).

If I weren’t dating my partner, I would find another appealing person to date.

My alternatives are attractive to me (dating another, spending time with friends or on my own, etc.).

My needs for intimacy, companionship, etc., could easily be fulfilled in an alternate relationship.

Investment

Please indicate the degree to which you agree with each of the following statements regarding your current relationship (Don’t agree at all, Agree slightly, Agree moderately, Agree completely).

I have invested a great deal of time in our relationship.

I have told my partner many private things about myself (I disclose secrets to him/her).

My partner and I have an intellectual life together that would be difficult to replace.

My sense of personal identity (who I am) is linked to my partner and our relationship.

My partner and I share many memories.

Many aspects of my life have become linked to my partner (recreational activities, etc.), and I would lose all of this if we were to break up.

I feel very involved in our relationship-like I have put a great deal into it.

My relationships with friends and family members would be complicated if my partner and I were to break up (e.g., partner is friends with people I care about).

Compared to other people I know, I have invested a great deal in my relationship with my partner.

Commitment

Please respond to the following questions using the scale provide.

I want our relationship to last for a very long time.

I am committed to maintaining my relationship with my partner.

I would not feel very upset if our relationship were to end in the near future.

It is likely that I will date someone other than my partner within the next year.

I feel very attached to our relationship-very strongly linked to my partner.

I want our relationship to last forever.
I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now).

Approach and Avoidance Sexual Goals

Rate the importance of the following factors in influencing why you TYPICALLY engage in sex from 1 = not at all important to 7 = extremely important.

1  2  3  4  5  6  7

Not at all important  Extremely important

To pursue my own sexual pleasure.
To feel good (better) about myself.
To prevent my partner from falling out of love with me.
To gain power over my partner
To feel sexually desirable
To have an orgasm
To prevent my partner from losing interest in me.
To feel sexually satisfied.
To avoid feeling guilty.
To sleep better.
To relieve stress.
To please my partner.
To avoid feeling bad about myself.
To prevent feeling sexually frustrated.
To avoid having to decline a partner’s request.
To promote intimacy in my relationship.
To express love for my partner.
To prevent my partner from becoming upset.
To feel emotionally closer to my partner.
To experience pleasure with my partner.

To avoid conflict in my relationship.

To add excitement to my relationship.

To prevent my partner from getting angry at me.

**Sexual Desire**

Next we would like some additional information about your sexual experiences with your partner. Please rate the statements below from 0 (never) to 4 (all the time).

```
   0   1   2   3   4
   Never    All the time
```

1. Just thinking about having sex with my partner excites me. (R)
2. I try to avoid having sex with my partner
3. I daydream about sex. (R)
4. It is difficult for me to get in a sexual mood.
5. I desire sex more than my partner does. (R)
6. It is hard for me to fantasize about sexual things.
7. I look forward to having sex with my partner. (R)
8. I have a huge appetite for sex. (R)
9. I enjoy using sexual fantasy during sex with my partner. (R)
10. It is easy for me to get in the mood for sex. (R)
11. My desire for sex should be stronger.
12. I enjoy thinking about sex. (R)
13. I desire sex. (R)
14. It is easy for me to go weeks without having sex with my partner.
16. I feel I want sex less than most people.
17. It is easy for me to create sexual fantasies in my mind. (R)
18. I have a strong sex drive.
19. I enjoy thinking about having sex with my partner. (R)
20. My desire for sex with my partner is strong. (R)
21. I feel that sex is not an important aspect of the relationship I share with my partner.
22. I think my energy level for sex with my partner is too low.
23. It is hard for me to get in the mood for sex.
24. I lack the desire necessary to pursue sex with my partner.
25. I try to avoid having sex with my partner.
Sexual Satisfaction

Please rated the following questions using the scale provided.

1. I feel that my partner enjoys our sex life.
2. Our sex life is very exciting.
3. Sex is fun for my partner and me.
4. Sexual with my partner has become a chore for me. (R)
5. I feel that our sex life is dirty and disgusting. (R)
6. Our sex life is monotonous. (R)
7. When we have sex it is too rushed and hurriedly completed. (R)
8. I feel that my sex life is lacking in quality. (R)
9. My partner is sexually very exciting.
10. I enjoy the sex techniques that my partner likes or uses.
11. I feel that my partner wants too much sex from me. (R)
12. I think our sex is wonderful.
13. My partner dwells on sex too much. (R)
14. I try to avoid sexual contact with my partner. (R)
15. My partner is too rough or brutal when we have sex. (R)
16. My partner is a wonderful sex mate.
17. I feel that our sex life is a normal function of our relationship.
18. My partner does not want sex when I do. (R)
19. I feel that our sex life really adds a lot to our relationship.
20. My partner seems to avoid sexual contact with me. (R)
21. It is easy for me to get sexually excited by my partner.
22. I feel that my partner is sexually pleased with me.
23. My partner is very sensitive to my sexual needs and desires.
24. My partner does not satisfy me sexually. (R)
25. I feel that my sex life is boring.
On average, how many times per month do you and your partner have sex?

___ Less than once a month
___ About once a month
___ 2-3 times per month
___ About once a week
___ Multiple times per week
___ Daily
Appendix B

Daily Survey

Please complete the following questions about your relationship today.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all true</td>
<td>Moderately true</td>
<td>Very true</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

___ I felt satisfied with my relationship today.
___ I felt close to my partner.
___ Our relationship made me very happy.
___ Alternatives to my relationship (such as spending time with friends, spending time alone, or dating another person) were attractive to me today.
___ I felt that my needs for intimacy and companionship could be fulfilled in another relationship.
___ People other than my partner were very appealing.
___ I felt like I invested a great deal of time in my relationship.
___ My sense of personal identity (who I am) was strongly linked to my partner and our relationship.
___ I felt very involved in my relationship.
___ I felt a strong desire to continue my relationship for a long time.
___ I felt very attached to our relationship.
___ I felt committed to maintaining my relationship with my partner.

Please rate the following question on the scale provided.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly disagree</td>
<td>Strongly agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

___ I felt a great deal of sexual desire for my partner today.

Did you and your partner engage in sexual today?
___ Yes
___ No
Rate the importance of the following factors in influencing your decision to engage in sex.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all important</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Extremely important</td>
</tr>
</tbody>
</table>

To pursue my own sexual pleasure.
To feel good (better) about myself.
To prevent my partner from falling out of love with me.
To gain power over my partner.
To feel sexually desirable.
To have an orgasm.
To prevent my partner from losing interest in me.
To feel sexually satisfied.
To avoid feeling guilty.
To sleep better.
To relieve stress.
To please my partner.
To avoid feeling bad about myself.
To prevent feeling sexually frustrated.
To avoid having to decline a partner’s request.
To promote intimacy in my relationship.
To express love for my partner.
To prevent my partner from becoming upset.
To feel emotionally closer to my partner.
To experience pleasure with my partner.
To avoid conflict in my relationship.

To add excitement to my relationship.

To prevent my partner from getting angry at me.