

**SEXUAL SATISFACTION IN NEWLYWED COUPLES:
THE ROLE OF ATTACHMENT AND SEXUAL MOTIVATIONS**

by

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Abstract

People engage in sex to meet a variety of intra- and interpersonal goals. Some motives for having sex may be associated with how people meet attachment-related needs for emotional security in their intimate relationships. I examined how spouses' motives for engaging in sexual activity and their perceptions of their partners' sex motives were associated with their sexual satisfaction. I also examined how attachment orientation was associated with sex motives, and whether spouses' sex motives mediated the relation between attachment security and sexual satisfaction. Both spouses in a sample of 163 newlywed couples completed self-reports of attachment orientation, sex motives, and sexual satisfaction. Attachment anxiety was related to having sex to avoid negative experiences, and sex motives involving the pursuit of pleasurable experiences were positively associated with sexual satisfaction. However, sex motives did not mediate the association between attachment orientation and sexual satisfaction. A gender-moderated link emerged from spouses' attachment insecurity to sexual satisfaction: Husbands' attachment anxiety independently and negatively predicted their sexual satisfaction, whereas wives' attachment avoidance independently and negatively predicted their sexual satisfaction. Discussion focuses on the complex role of sex motives in couples' sexual satisfaction and provides directions for future research.

Keywords: adult attachment; sex motives; sexual satisfaction; relationship satisfaction; couples; gender

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Introduction

People engage in sexual activity for many reasons (e.g., Cooper, Shapiro, & Powers, 1998; Hill & Preston, 1996). Some of those reasons may be associated with how people meet their attachment-related needs for emotional security in their intimate relationships (Davis, Shaver, & Vernon, 2004; Schachner & Shaver, 2004). For instance, people who are especially sensitive to potential rejection and abandonment may have sex as a way of keeping a partner close and involved in the relationship. On the other hand, people who are uncomfortable with emotional closeness in relationships may engage in sex for reasons that are more self-focused. Though there is growing interest in the links between attachment orientation and sexual behaviour (e.g., Birnbaum, 2007; Birnbaum, Reis, Mikulincer, Gillath, & Orpaz, 2006; Butzer & Campbell, 2008; Feeney & Noller, 2004), few studies have examined links between attachment orientation and sexual satisfaction. I will examine whether people's sexual motives mediate the associations between attachment orientation and sexual satisfaction. In addition, the reasons people *think* their partner has sex with them may be just as, if not more, important to their sexual satisfaction as their own reasons for engaging in sex. Therefore, I will also explore how people's perceptions of their partner's sexual motives predict their sexual satisfaction.

Background

Sexual Motivation

People engage in sex to meet a broad range of psychological needs and goals (e.g., Cooper et al., 1998; Hill & Preston, 1996). For instance, people have sex because it

feels good and provides them with physical pleasure, or people have sex when they want to have children. There have been a few attempts to organize these reasons systematically. In 1996, Hill and Preston developed a taxonomy of eight different dispositional motives for sex (to experience pleasure, feel valued, nurture a partner, etc.). In more recent research from an evolutionary perspective, Meston and Buss (2007) grouped people's reasons for engaging in sexual intercourse according to physical, emotional, insecurity, and goal attainment reasons (such as to gain resources, status, or revenge). As is the case with other emotionally driven interpersonal behaviour, some of these motives reflect the pursuit of pleasurable, positive outcomes, whereas other motives reflect the avoidance of unpleasant, negative outcomes. Using this framework as a basis, Cooper and colleagues (1998) conceptualized sexual motives in terms of two intersecting dimensions. Approach versus avoidance reflects the degree to which sexual motives are directed toward pursuing a positive, pleasurable experience or outcome versus avoiding a painful, aversive experience or outcome; self- versus other-focused reflects the degree to which sexual motives are internally directed versus externally directed.

Although research suggests that different psychological needs and motivations are associated with distinct patterns of sexual behaviour and sexual risk taking (Cooper et al., 1998), only one previous study has considered sexual motives in relation to positive relationship outcomes, such as relationship and sexual satisfaction (Impett, Peplau, & Gable, 2005). Impett and colleagues (2005) conducted a two-week daily experience study to examine how approach and avoidance sexual motives in intimate relationships were associated with personal and interpersonal well-being. Target participants rated their reasons for having sex with their partner, and participants' partners were asked to

rate how often they thought the participant had engaged in sex with them for these reasons. Self- and partner-perceived approach-oriented motives were positively related to intra- and inter-personal well-being. In contrast, self- and partner-perceived avoidance motives were negatively related to well-being and positively related to relationship dissolution at a six-week follow up.

Impett et al.'s (2005) findings indicate that people's *reasons* for engaging in sexual activity (whether experienced by the self or attributed to the partner) may affect well-being and relationship stability. The authors speculate that people may be more expressive and enthusiastic when engaging in sex for approach (relative to avoidance) motives, thereby enhancing their own and their partners' enjoyment. As well, people who have sex for approach motives may be more attuned to positive cues from their partner, whereas those who have sex for avoidance motives may be more attentive to negative cues (such as signs of disinterest or displeasure). Thus, people may tend to perceive their sexual motivations in their partners, compromising their capacity to judge accurately their partners' reasons for sexual engagement. Consistent with this speculation, there was only modest (at best) agreement between self- and partner-perceived motives.

Impett and colleagues' (2005) research highlights the importance of sexual motivation for relationship functioning. However, participants were limited to undergraduate students (with a mean age of approximately 20 years) reporting on dating relationships (with a mean relationship length of 1.5 years), and it is not clear if the findings would apply to more established relationships. The reasons for engaging in sexual activity may vary depending on the age and health status of partners and length of

relationships. For instance, partners in established relationships may be more attuned to each other's needs and desires. Therefore, interpersonal reasons for making love may supersede more personal, self-focused motives. Moreover, because Impett et al. (2005) only assessed self- and partner-perceptions of one partner's sex motives, no cross-dyad analyses of partners' sex motives and motive attributions were possible.

Attachment Orientation and Sexual Motivation

Romantic relationships can be conceptualized as involving the integration of the attachment, caregiving, and sexual systems (Shaver, Hazan, & Bradshaw, 1988).

Although the sexual system is functionally and conceptually distinct from the attachment system, sexual behaviour may serve attachment needs. Therefore, individual differences in attachment orientation may impact on sexual motivations (Hazan & Shaver, 1987).

Adult attachment orientation can be conceptualized in terms of two underlying dimensions: the degree of *anxiety* and the degree of *avoidance* experienced in close relationships (Bartholomew, 1990; Griffin & Bartholomew, 1994; Mikulincer & Shaver, 2007a). The *anxiety* dimension refers to the degree to which people experience anxiety about a partner's availability and their value to the partner. Anxiety is characterized by hyperactivating strategies to deal with insecurity and distress (e.g., hypersensitivity to signs of real or imagined rejection or abandonment; Mikulincer & Shaver, 2007a; Shaver & Mikulincer, 2005). The *avoidance* dimension describes people's tendency to avoid closeness in relationships in response to anxiety. It is characterized by deactivating strategies to deal with insecurity and distress (e.g., suppression of attachment-related distress, inhibition of proximity-seeking, emphasis on independence and self-reliance; Shaver & Mikulincer, 2005).

Attachment orientation, as defined by degree of anxiety and avoidance in intimate relationships, influences how individuals interpret their partner's behaviour and interact in close relationships (Shaver & Mikulincer, 2005). Thus, I propose that attachment orientation may also influence sexual motivation. To date, few published studies have examined how individual differences in attachment orientation relate to sexual motivations (e.g., Cooper, Pioli, Levitt, Talley, Micheas, & Collins, 2006; Davis et al., 2004; Schachner & Shaver, 2004; Tracy, Shaver, Albino, & Cooper, 2003). In all cases, samples consisted of either adolescents or relatively young, mainly unmarried adults.

Attachment anxiety is defined in terms of insecurity about the self in relation to others, such as worry about rejection, separation, and abandonment in relationships. Therefore, I expected attachment anxiety to be associated with engaging in sexual activity as a way of maintaining closeness with one's partner and gaining reassurance to quell insecurities. Consistent with this expectation, the strongest and most consistent finding across studies is that attachment anxiety is associated with having sex to feel valued by one's partner, to gain reassurance about the relationship, and to avoid a partner's rejection/abandonment (Davis et al., 2004; Schachner & Shaver, 2004). In addition, Davis et al. (2004) found that attachment anxiety was positively related to almost all sex motives assessed, suggesting that those high on anxiety may use sex to fulfill a range of psychological needs. However, many of these associations were small effects. In contrast, Schachner and Shaver (2004) found few associations between anxiety and sex motives.

Having sex is an intrinsically interpersonal activity, requiring—if not psychological—at least physical closeness. This closeness may pose a dilemma and

source of discomfort to individuals high on avoidance. Thus, the theoretical rationale for how attachment avoidance relates to sex motives is less clear than it is for attachment anxiety. As expected, however, attachment avoidance is consistently and negatively associated with having sex to promote intimacy (Davis et al., 2004; Schachner & Shaver, 2004; Tracy et al., 2003). In addition, Schachner and Shaver's (2004) findings suggest that sex motives for people high on attachment avoidance may vary depending on relationship context. For avoidant participants who had casual sex in the past six months, the degree of avoidance was positively associated with sex motives aimed at avoiding negative outcomes. This was not the case for those who had not had casual sex in the past six months.

Current Study

I examined how attachment orientation was associated with motives for engaging in sexual activity, and whether different types of sex motives were associated with sexual satisfaction. Many studies have focused on the association between attachment orientation and relationship satisfaction and possible mediators such as communication, conflict, social support, and attribution style (Feeney, 1999; Mikulincer & Shaver, 2007a). However, despite a growing literature on attachment and sex (see Mikulincer & Shaver, 2007a, for a review), there has been little focus on the links between attachment orientation and sexual satisfaction. Moreover, researchers have not considered whether sexual motives mediate the path between attachment orientation and sexual satisfaction.

Some sex motives may be more or less relevant depending on the context of the relationship. For instance, rejection concerns may be more salient in dating and adolescent relationships than in more established, committed relationships. Furthermore,

the reasons for having sex may be more self-focused and less relationally focused in casual relationships than in committed relationships. Individuals in longer-term relationships may be more attuned to and sensitive to their partners' needs and desires and less likely to have sex for self-focused motivations, whether for insecurity reasons to reassure themselves or for self-enhancement reasons. Thus, findings from short-term dating relationships may not generalize to longer-term, established relationships. The current study builds on and extends previous research by including a large community sample of newlywed couples in committed relationships.

In the present study I took a dyadic perspective by considering both spouses' experiences, including their attachment orientations, sexual motivations, and sexual satisfaction. I tested a model that examined the role of attachment orientation and participants' sexual motivations and their perceptions of their partners' sexual motivations in predicting sexual satisfaction. The mediation model for wives is presented in Figure 1. Paths a and b indicate the association between wives' attachment orientation and wives' sex motives. Wives' perception of husbands' motives can originate from wives' own motives (i.e., projection, path d) or from husbands' reported motives (i.e., agreement, path e). Wives' sex motives (path f) and perception of their husbands' sex motives (path g) may independently predict wives' sexual satisfaction. Although not necessarily expected, husbands' sex motives may also independently predict wives' sexual satisfaction (path h). I also allowed for direct paths from attachment anxiety and avoidance to sexual satisfaction (paths i and j). A parallel model was tested for husbands.

Attachment Orientation and Sexual Motivation

Although anxiously attached individuals desire closeness in their relationships, their pervasive self-focus and worries about acceptance and abandonment may lead them to engage in sex to allay concerns about their perceived personal shortcomings and to avoid rejection rather than to enhance reciprocal intimacy or to experience physical pleasure. Therefore, I expected that anxious attachment would be associated with avoidance motives. Specifically, I hypothesized that attachment anxiety would be related to having sex to feel emotionally valued by one's partner, to affirm oneself when feeling inadequate, and to reassure oneself when feeling insecure about the relationship. I speculated that attachment anxiety might also be associated with engaging in sex to cope with negative emotional states since this motive may be especially relevant to those prone to responding strongly to a range of stressors, such as relationship threat. In addition, I speculated that attachment anxiety may be related to using sex as a tool to influence or manipulate the partner because feeling dependent on one's partner and lacking self-esteem may make it difficult to communicate sexual needs assertively and directly. I did not have specific predictions for how attachment anxiety would be related to having sex to give the partner pleasure. However, attachment anxiety may motivate people to provide their partner with physical pleasure as a means to an end, to avoid rejection and to keep the partner involved in the relationship, rather than giving the partner pleasure for its own sake.

Attachment avoidance is characterized by avoiding closeness and maintaining distance in the face of relationship threat. Consequently, I expected that attachment avoidance would be negatively associated with motives related to promoting closeness

and intimacy with one's partner. I also expected that attachment avoidance would be positively associated with sex motives that are focused on the self and related to autonomy and self-enhancement, such as having sex to seek self-enhancement and self-affirmation. However, I did not have specific predictions for how avoidance would be associated with the motive of physical pleasure. On the one hand, attachment avoidance may be positively associated with having sex to experience physical pleasure given the inherent self-focus of this motive. On the other hand, avoidance may be unrelated to motives of physical pleasure given that general dissatisfaction with intimate touching and erotophobic attitudes are associated with avoidance (Cooper et al., 2006; Schachner, Shaver, & Mikulincer, 2003; Tracy et al., 2003).

Partner Perceptions

Little previous research has examined partner perceptions in the sexual domain (cf. MacNeil & Byers, 2005). As in other domains of relationships (e.g., Reis, Clark, & Holmes, 2004), partner perceptions may be just as, or even more, important as self-perceptions of sex motives. The one study to assess partner perceptions did not involve any dyadic analyses (Impett et al., 2005). Thus, results of the study did not provide answers to the question of what predicts husbands and wives' *perceptions* of one another's sexual motivations. I predicted that projection from self-reported motives and partners' self-reported motives (i.e., agreement or consensus) would influence how one perceives one's partner's motivations.

Predictors of Sexual Satisfaction

Thinking that your partner is having sex with you for what you perceive to be the “wrong” reasons (e.g., to cope with upset feelings or to reassure him-or herself) may undermine sexual satisfaction. More specifically, I expected perceived partner motives that are related to the pursuit of positive or pleasurable experiences (i.e., approach motives such as intimacy and physical pleasure), especially those that are perceived to be responsive to the partner’s needs (e.g., to please the partner) to be associated with greater self-reported sexual satisfaction. In contrast, I expected perceived partner motives related to the avoidance of aversive or painful experiences (i.e., avoidance motives such as insecurity, reassurance, and coping) to predict lower sexual satisfaction. By including both members of heterosexual couples, I was able to examine how participants’ sex motives and their perceptions of their partners’ reasons for engaging in sex predict participants’ sexual satisfaction.

In line with previous research, I expected that attachment anxiety and avoidance would be negatively associated with sexual satisfaction (e.g., Butzer & Campbell, 2008) as fears of rejection during sexual encounters as well as discomfort with closeness may negatively affect sexual satisfaction. I expected that the path between attachment orientation and sexual satisfaction would be mediated, at least in part, through self-reported and perceived partner sexual motives. For instance, attachment anxiety may be related to sex motives of self-affirmation and insecurity, which are in turn associated with lower sexual satisfaction. Attachment avoidance, on the other hand, may be negatively related to the sex motive of intimacy, which is in turn associated with lower satisfaction.

Secondary Research Questions

Gender Differences

Because past research has documented gender differences in sexual desire, behaviour, and attitudes (e.g., level of sexual desire, erotic plasticity; Vohs & Baumeister, 2004), I ran separate models for wives and husbands. However, I had no basis for expecting gender differences in the proposed path models.

Interaction of Anxiety and Avoidance

I examined whether the interaction between attachment anxiety and avoidance was associated with sexual motivations and sexual satisfaction. For instance, a positive association between attachment avoidance and having sex when feeling insecure about oneself (i.e., Self-Affirmation) may not be related to attachment avoidance *per se* but only to avoidance in the context of high anxiety. Thus, a spouse high on avoidance and anxiety may endorse having sex for Self-Affirmation reasons, whereas an avoidant spouse low on anxiety may not.

Controlling for Marital Satisfaction¹

The association between marital satisfaction and sexual satisfaction is complex, and the direction of influence is not entirely understood. Although some longitudinal research suggests that sexual satisfaction contributes to marital satisfaction, some researchers question the causal direction of the link and propose that the association

¹ The terms marital satisfaction and relationship satisfaction are used interchangeably in this thesis, with marital satisfaction specifically referring to relationship satisfaction in married couples.

between sexual and marital satisfaction is dynamic, with each likely reciprocally influencing the other (Henderson-King & Veroff, 1994; Lawrance & Byers, 1995; for reviews see Christopher & Sprecher, 2000; Sprecher & Cate, 2004). However, there is general agreement that sexual satisfaction is a component of global relationship satisfaction (Butzer & Campbell, 2008; Sprecher & Cate, 2004; Young, Denny, Luquis, & Young, 1998). In particular, general feelings of satisfaction in a relationship may predict feelings in particular domains of a relationship (such as the sexual domain), independent of actual functioning in that domain. Thus, attachment security may predict sexual satisfaction (whether or not mediated through sexual motivations) through its association with marital satisfaction. Therefore, I also examined whether attachment orientation and sex motives predicted sexual satisfaction independently of marital satisfaction.

Method

The proposed study is part of a larger study, the Simon Fraser University Transition to Marriage (TTM) project. The TTM project followed 201 engaged couples from one to four months prior to their wedding date through the first two years of their marriage. The study was conducted in Metro Vancouver, British Columbia, Canada. Data collection began in the fall of 2005 with the purpose of learning more about positive marital processes (e.g., social support, forgiveness, empathy) as they unfold naturally over time.

Participants

A total of 684 individuals (537 women, 119 men, and 28 individuals whose gender is unknown) living in the Lower Mainland contacted the lab about the study, and 461 phone screens were completed with one member of the couple. Of those screened, 226 were eligible to participate in the TTM project. Of the 201 couples who eventually completed T1, 186 couples completed T3. Of those, 23 couples were excluded from analyses because of insufficient data on any of the key variables, which resulted in a final sample of 163 couples. Couples who were included in these analyses ($n = 163$) did not differ from couples who were not included ($n = 38$) on most demographic factors (i.e., age, length of relationship, education, and income), attachment orientation, or marital satisfaction. However, husbands who participated at T3 were on average two years younger, had one and a half years more education, and rated themselves lower on attachment anxiety (with a mean of 2.11 vs. a mean of 2.55) than husbands who did not

complete T3. In addition, wives who participated at T3 rated themselves lower on attachment avoidance (with a mean of 2.09 vs. mean of 2.49) than wives who did not complete T3.

At T3, husbands averaged 29.9 years of age ($SD = 4.6$) and wives averaged 28.2 years of age ($SD = 4.1$). Most husbands ($M = 12.7$, $SD = 6.5$) and wives ($M = 14.0$, $SD = 5.6$) had completed some college or post-secondary education. Husbands earned an average of \$30-39,000 ($SD = 16,200$) and wives earned an average of \$20-29,000 ($SD = 17,900$). Of the husbands, 76% were Caucasian, 15% were Asian, 3% were Indo-Canadian, 1% were First Nations, 2% were Middle-Eastern, and 3% identified as “other.” Of the wives, 69% were Caucasian, 20% were Asian, 6% were Indo-Canadian, 1% were First Nations, and 4% identified as “other.” The mean relationship length at T1 was 4.0 years ($SD = 2.89$), and 64% of couples lived together prior to marriage.

Procedures

One member of engaged couples was screened by telephone or email to ensure that they met eligibility for participating in the study. Eligibility criteria were that the couple had to be engaged with a wedding date set within one year of the onset of the study, and that partners were starting their first marriage, had no children, were between the ages of 18 and 45, and were able to read and write in English. Couples were recruited through bridal show exhibit booths, brochure mailings to bridal show participants and religious organizations, poster and brochure placements in wedding shops and insurance agencies that sell wedding licenses, word of mouth, advertisements in newspapers and on the internet, and media coverage.

The TTM study involved nine waves of data collection, each spaced three months apart beginning one to four months prior to the wedding date. Time 1 (T1) consisted of on-line questionnaires that assessed various experiences related to marriage, including marital quality, conflict, and communication. Time 2 (T2) consisted of a brief, five-minute on-line questionnaire assessing marital satisfaction. Time 3 (T3) took place two to six months after the wedding and consisted of two components: on-line questionnaires and a lab session, during which couples were interviewed and engaged in a series of marital discussions. Study participants completed on-line questionnaires via a secure internet web site hosted on a university server. Couples were paid \$75 Canadian for completion of the first questionnaire and \$100 Canadian for completion of the third questionnaire and lab session.

The data for the current study was collected as part of the T3 online questionnaires and included self-reports from both spouses on attachment orientation, sexual motivations, sexual satisfaction, and marital satisfaction.

Measures

Attachment Dimensions

Experiences in Close Relationships-Revised (ECR-R; Fraley, Waller, & Brennan, 2000) consists of 36 items that yield two attachment dimensions: anxiety and avoidance. On 7-point scales, ranging from strongly disagree to strongly agree, participants rate the extent to which they think each statement corresponds to the way they generally feel in romantic relationships. Sample anxiety items are “I often worry that my partner will not want to stay with me” and “I worry that I won’t measure up to other people.” Sample

avoidance items are “I find it difficult to allow myself to depend on romantic partners” and “I am very comfortable being close to romantic partners” (reverse scored). Cronbach’s alphas were .92 for wives and .87 for husbands on the anxiety dimension, and .91 for wives and husbands on the avoidance dimension. Mean ratings on attachment anxiety and avoidance are in Table 1. Wives’ attachment anxiety was higher than husbands’ ($t(162) = 3.31, p < .001; d = .32$). Attachment anxiety was positively associated with attachment avoidance ($r(163) = .58, p < .001$, for wives, and $r(163) = .65, p < .001$, for husbands).

Sexual Motivations

I conducted an on-line pilot study to refine existing measures of sexual motivation. A sample of 552 undergraduate and graduate students was recruited from various departments at Simon Fraser University (SFU) in Burnaby, B.C., via e-mails sent to the SFU student population by departmental assistants. Eligible respondents were in an ongoing sexually active romantic relationship with the same partner for at least six months. Respondents completed a short (approximately 15 minutes) on-line survey. The survey assessed respondents’ reasons for engaging in sexual activity in their current relationship and the reasons they perceived their partner had engaged in sexual activity with them during the past six months. The sex motives measure contained 55 items used by Cooper et al. (1998), Hill and Preston (1996), and Davis et al. (2004). Based on item analyses, I chose 39 items to assess nine sexual motives. Subsequently, I added four items for a Physical Pleasure for Partner subscale (an other-focused approach motive), as previous measures did not assess this reason for engaging in sex.

The final sex motives measure consists of self and partner versions of 43 items each (see Appendix A for the self-perception version). On 5-point Likert scales ranging from *Not at all* to *A great deal*, participants rate the degree to which they had sex in the past six months for each reason listed, and the degree to which they think their partner had sex in the past six months for each reason. The measure includes eight subscales: Physical Pleasure (sometimes referred to as Enhancement in the literature), Physical Pleasure for Partner, Intimacy, Feeling Emotionally Valued by One's Partner, Coping, Self-Affirmation, Insecurity (referred to as Partner Pressure or Partner Approval in Cooper et al.'s (1998) measure), and Manipulative Use of Sexuality. With two exceptions, subscales of sex motives were reliable, with Cronbach's alphas ranging from .76 to .92, with a mean of .87.

Wives' self-ratings and partner perceptions on the Manipulation subscales had the lowest reliabilities of all subscales, with Cronbach alphas of .61 and .48, respectively. There were clear floor effects for wives' and husbands' ratings of Manipulation. Mean ratings ranged from 1.14 to 1.42 on a 7-point scale, with correspondingly low standard deviations (ranging from .29 to .70). The means and SD's of the Manipulation subscales were considerably lower than those of other motivation subscales (see Table 1). Given its low endorsement and low reliability (for wives' reports), the Manipulation subscale was dropped from subsequent analyses.

Sexual Satisfaction and Quality

Respondents rated their sexual satisfaction on a 7-point Likert-scale item (from *Not at all satisfied* "1" to *Perfectly satisfied* "7").

Marital Satisfaction and Quality

The Marital Adjustment Test (Locke & Wallace, 1959) is a widely used 16-item measure of present relationship adjustment. It includes one item assessing global satisfaction, eight items assessing the degree of agreement in specific marital domains (e.g., finances, leisure time, philosophy of life, and ways of dealing with in-laws), and seven items assessing conflict resolution, participation in leisure activities, confiding in the partner, and feelings about having married the spouse. Scores are weighted and can range from two to 158. The MAT has adequate reliability and discriminates between non-distressed and distressed spouses with documented marital problems (Locke & Wallace, 1959).²

The *Quality of Marriage Inventory* (Norton, 1983) is a six-item measure assessing global marital satisfaction. Participants indicate their level of agreement or disagreement (on 7-point Likert scales from 1 [*Very Strong Disagreement*] to 7 [*Very Strong Agreement*]) with five statements describing them and their relationship (e.g., We have a good relationship; Our relationship is strong) and rate, all things considered, how happy they are in their relationship on a 10-point Likert scale (from 1 [*Very Unhappy*] to 10 [*Perfectly Happy*]). Total scores can range from six to 45. Cronbach's alphas were .91 for wives and .94 for husbands.

² Because of the nature of the items, Cronbach's alpha is not an appropriate measure of reliability. Reliability has been established using test-retest reliability.

Marital Satisfaction Composite Rating

Correlations between the MAT and the QMI were .69 for wives and .68 for husbands ($p < .001$). To form composite scores of marital satisfaction, total scores on the QMI and the MAT were standardized and averaged. The composite scores were used in all analyses. For wives and husbands, there were moderately strong associations between sexual satisfaction and the marital satisfaction composite ($r(163) = .39$ and $r(163) = .50$, respectively, $p < .001$).

Results

Descriptive Analyses

Sexual Motivations

As shown in Table 1, the general pattern of means for sex motives was similar for husbands and wives. On self-reports of motives, spouses endorsed the approach motives of Physical Pleasure, Partner Pleasure, and Intimacy most highly, with wives endorsing more Intimacy ($t(162) = 3.10, p < .01; d = .31$) and husbands endorsing more Physical Pleasure ($t(162) = 2.46, p < .05; d = .25$) than their partners. Wives and husbands moderately endorsed the motive of having sex to feel Emotionally Valued by their partner, followed by sex motives of Self-Affirmation and Coping. Husbands and wives least frequently endorsed motives related to Insecurity about the relationship.

This pattern of endorsement was similar for perceptions of partner motivations. In addition, wives viewed their husbands as higher on Physical Pleasure than husbands perceived their wives, and husbands viewed their wives as higher on Insecurity than wives perceived their husbands ($ts(162)$ ranged from 4.12 to 4.83, all $ps < .001$; ds ranged from .44 to .50). Wives perceived their husbands as higher on Physical Pleasure, Emotional Value, and Self-Affirmation, but lower on Insecurity than husbands saw themselves ($ts(162)$ ranged from 2.19 to 3.57, all $ps < .05$; ds ranged from .20 to .34). Conversely, husbands perceived their wives as higher on Self-Affirmation and Emotional Value than wives saw themselves ($ts(162)$ ranged from 2.57 to 3.41, all $ps < .05$; ds ranged from .23 to .31).

Agreement between self-reported motives and partners' perceptions of corresponding motives was mild to moderate, suggesting some accuracy in partners' estimation of their spouses' motives. Associations between wives' sex motives and husbands' perceptions of wives' sex motives ranged from $r(163) = .22$ to $.37$, with a mean of $.31$. Associations between husbands' sex motives and wives' perceptions of husbands' motives ranged from $r(163) = .18$ to $.40$, with a mean of $.29$. In comparison, associations between spouses' self-reported motives and their perceptions of their partners' sex motives ranged from moderate to high (r 's(163) ranged from $.31$ to $.77$, with a mean of $.63$), indicating that spouses tended to see their partners as having similar motives to their own.

Attachment Dimensions and Sexual Motivation

Correlations between wives and husbands' attachment dimensions and perceptions of sex motives are in Table 2. As expected, wives' attachment anxiety was positively associated with wives' self-reported sex motives of Feeling Emotionally Valued by one's partner, Self-Affirmation, and Insecurity. There were no significant associations between wives' attachment anxiety and wives' sex motives of Physical Pleasure, Partner Pleasure, Intimacy, and Coping. Wives' attachment avoidance was positively associated with only one self-reported sex motive: Insecurity. Patterns of associations were generally similar for the wives' perceptions of their husbands' motives.

As expected, husbands' attachment anxiety was positively associated with husbands' self-reported sex motives of Coping, Self-Affirmation, and Insecurity, and negatively associated with Physical Pleasure and Partner Pleasure. There were no significant associations between husbands' attachment anxiety and husbands' sex

motives of Intimacy and Emotional Value. Similar to the findings for wives, husbands' attachment avoidance was positively associated with husbands' sex motives of Self-Affirmation and Insecurity. Husbands' attachment avoidance was negatively related to husbands' sex motives of Physical Pleasure and Partner Pleasure. There were no significant associations between husbands' attachment avoidance and husbands' sex motives of Intimacy, Emotional Value, and Coping. Patterns of associations were generally similar for the husbands' perceptions of their wives' motives.

Attachment Dimensions and Sexual Satisfaction

As expected, participants' attachment anxiety was negatively associated with their sexual satisfaction (for wives, $r(163) = -.29$, and for husbands $r(163) = -.36, p < .001$). As well, participants' avoidance was negatively associated with sexual satisfaction (for wives, $r(163) = -.37$, and for husbands $r(163) = -.32, p < .001$).³

Sexual Motivation and Sexual Satisfaction

As shown in Table 2, spouses' motives of having sex for Physical Pleasure were positively related with their sexual satisfaction. As well, for husbands only, the motive of Partner Pleasure motive was positively associated with sexual satisfaction. For husbands and wives, having sex for Insecurity reasons was associated with decreased sexual satisfaction. There were no associations between spouses' self-reported sex motives of Intimacy and Emotional Value, and sexual satisfaction. Husbands' self-ratings on

³ The pattern of associations between both attachment dimensions and marital satisfaction was similar. Marital satisfaction was negatively associated with attachment anxiety (for wives $r(163) = -.49$, and for husbands $r(163) = -.49$, both $p < .001$) and avoidance (for wives $r(163) = -.56$, and for husbands $r(163) = -.48$, both $p < .001$).

motives of Self-Affirmation and Coping were negatively associated with satisfaction, whereas there were no such associations for wives.⁴

Similar patterns of associations were found between spouses' partner perceptions and sexual satisfaction, as would be expected given the strong associations between self-ratings and partner perceptions on corresponding motives. For wives and husbands, perceiving their partners as having sex for Physical Pleasure, Partner Pleasure, and Intimacy reasons was positively related with their sexual satisfaction, whereas perceiving their partners as having sex with them for Insecurity reasons was associated with decreased sexual satisfaction. There were no significant associations between spouses' perceptions of their partners as having sex with them for Emotional Value, Coping or Self-Affirmation reasons, and sexual satisfaction.⁵

Because of the strong associations between self-ratings and partner perceptions on sex motives, I ran partial correlations between self-rated sex motives and sexual satisfaction controlling for partner perceptions on the same motive, and between partner perceptions and sexual satisfaction controlling for corresponding self-rated motives. There were few significant associations between self-reported motives and sexual satisfaction independent of partner perceptions: Wives' self-rated Physical Pleasure motives positively predicted sexual satisfaction and husbands' self-rated Coping, Self-Affirmation, and Emotional Value motives negatively predicted sexual satisfaction. In

⁴ With just one minor exception, the same patterns of associations were found between all sex motives and marital satisfaction.

⁵ The patterns of associations between partner perceptions of sex motives and marital satisfaction were similar with two exceptions. Husbands' perceptions of wives' Physical Pleasure motives were positively associated with husbands' marital satisfaction, and husbands' perceptions of wives' Coping motives were negatively associated with husbands' marital satisfaction. There were no such associations for wives.

contrast, the pattern of associations between partner perceptions and sexual satisfaction, independent of own motives, was generally similar to the pattern of zero-order associations. Thus, partner perceptions of motives relate to sexual satisfaction (to some extent) independent of self-reported motives, whereas the converse is not generally true. In addition, there were more significant partial correlations between partner perceptions and sexual satisfaction (controlling for own motives) for husbands (5 of 7) than for wives (2 of 7).

Demographic Variables and Sexual Satisfaction

I assessed whether demographic variables (age, education, ethnicity, length of relationship, premarital cohabitation) were associated with sexual or marital satisfaction. There were no significant associations between any of the demographic variables and the satisfaction variables with the exception of a modest negative association between wives' age and wives' sexual satisfaction ($r(163) = -.17$).

Path Analyses

The path model was tested separately for wives (Figure 1) and husbands (Figure 2), and for each of the seven sex motives (for a total of 14 sets of analyses) using Lisrel 8.8 (Jöreskog & Sörbom, 1993). Tables 1 to 7 in Appendix B provide inter-correlation tables for each model. Chi-square statistics are reported as indicators of the absolute fit

of the model.⁶ Two additional goodness of fit indices are reported: the Root Mean Square Error of Approximation (RMSEA) and the Comparative Fit Index (CFI).⁷

I tested whether adding the interaction between attachment anxiety and avoidance to the model contributed to the prediction of sexual motives or sexual satisfaction. Based on these analyses, the attachment interaction term was retained in the husbands' model, as shown in Figure 2. None of the paths from the attachment interaction term to wives' self-rated sex motives or to wives' sexual satisfaction were significant for any of the models. In addition, the general pattern of findings for the wives' models was similar regardless of whether the interaction term was added. Therefore, to simplify presentation of the findings, the interaction term was dropped from the wives' models.⁸

When reviewing the path models I will focus on the following paths: spouse's attachment dimensions predicting spouse's sex motives (paths a, b, and c in Figure 2); spouse's sex motives predicting spouse's perception of partner's sex motives (path d); partner's sex motives predicting spouse's perception of partner's sex motives (path e); spouse's sex motives predicting spouse's sexual satisfaction (path f); and partner perception of spouse's sex motives predicting spouse's sexual satisfaction (path g). I will

⁶ In path analysis, a chi-square value that is not significant reflects good model fit (i.e., $p > .05$), whereas a significant chi-square value (i.e., $p < .05$) indicates lack of satisfactory fit. However, the chi-square value is not sufficient for assessing model fit because it is sensitive to sample size and departures from multivariate normality and assumes that the model fits perfectly in the population (Diamantopoulos & Siguaw, 2000).

⁷ CFI values of .95 and better indicate a good fit, and RMSEA values within the bounds of .00 and .07 indicate an adequate fit (Hooper, Coughlan, & Mullen, 2008). All but three CFI values were in the acceptable range. However, with a few exceptions, RMSEA values were above the recommended guideline of .07.

⁸ Adding the interaction term to the wives' models changed the level of significance for three of a total of 63 paths in all models; but for none of the paths did the standardized path coefficients change by more than .02. Adding the interaction term resulted in the paths from wives' attachment avoidance to wives' self-ratings on the Intimacy and the Self-Affirmation motives becoming non-significant, and the path from wives' attachment anxiety to wives' sexual satisfaction becoming significant.

only report marginal significance for hypothesized paths. I will describe the direct paths from attachment dimensions to sexual satisfaction (paths i, j, and k in Figure 2) in a brief summary following description of the motives.

Physical Pleasure

As shown in Figure 3, wives' attachment anxiety and avoidance did not predict their Physical Pleasure motive. There was a strong link from wives' Physical Pleasure motive to wives' perception of husbands' Physical Pleasure motive. Wives' Physical Pleasure motive also positively predicted their sexual satisfaction, but their perceptions of their husband's Physical Pleasure motive did not.

For husbands (Figure 3), the pattern was somewhat different from the wives' pattern. There was a significant path from the attachment interaction term to husbands' Physical Pleasure motive. Follow-up analyses indicated that when attachment anxiety and avoidance were high, husbands' were less likely to endorse having sex for Physical Pleasure. As was the case with wives, there was a strong link from husbands' Physical Pleasure motive to their perceptions of wives' Physical Pleasure motive. In addition, wives' Physical Pleasure motive predicted husband's perceptions of wives' Physical Pleasure motive. In contrast to wives, husbands' Physical Pleasure motive did not predict their sexual satisfaction; however, husbands' perceptions of wives' Physical Pleasure motive did predict husband's sexual satisfaction.

Partner Pleasure

As illustrated in Figure 4, wives' attachment anxiety positively predicted their Partner Pleasure motive, and wives' attachment avoidance negatively predicted their

Partner Pleasure motive. Wives and husbands' Partner Pleasure motives predicted wives' perception of husbands' Partner Pleasure motive, which in turn positively predicted wives' sexual satisfaction.

The pattern for husbands was somewhat different than for wives (Figure 4). Husbands' attachment anxiety marginally negatively predicted their Partner Pleasure motive. Furthermore, there was a strong link from husbands' Partner Pleasure motive to husbands' perception of their wives' Partner Pleasure motive, which in turn positively predicted husbands' sexual satisfaction. However, wives' Partner Pleasure motive did not predict husbands' perceptions of their wives' Partner Pleasure motive, nor husbands' sexual satisfaction.

Intimacy

As expected, wives' attachment avoidance negatively predicted their Intimacy motive (Figure 5). Again, wives' Intimacy motives strongly predicted wives' perception of husbands' Intimacy motive. However, wives' Intimacy motive and wives' perceptions of their husband's Intimacy motive did not predict wives' sexual satisfaction.

As shown in Figure 5, husbands' attachment dimensions did not predict their Intimacy motive. Husbands and wives' Intimacy motives predicted husbands' perceptions of wives' Intimacy motive. In addition, there was a significant path from wives' Intimacy motive to husbands' sexual satisfaction. However, husbands' perceptions of their wives' Intimacy motive did not predict husbands' sexual satisfaction.

Emotional Value

As expected, wives' attachment anxiety positively predicted their Emotional Value motive (Figure 6). Wives' Emotional Value motive strongly predicted wives' perceptions of husbands' Emotional Value motive, and husbands' Emotional Value motives were marginally significant in predicting wives' perceptions of husbands' Emotional Value motives. However, there were no significant paths from wives or husbands' Emotional Value motives to wives' sexual satisfaction.

As illustrated in Figure 6, husbands' attachment anxiety marginally positively predicted their Emotional Value motive. Husbands and wives' Emotional Value motives predicted husbands' perceptions of wives' Emotional Value motive. Husbands' Emotional Value motive as well as husbands' perceptions of wives' Emotional Value motive predicted husbands' sexual satisfaction. Whereas husbands' Emotional Value motive negatively predicted their sexual satisfaction, husbands' perceptions of wives' Emotional Value motive positively predicted husbands' sexual satisfaction.

Coping

As shown in Figure 7, wives' attachment anxiety and avoidance did not predict wives' Coping motive. Only wives' and husbands' Coping motives predicted wives' perceptions of husbands' Coping motive. Wives' Coping motive marginally positively predicted their sexual satisfaction. In contrast, wives' perceptions of their husbands' Coping motive and husbands' Coping motives did not predict wives' sexual satisfaction.

As predicted, there was a significant path from husbands' attachment anxiety to their Coping motives (Figure 7). However, there was no association between husbands' attachment avoidance and Coping motive. Husbands and wives' Coping motives

predicted husbands' perceptions of wives' Coping motive. As well, husbands' Coping motive negatively and wives' Coping motive positively predicted husbands' sexual satisfaction.

Self-Affirmation

As shown in Figure 8, wives' attachment anxiety positively predicted their Self-Affirmation motive, as expected. In addition, wives' attachment avoidance negatively predicted their Self-Affirmation motive. Husbands' and wives' Self-Affirmation motives predicted wives' perceptions of husbands' Self-Affirmation motive. However, neither self-rated nor partner-rated Self-Affirmation motives independently predicted wives' sexual satisfaction.

As illustrated in Figure 8, the pattern of results was similar for husbands, with one exception: Though husbands' attachment anxiety also positively predicted their Self-Affirmation motives, husbands' attachment avoidance did not.

Insecurity

Contrary to expectations, wives' attachment anxiety did not predict their Insecurity motive (Figure 9). Wives and husbands' Insecurity motives predicted wives' perceptions of their husbands' Insecurity motive. However, neither self-rated nor partner-rated Insecurity motives independently predicted wives' sexual satisfaction.

In contrast, husbands' attachment anxiety positively predicted their Insecurity motive as expected (Figure 9). As was the case for wives, husbands and wives' Insecurity motives predicted husbands' perceptions of their wives' Insecurity motive. In

addition, husbands' perceptions of their wives' Insecurity motive negatively predicted husbands' sexual satisfaction.

Integrated Summary

I hypothesized that spouses high on attachment anxiety would engage in sex to cope with negative affect (Coping), to avoid rejection from partners (Insecurity), and to gain reassurance to quell their insecurities (Emotional Value and Self-Affirmation). Wives' attachment anxiety (independent of avoidance) was positively associated with sex motives of Emotional Value, Self-Affirmation, and Partner Pleasure. Husbands' attachment anxiety was generally positively associated with their endorsement of avoidance sex motives as expected.

I expected attachment avoidance to be negatively associated with motives promoting closeness in the relationship, such as Intimacy and Partner Pleasure, and positively associated with self-focused, intra-psychologically oriented motives, such as Self-Affirmation. Wives' avoidance (independent of anxiety) negatively predicted their endorsement of Partner Pleasure, Intimacy, and Self-Affirmation motives. In contrast, husbands' avoidance (independent of anxiety) did not predict any of the sex motives.

Wives and husbands' motives of Physical Pleasure and Partner Pleasure were positively associated with sexual satisfaction, and the motive of Insecurity was negatively associated with sexual satisfaction. However, spouses' sex motives generally did not predict their sexual satisfaction independently of attachment orientation and partner perceptions.

Similarly, partner perceptions did not play a key role in spouses' sexual satisfaction independently of other variables in the model. I had expected that thinking

their partner is having sex for approach reasons (i.e., to pursue pleasurable experiences) would be associated with spouses' greater sexual satisfaction, whereas perceiving their partner as having sex to avoid aversive experiences would be related to lower satisfaction. For wives, only believing that husbands were having sex to give them pleasure was independently associated with greater sexual satisfaction in the path model. However, a number of significant zero-order associations between wives' perceptions of their husbands' sex motives and sexual satisfaction were in line with predictions. Associations between husbands' perceptions of their wives' motives and husbands' sexual satisfaction (independent of attachment dimensions and their own motives) were generally in line with predictions. Husbands' perceptions of their wives' having sex with them for the approach motives of Physical Pleasure, Partner Pleasure, and Emotional Value positively predicted husbands' sexual satisfaction, whereas husbands' perceptions of their wives' having sex with them for Insecurity reasons negatively predicted husbands' satisfaction.

Finally, although the path models focused on how sexual motives might mediate links between attachment orientation and sexual satisfaction, I was also interested in the direct paths from attachment orientation to sexual satisfaction. Wives' attachment anxiety did not predict their sexual satisfaction independent of sex motives, whereas husbands' attachment anxiety independently (and negatively) predicted their sexual satisfaction in the path models for each sex motive. A different pattern emerged for attachment avoidance. Wives' attachment avoidance independently (and negatively) predicted their sexual satisfaction independent of sex motives in all models. However,

the direct association between attachment avoidance and sexual satisfaction was less strong for husbands.

Follow-up Analysis Controlling for Marital Satisfaction

Given the reciprocal relationship between sexual and marital satisfaction, I examined the paths between attachment orientation, sex motives, and sexual satisfaction while controlling for marital satisfaction. For wives, after controlling for marital satisfaction the paths between the attachment dimensions, sex motives, and sexual satisfaction generally remained the same. Marital satisfaction emerged as a significant independent but modest predictor of sexual satisfaction across all seven models (path coefficients ranged from .19 to .27, $ps < .05$). For husbands, after controlling for marital satisfaction, the findings also generally remained the same. In addition, marital satisfaction emerged as a strong predictor of sexual satisfaction across all seven models (path coefficients ranged from .34 to .46, $ps < .01$). Thus, marital satisfaction was an independent predictor of sexual satisfaction in the new path analyses for both spouses, and particularly strongly for husbands. Moreover, attachment avoidance continued to independently predict wives' sexual satisfaction in four of seven models (path coefficients ranged from -.19 to -.21, $ps < .05$) and was marginally significant for the remaining three models (path coefficients ranged from -.17 to -.18, $ps < .10$). Attachment anxiety continued to independently predict husbands' sexual satisfaction in two of seven models (path coefficients ranged from -.18 to -.19, $ps < .05$) and was marginally significant for an additional two models (path coefficients ranged from -.16 to -.17, $ps < .10$). Husbands' attachment avoidance did not significantly independently predict their sexual satisfaction for any of the models after controlling for marital satisfaction. Thus,

adding marital satisfaction as an independent predictor reduced the predictive power of attachment orientation especially for husbands.

Discussion

Until recently, little research has focused on why people have sex, possibly because both lay persons and researchers have tended to assume that the reasons are obvious. Yet, sex can serve a variety of goals. In this study I examined how sex motives were related to newlywed couples' sexual satisfaction, and whether the reasons why spouses thought their partner was having sex with them played a role in their sexual satisfaction. I also examined how individual differences in attachment security related to sexual motivations and whether spouses' sexual motivations mediated the relationship between attachment security and sexual satisfaction.

Sexual Motivations

In general, couples were reasonably sexually satisfied. Husbands and wives, by either self or partner report, highly endorsed the positive, approach-oriented motives of having sex (i.e., to experience their own physical pleasure, to give their partner pleasure, and to promote intimacy in the relationship). In contrast, spouses tended to endorse avoidance- and insecurity-oriented motives at much lower levels than approach motives. This general pattern replicates previous findings indicating that people are more likely to have sex for approach than avoidance motives (e.g., Davis et al., 2004; Impett et al., 2005; Meston & Buss, 2007).

Spouses' perceptions of why their partner was engaging in sex with them originated mainly from their own motives, suggesting projection of own motives onto the partner. Thus, whatever spouses' motives were for having sex, they assumed that their

partner had sex for the same reasons. In comparison, their partners' actual motives predicted spouses' perceptions only to a modest degree. This pattern suggests that it may be difficult for spouses to infer their partners' motives because these are internal processes not necessarily accessible to observation. In addition, projection may be particularly high in the sexual domain because people have difficulties communicating about sexual issues (Hyde, DeLamater, & Byers, 2009).

As expected, when spouses had sex for motives that involved the pursuit of positive experiences (such as having sex for their own physical pleasure, to give their partner pleasure, and to foster intimacy), they tended to be sexually satisfied. The regulatory fit between sex motives that reflect a strong approach orientation to sex and sexual satisfaction, which appears to be an inherently growth or promotion-oriented state, may explain the consistent association between these two constructs (Molden, Lee, & Higgins, 2007; Scholer & Higgins, 2008).

In comparison, when spouses had sex for motives related to avoiding negative experiences, there was a little association with their sexual satisfaction. Regardless of whether wives and husbands rated themselves or their partners, only the motive of insecurity about the relationship was consistently associated with sexual dissatisfaction. Thus, only the most unambiguously negative motive amongst the various avoidance motives showed the expected association. Counter to my predictions, the motives of having sex to reassure oneself of one's desirability and to cope with negative emotions were not consistently negatively associated with sexual satisfaction.

Associations between avoidance motives and sexual satisfaction may have been attenuated by limited variability in endorsement of all avoidance motives. The extent to

which spouses had engaged in sex for these reasons in the last six months was severely restricted, ranging from *not at all* to just below *somewhat*. It may also be that engaging in sex to gain reassurance is somewhat successful or intermittently successful in this sample of newlyweds and therefore does not undermine sexual satisfaction. When designing the study, I considered having sex for coping and reassurance reasons to be avoidance motives in which the goal is to avoid, or move away from, negative stimuli (Elliot, 2008). However, participants may have construed some avoidance subscales in approach terms. In particular, participants may have viewed having sex for Emotional Value motives (e.g., to feel valued, loved, and cared for) and Self-Affirmation motives (e.g., to feel more self-confident and sexually desirable) as involving the pursuit of something positive, rather than the avoidance of feeling insecure and inadequate.

Attachment Orientation and Sexual Motivations

As I had predicted, spouses' attachment anxiety was associated with having sex to reassure themselves about their self-worth and the relationship. Attachment anxiety was generally related to having sex to feel emotionally valued by their partners, to cope with unpleasant feelings, and to reassure themselves when feeling insecure about their attractiveness and the relationship. Having sex with their partner may—at least temporarily—serve to alleviate such doubts (e.g., Davis et al., 2004; Schachner & Shaver, 2004). Only for husbands was attachment anxiety also negatively associated with the approach motives of having sex to experience physical pleasure and to give their wives pleasure. Thus, attachment anxiety was associated with motives that focus on avoiding negative outcomes rather than motives that focus on feeling good or enhancing the relationship. Attachment anxiety indicates a dispositional need for security and a

hypersensitivity to potential rejection and loss. Thus, attachment anxiety leads to a motivational state directed toward avoiding aversive experiences rather than toward pursuing positive experiences (Mikulincer & Shaver, 2007b). The conceptual overlap between attachment anxiety and avoidance motivation further explains these findings. Both constructs involve negative orientations, including negatively valenced perceptions (e.g., negative interpretations of partner behaviour), that undermine the quality of social interactions and bonds (e.g., Elliot, Gable, & Mapes, 2006).

I found only limited and inconsistent support for the prediction that attachment avoidance would predict engaging in sex for reasons that serve to enhance the self. For husbands only, attachment avoidance was positively associated with having sex to reassure themselves of their desirability and negatively associated with having sex to make them or their wives feel good. The most consistent, though unexpected, finding was a positive association between attachment avoidance and the Insecurity motive. The Insecurity motive subscale includes items related to avoiding conflict and upsetting the partner. Given that attachment avoidance is associated with avoiding conflict with the partner (e.g., Mikulincer & Shaver, 2007a), it is possible that this finding may be more reflective of conflict avoidance than insecurity about losing the partner.

Attachment avoidance was not significantly associated with the positive, relationship maintaining motive of having sex to foster intimacy as predicted, although associations were in the expected negative direction. Though the conceptual link between attachment avoidance and having sex to pursue intimacy is clear and the association has been found in some previous studies (e.g., Davis et al., 2004; Schachner & Shaver, 2004), Cooper et al. (2006) also failed to confirm a negative association

between attachment avoidance and intimacy motivation. Cooper et al. (2006) argued that the restricted range of the highly endorsed Intimacy motive may have suppressed potential associations with predictor variables, such as attachment orientation. However, considering that I obtained significant associations with other highly endorsed motives, such as Partner Pleasure and Physical Pleasure, this reasoning does not seem to explain my lack of findings for the Intimacy subscale. The lack of associations between attachment avoidance and sexual motives might be related to specific characteristics of this community sample of newlywed couples, as most previous research on attachment orientation and sex motives is on young, mainly unmarried adults.

Spouses' motives did not generally predict their sexual satisfaction independent of partner perceptions and the attachment dimensions. In contrast, a few partner-perceived motives predicted sexual satisfaction independent of their strong associations with spouses' self-ratings on the same motive, affirming the importance of partner perceptions (especially for husbands). Taken together, findings generally suggested that husbands were more focused on their wives in their love-making than vice versa. Specifically, four of seven partner-perceived motives predicted husbands' sexual satisfaction independent of their motives and attachment orientation. In comparison, only perceiving their husbands as having sex for the relationship-maintaining approach motive of giving them pleasure independently predicted wives' sexual satisfaction. This finding suggests the importance of a motive that unambiguously taps a partner's responsiveness and is consistent with previous research indicating strong associations between perceived partner responsiveness to one's needs and subjective well-being (e.g., Reis et al., 2004; Reis, 2007).

An interesting differential pattern emerged for the motive of having sex to experience physical pleasure. Wives' motive of having sex because it feels good independently predicted their sexual satisfaction, whereas husbands' *perception* that their wives were having sex with them because wives enjoyed themselves predicted husbands' sexual satisfaction. As well, in the path models, there were more independent associations from partner perceptions to sexual satisfaction for husbands than for wives, and there were more significant partial correlations between partner perceptions and sexual satisfaction (controlling for own motives) for husbands than for wives. This pattern of findings may suggest that husbands may be more sensitive to their wives' sexual motives than vice versa and challenges the notion that sex is less relationally focused for men than for women (cf. Peplau, 2003). Consistent with this interpretation, Cooper et al. (2008) found that men's sexual experience (including sexual satisfaction) was determined by their own as well as their partners' motives, whereas women's sexual experience was determined almost exclusively by their own motives. Sex Exchange Theory posits that sex is a resource that men desire more than women (Vohs, Catanese, & Baumeister, 2004); therefore, men may need to be more sensitive to their partners' needs and motivations to receive a valued resource.

Overall, sex motives did not mediate the associations between attachment orientation and sexual satisfaction. Mediation was not feasible because the sex motives associated with attachment insecurity were, for the most part, *not* associated with sexual satisfaction. Whereas attachment anxiety was associated with having sex for avoidance motives, having sex for approach motives was positively associated with spouses' sexual satisfaction. Notably, attachment insecurity predicted sexual satisfaction *independently*

of sexual motives. Thus, factors other than sex motives must account for the association between attachment orientation and sexual satisfaction. As well, the direct paths from attachment orientation to sexual satisfaction differed by gender, suggesting that mediating processes may be gender linked.

Husbands' attachment anxiety negatively predicted their sexual satisfaction independent of each sex motive. In contrast, wives' attachment anxiety did not independently predict wives' sexual satisfaction for any sex motives. Perhaps highly anxious husbands' need for affection and approval, combined with their self-doubts and sensitivity to rejection, result in worries over their ability to be competent lovers and to please their wives. Furthermore, because of their sensitivity to rejection, anxiously attached husbands may defer to their wives' sexual needs and wishes, which may have detrimental effects on their ability to enjoy themselves sexually. Poor communication skills associated with attachment anxiety (e.g., Feeney & Noller, 2004) may also make it difficult for highly anxious husbands to effectively communicate their sexual preferences to their wives. Men are more likely to initiate sexual encounters than women are (Sprecher & Cate, 2004), and they may feel more responsible for ensuring that sex is satisfying. Therefore, wives' responses to these advances may heighten husbands' already existing anxieties and lead to further decreases in their sexual satisfaction.

A different pattern emerged for the direct links between attachment avoidance and sexual satisfaction. Wives' attachment avoidance negatively predicted their sexual satisfaction independent of each sex motive, whereas for husbands, the direct association between attachment avoidance and sexual satisfaction was present but weaker. The role of communication in sexual satisfaction may provide a potential explanation for this

finding. The more effectively a couple can communicate about sexual issues, the greater likelihood that they will be satisfied with the sexual and non-sexual aspects of their relationship (e.g., Lawrence & Byers, 1995; Sprecher & Cate, 2004). Attachment avoidance is associated with limited self-disclosure (Mikulincer & Shaver, 2007a). Thus, partners high on attachment avoidance may be less likely to disclose their sexual preferences because they do not trust that their partners will be responsive to their requests. Not expressing their needs and desires may make it difficult to get their needs met, sexually and otherwise, and result in limited sexual satisfaction. Moreover, it may be especially important for women to communicate their needs and desires, as there is greater variation in women's likelihood to achieve orgasm, an important correlate of sexual satisfaction, compared to men (Sprecher & Cate, 2004; Young et al., 1998).

Sexual desire may be another potential link between attachment avoidance and sexual satisfaction. Impett and colleagues (2008) found that approach sexual goals mediated the association between approach relationship goals and sexual desire. The researchers also found that the association between approach goals and sexual desire was stronger for women than for men, supporting previous findings that women's sexual desire is more malleable (and on average lower) than men's (e.g., Basson, 2001; Basson, 2003; Peplau, 2003). Basson (2003) and Impett et al. (2008) conclude that women's sexual desire is more strongly linked with intimacy and relationship goals than men's. Thus, it could be that women uncomfortable with closeness in relationships experience decreased sexual desire and potentially engage in sex less frequently, leading to lower sexual satisfaction than their less avoidant counterparts.

The present path model is based on cross-sectional data and therefore does not allow for inferences about causal processes. I proposed that attachment orientation predicts sexual satisfaction; however, this relationship may be reciprocal. That is, being sexually dissatisfied may contribute to attachment avoidance and, in the case of husbands, attachment anxiety. For instance, a sexually dissatisfied wife may perceive that her partner is not responsive to her needs, thereby leading her to become less comfortable with emotional closeness and even more hesitant to express her needs, in turn further eroding her sexual satisfaction. Similarly, a husband may not be sexually satisfied, possibly because he feels that his wife is not responsive to his sexual advances. As a result, he may become more sensitive to rejection and question his ability to please his wife. In short, he may become more anxious in his relationship, which in turn may lead to decreased sexual satisfaction.

Consistent with previous research, I found moderately strong associations between overall marital satisfaction and sexual satisfaction (Sprecher & Cate, 2004), and between marital satisfaction and attachment dimensions (Butzer & Campbell, 2008; Mikulincer & Shaver, 2007a). Therefore, I questioned whether the associations between attachment orientation and marital satisfaction account for the observed links from attachment dimensions to sexual satisfaction. General marital satisfaction tended to predict sexual satisfaction independently of attachment dimensions, with stronger links for husbands than for wives. Most important, the pattern of associations between attachment dimensions, sexual motives, and sexual satisfaction remained the same when controlling for marital satisfaction. In particular, the gender-based, independent associations between attachment orientation and sexual satisfaction held up for the most

part, even when controlling for general marital satisfaction. Thus, wives' attachment avoidance generally predicted their sexual satisfaction independent of marital satisfaction, whereas husbands' attachment anxiety generally predicted their sexual satisfaction independent of marital satisfaction. This pattern of findings indicates that sexual satisfaction presents a distinct aspect of relationships from overall marital satisfaction, and that attachment insecurity undermines sexual satisfaction differentially for each gender beyond its negative impact on general marital satisfaction.

Limitations and Future Directions

Couples who volunteered to participate in this longitudinal study may constitute a select sample and may differ systematically from other newlywed couples who chose not to participate. However, this sample of newlyweds showed a reasonable range of scores on sexual satisfaction and the sample mean and standard deviation on marital satisfaction were comparable to those in samples of couples recruited through newspaper advertisements (cf. Karney et al., 1995). Sex motives may also change over the course of a relationship. The fact that all couples in this sample were at a similar stage in their relationship may have restricted variability in sexual motivation and attenuated associations with other variables. Therefore, it would be beneficial for future studies to include a range of couples who have been in their relationship for various lengths of time and who may offer greater variability in terms of their sexual motivations and experienced levels of sexual satisfaction.

All variables in this study were assessed with self-reports. Self-report measures presuppose that people are able to access and examine their thoughts, feelings, and behaviours in a reflective fashion and are prepared to report those accurately

(Bartholomew, Henderson, & Marcia, 1998; Bartholomew & Shaver, 1998). In particular, the validity of self-reports on sexual behaviour may be undermined by participants' presentational concerns, especially for women (Catania, Gibson, Chitwood, & Coates, 1990; Meston, Heiman, Trapnell, & Paulhus, 1998). However, participants in this study completed questionnaires online to reduce possible embarrassment and to address desires for privacy. Cross-sectional retrospective reports of sexual motives and satisfaction may also be compromised by memory biases (Kahneman, 2000). For example, motive reports may be strongly biased by individuals' most recent or most salient sexual experiences. Moreover, sexual motivations may constitute a transient, situational phenomenon that changes with dyadic processes on any given day. Partners high on attachment anxiety, for instance, may feel disappointed with the relationship or rejected by their partner on a particular day. As a result, they may pursue sex for different reasons (e.g., to feel reassured about their desirability) than they might on a day when feeling more satisfied with the relationship. Therefore, it might be useful to have participants report on their sexual and relational experiences using daily diary methods (e.g., Impett et al., 2005) to gain a more accurate and complete understanding of fluctuations in participants' experiences. In addition, qualitative methods may be useful to clarify the nature of sexual motives and how the meaning of sexual relations more generally may differ for women and men.

Another potential limitation of the study is that sexual satisfaction was assessed with a single item. Past research, however, has shown that sexual satisfaction can be reliably assessed with one global item. Furthermore, a single item may best capture this construct, as multi-item scales often measure aspects of sexuality other than sexual

satisfaction (Sprecher & Cate, 2004). Moreover, the pattern of findings generally held when controlling for marital satisfaction, which was assessed by combining two multi-item measures with adequate psychometric properties (Locke & Wallace, 1959; Norton, 1983). Nevertheless, future research might benefit from using multi-item sexual satisfaction measures.

The overall fit of some of the path models was less than ideal, likely because the path model was incomplete. The proposed theoretical model is a simplification of the complex reciprocal associations between partners' attachment insecurity, sexual motivations, and sexual satisfaction. Notably, sexual satisfaction may influence both security of attachment and motivations for having sex. Given that all variables were measured cross-sectionally, it is not possible to determine the direction of causality. Therefore, longitudinal extensions of this research examining associations over time will be necessary to clarify the direction of these effects. Furthermore, although the present study included partners, I conducted analyses separately for husbands and wives given documented gender differences in a variety of sexual attitudes and behaviours (e.g., Peplau, 2003; Vohs & Baumeister, 2004). In the future, both spouses' ratings on each variable could be included in the same analyses to examine cross-dyad processes. In addition, aspects of sexuality other than sex motives (e.g., frequency of sexual activity and sexual desire) may play a role in predicting spouses' sexual satisfaction.

Conclusion

This study expands existing research on sexual motivations by including both members of couples in established relationships and including perceptions of partners' sex motives. The recruitment of a community sample of newlywed couples provides

more diversity in terms of age and relationship length than samples in previous studies on sex motives. Moreover, the added motive of having sex to give one's partner pleasure addresses an important interpersonal, relationship maintaining motivation. With few exceptions (e.g., Impett et al., 2005), previous research on sexual motivations has focused on their associations with negative outcomes, such as risky sexual behaviour (e.g., Cooper et al., 1998). Instead, in this study I examined how sex motives are related to the positive outcome of sexual satisfaction. Finally, combining the well-established framework of attachment theory and a motivational approach to understanding sexual behaviour, I sought to shed light on the processes that influence sexual satisfaction.

The present findings suggest that individuals who worry about their value to their partner and are sensitive to partner rejection tend to have sex to avoid aversive experiences and outcomes. Attachment anxiety—by definition—is concerned with needs for security and involves a dispositional focus on preventing losses and rejection. Thus, the underlying prevention disposition of attachment anxiety may undermine the strength of sexual motivation, which perhaps is inherently approach- and promotion-oriented. Furthermore, individuals who engage in sex to promote pleasure and intimacy tend to be more sexually satisfied than those who have sex for less positive reasons. Thus, there is a fit between promotion-oriented approach motives in the pursuit of the promotion-focused goal of sexual satisfaction.

Current findings suggest that the reasons people *think* their partner has sex with them are just as important to their sexual satisfaction as their own reasons for engaging in sex, especially for husbands. Moreover, some converging findings suggest that husbands' sexuality may be more relationally focused than has previously been assumed

in the literature (e.g., Basson, 2003; Peplau, 2003). In addition, whereas wives' discomfort with closeness was negatively associated with their sexual satisfaction, it was husbands' attachment anxiety that was negatively associated with their sexual satisfaction. Thus, attachment insecurity may undermine sexual satisfaction differentially for each gender. Future research may shed light on what other processes mediate the link between attachment orientation and sexual satisfaction and how these processes may differ for women and men.

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Table 1. Means and Standard Deviations for the Sex Motives Subscales for Self- and Partner Reports, Attachment Dimensions, and Sexual Satisfaction

	Self Reports				Partner Reports			
	Wives		Husbands		Wives		Husbands	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Physical Pleasure	3.96	0.91	4.16	0.70	4.37	0.74	3.96	0.90
Partner Pleasure	3.97	0.83	4.03	0.74	4.03	0.89	3.97	0.89
Intimacy	4.03	0.88	3.75	0.92	3.89	1.00	3.88	0.92
Emotional Value	2.68	1.18	2.69	1.20	3.11	1.26	3.05	1.17
Coping	1.75	0.83	1.94	0.89	1.95	0.93	1.91	0.92
Self-Affirmation	2.03	0.94	1.92	0.91	2.17	1.03	2.25	0.96
Insecurity	1.55	0.68	1.47	0.72	1.34	0.56	1.64	0.79
Anxiety	2.45	1.12	2.13	0.86	--	--	--	--
Avoidance	1.94	0.86	2.07	0.84	--	--	--	--
Sexual Satisfaction	5.02	1.42	5.20	1.35	--	--	--	--

Table 2. Associations between Sex Motives and Attachment Dimensions, and between Sex Motives and Sexual Satisfaction

Sex Motive	Anxiety		Avoidance		Sexual Satisfaction	
	Wife	Husband	Wife	Husband	Wife	Husband
Physical Pleasure						
Self	-.09	-.25***	-.11	-.21**	.36***	.21**
Partner	-.02	-.21**	-.08	-.19*	.26***	.36***
Partner Pleasure						
Self	.05	-.22**	-.14+	-.17*	.13+	.28***
Partner	.01	-.13+	-.13+	-.20**	.34***	.33***
Intimacy						
Self	.03	-.04	-.12	-.11	.12	.11
Partner	.04	-.13+	-.06	-.12	.15*	.20**
Emotional Value						
Self	.18*	.14+	.00	.04	-.02	-.08
Partner	.20*	.10	.14+	.06	.01	.07
Coping						
Self	.14+	.25***	.08	.12	.13	-.20*
Partner	.14+	.26***	.15+	.18*	.04	-.11
Self-Affirmation						
Self	.34***	.45***	.08	.24**	-.10	-.20*
Partner	.30***	.45***	.25**	.19*	-.13	-.11
Insecurity						
Self	.23**	.41***	.23**	.25***	-.19*	-.19*
Partner	.30***	.39***	.24**	.26***	-.22**	-.31***

Note. + $p < .10$; * $p < .05$, ** $p < .01$, *** $p < .001$.

Figure 1. Path model for wives' attachment orientation, sex motives, and sexual satisfaction

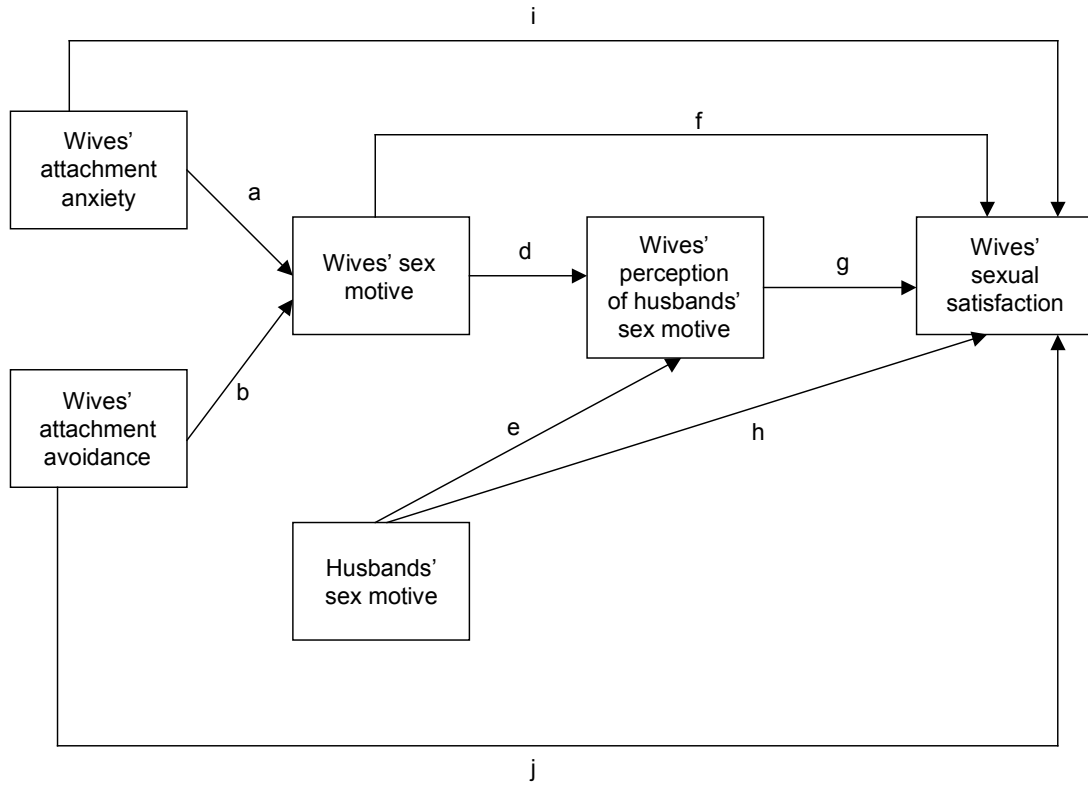


Figure 2. Path model for husbands' attachment orientation, sex motives, and sexual satisfaction

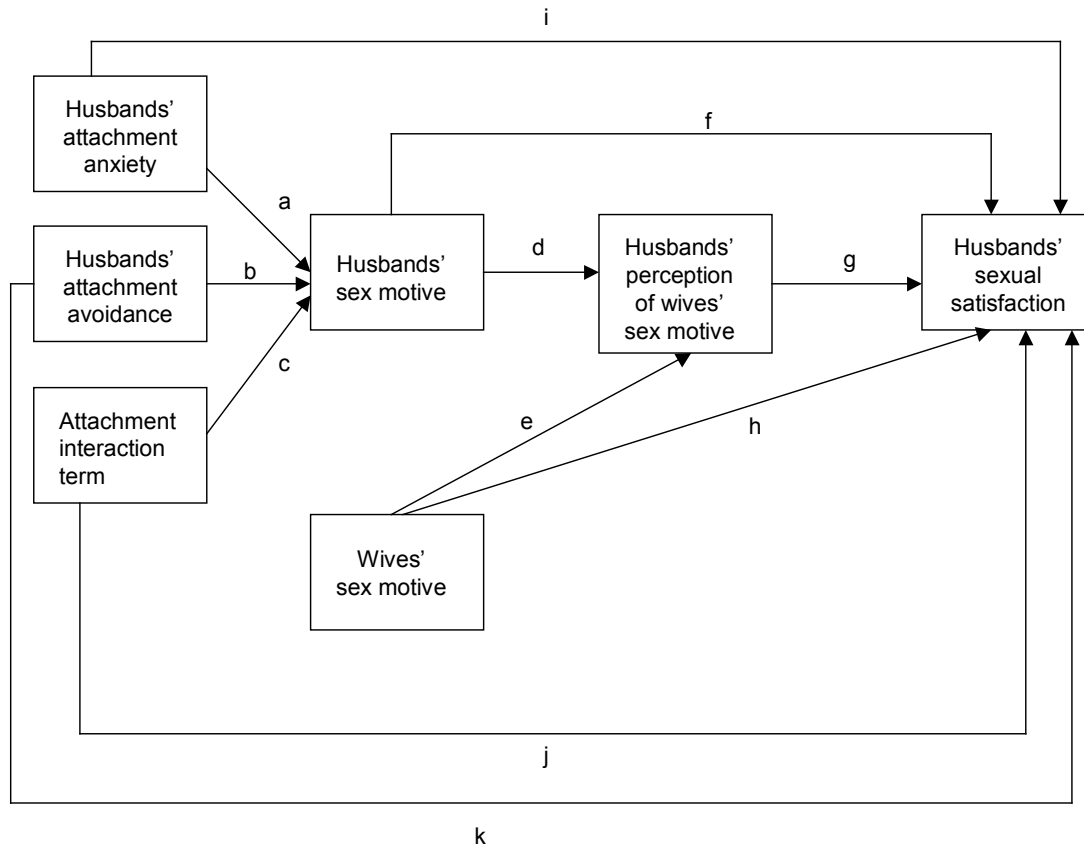
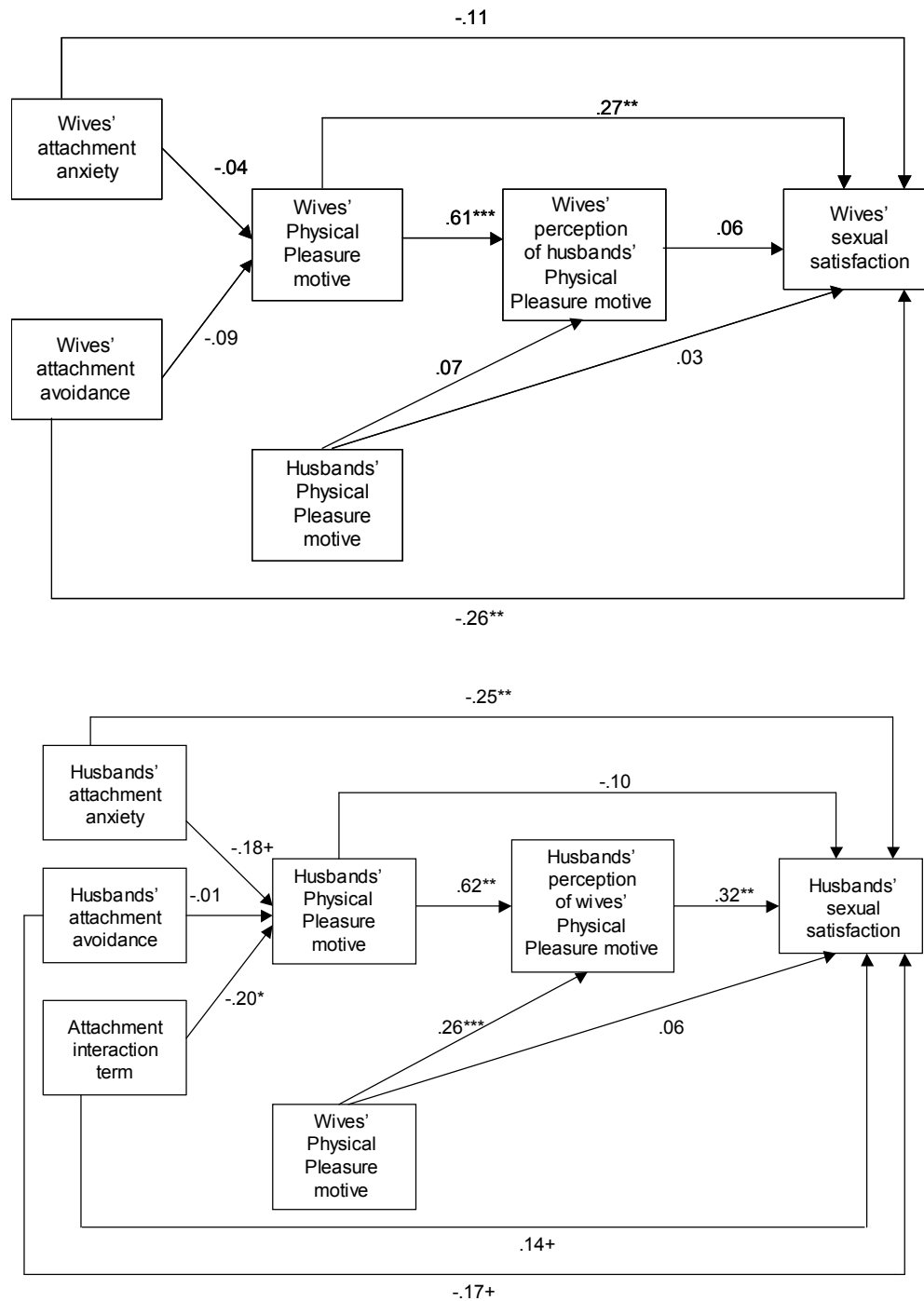
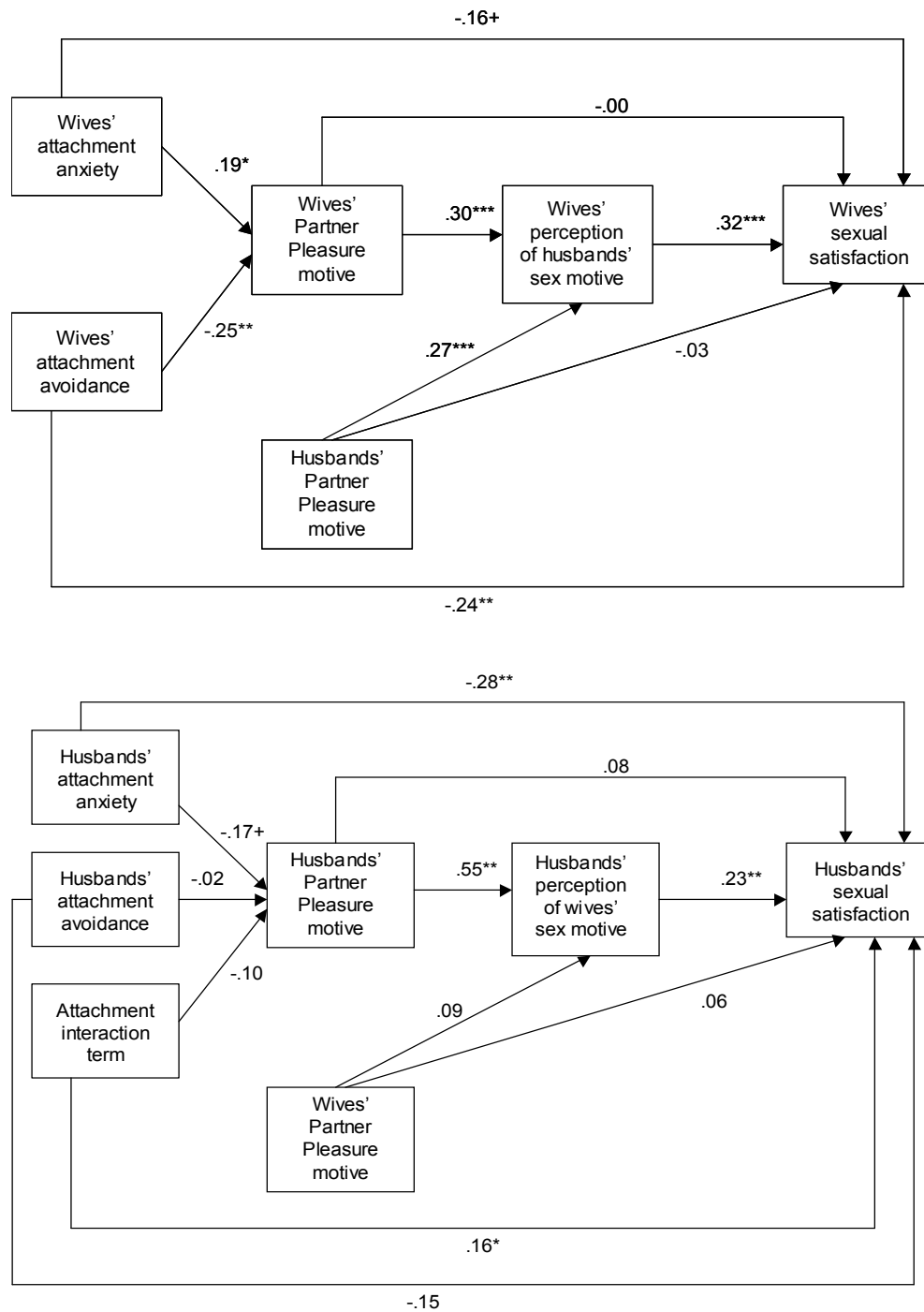


Figure 3. Path models for wives' and husbands' Physical Pleasure motives



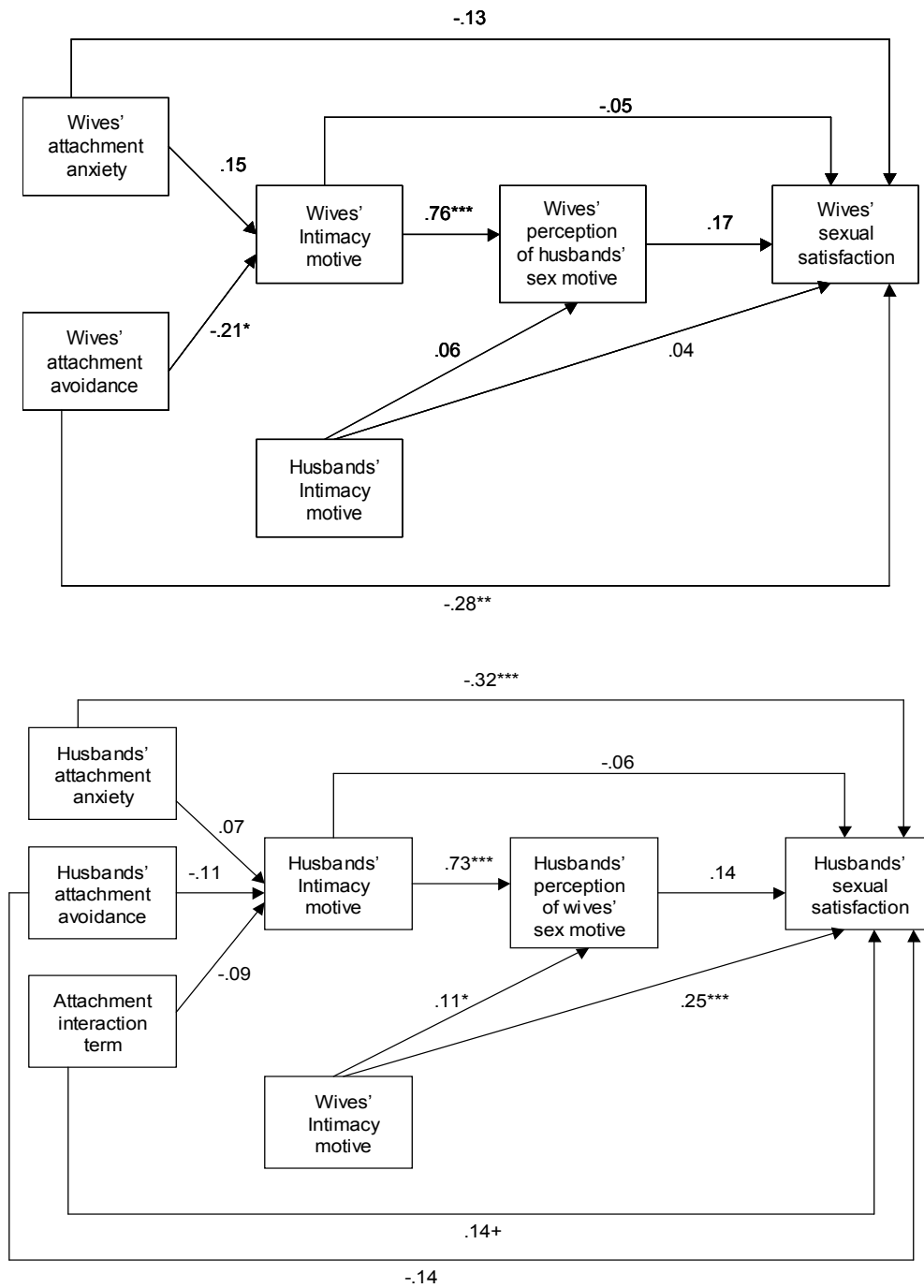
Note. Fit statistics for wives' model: CFI = .99; RMSEA = .07; $X^2(3) = 5.6$; $p = .13$; Fit statistics for husbands' model: CFI = .99; RMSEA = .06; $X^2(4) = 6.5$; $p = .16$; + $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 4. Path models for wives' and husbands' Partner Pleasure motives



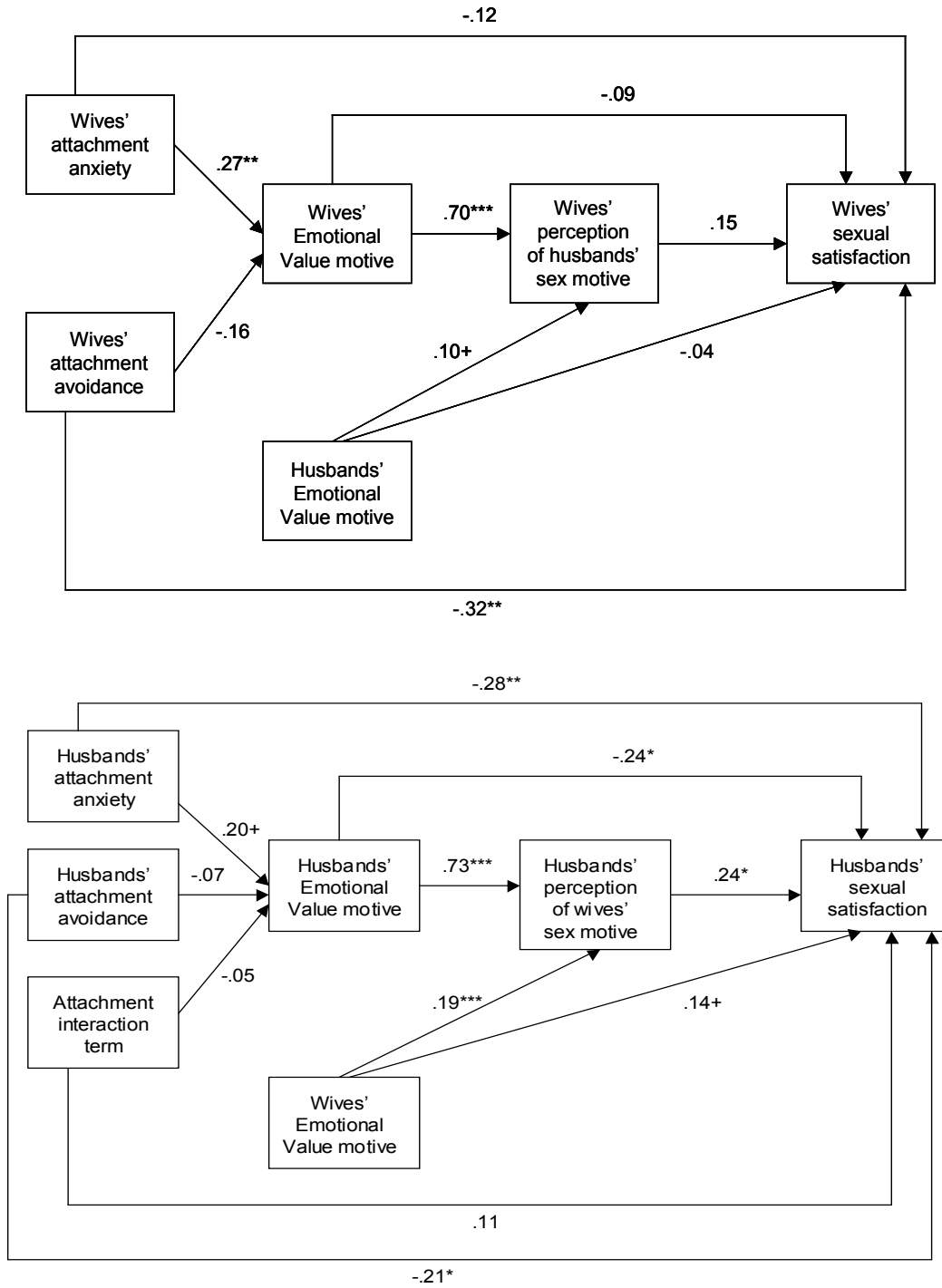
Note. Fit statistics for wives' model: CFI = .98; RMSEA = .09; $X^2(3) = 7.0$; $p = .07$;
 Fit statistics for husbands' model: CFI = .96; RMSEA = .13; $X^2(4) = 14.3$; $p = .01$;
 $+p < .10$. $*p < .05$. $**p < .01$. $***p < .001$.

Figure 5. Path models for wives' and husbands' Intimacy motives



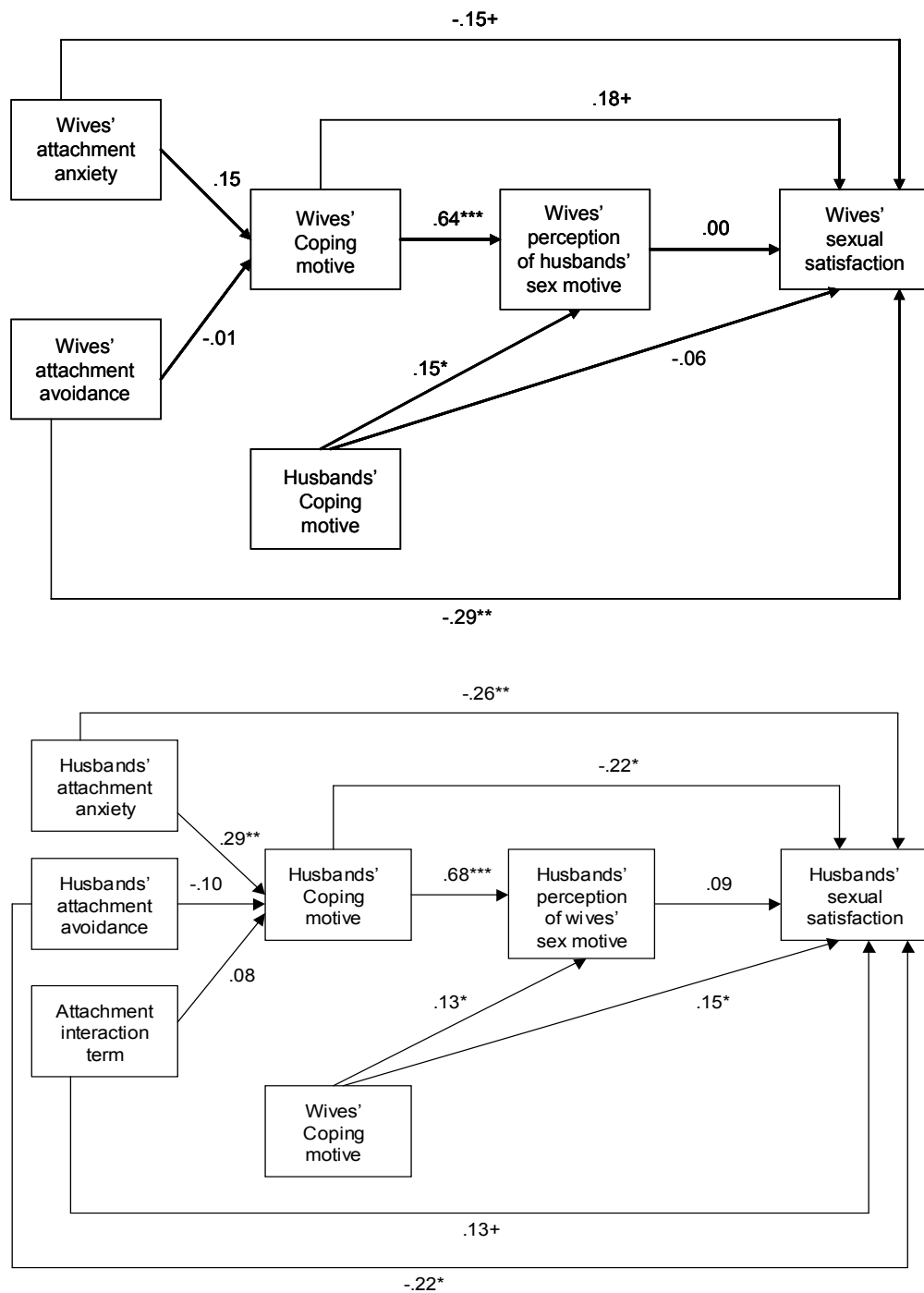
Note. Fit statistics for wives' model: CFI = .98; RMSEA = .09; $X^2(3) = 6.4$; $p = .09$; Fit statistics for husbands' model: CFI = .96; RMSEA = .13; $X^2(4) = 14.8$; $p = .01$; $+p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 6. Path models for wives' and husbands' Emotional Value motives.



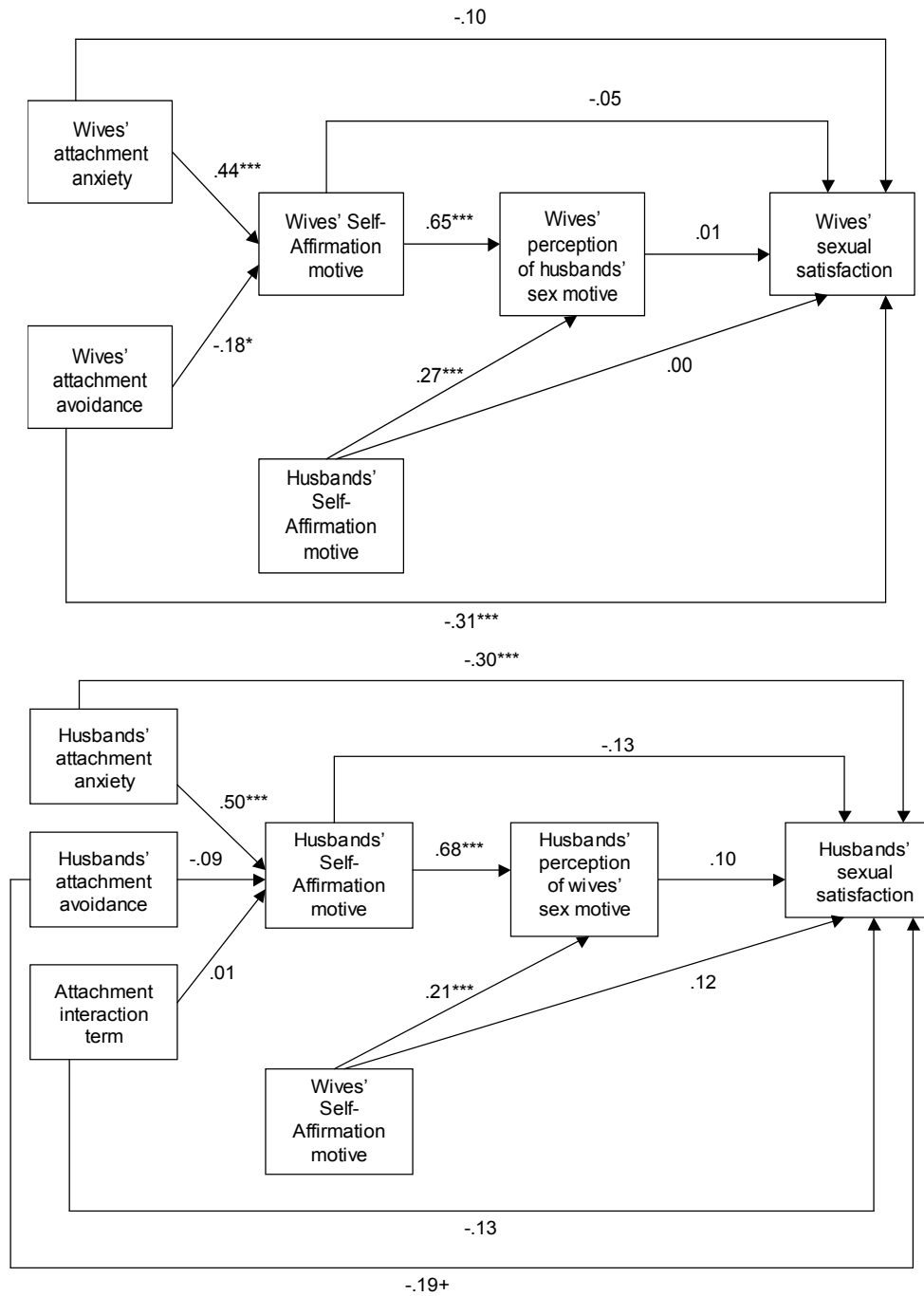
Note. Fit statistics for wives' model: CFI = .94; RMSEA = .15; $X^2(3) = 13.4$; $p = .0$; Fit statistics for husbands' model: CFI = .99; RMSEA = .06; $X^2(4) = 6.1$; $p = .19$; + $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 7. Path models for wives' and husbands' Coping motives.



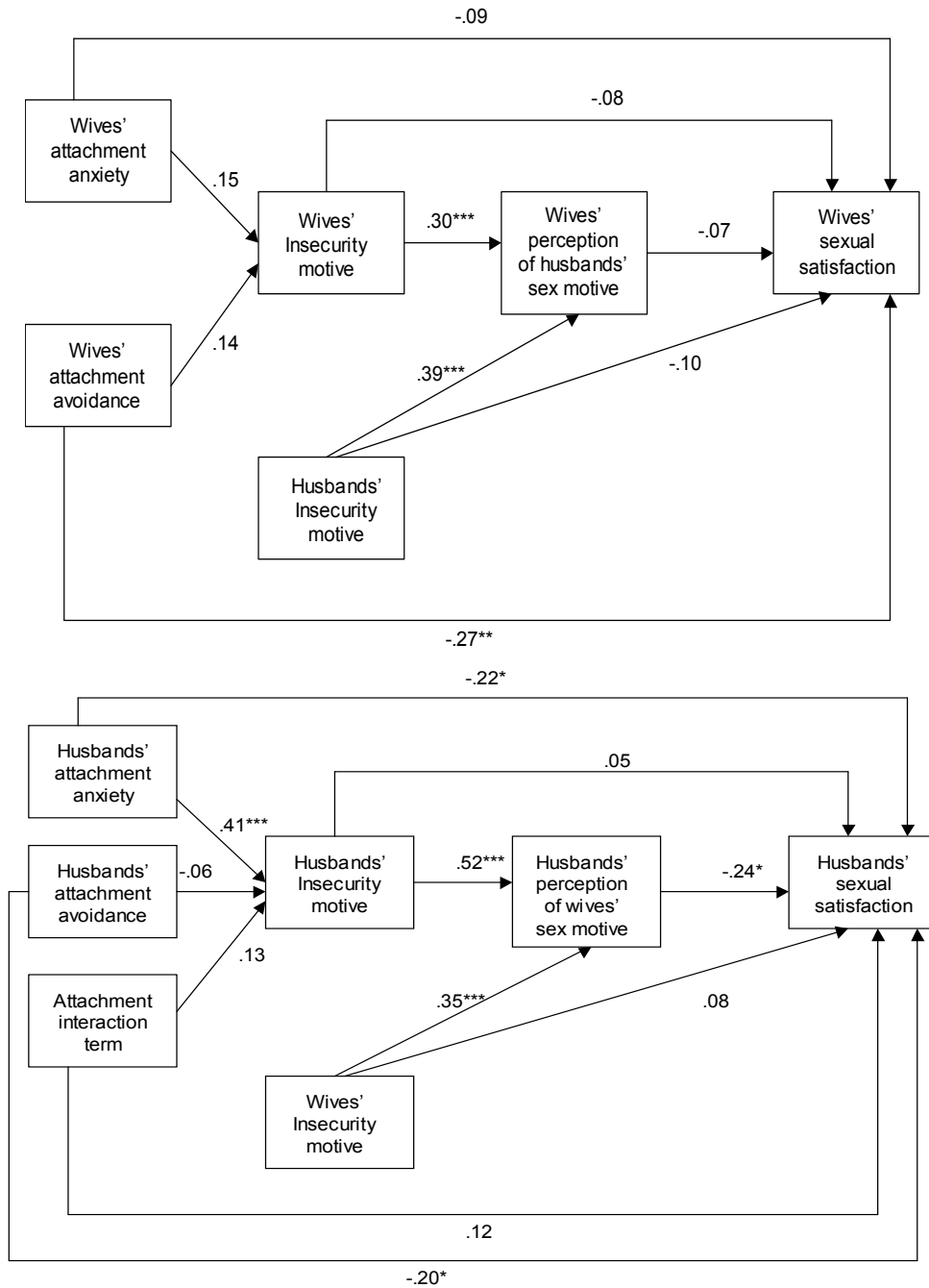
Note. Fit statistics for wives' model: CFI = .94; RMSEA = .16; $X^2(3) = 14.6$; $p = .00$;
 Fit statistics for husbands' model: CFI = .97; RMSEA = .11; $X^2(4) = 12.2$; $p = .02$;
 $+p < .10$. $*p < .05$. $**p < .01$. $***p < .001$.

Figure 8. Path models for wives' and husbands' Self-Affirmation motives



Note. Fit statistics for wives' model: CFI = .94; RMSEA = .17; $X^2(3) = 16.9$; $p = .00$; Fit statistics for husbands' model: CFI = .97; RMSEA = .13; $X^2(4) = 14.2$; $p = .01$; $+p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Figure 9. Path models for wives' and husbands' Insecurity motives.



Note. Fit statistics for wives' model: CFI = .97; RMSEA = .10; $X^2(3) = 8.2$; $p = .04$; Fit statistics for husbands' model: CFI = .99; RMSEA = .05; $X^2(4) = 5.6$; $p = .23$; $+p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Appendices

Appendix A.

Sex Motives Subscales (Self version)

Directions: The following statements describe various reasons why people have sex. Think of your sexual relationship with your partner in the past six months.

Rate the degree to which you personally had sex for each reason, on a 7-point Likert-scale ranging from not at all, to somewhat (midpoint), and to a great deal.

Remember—there are no right or wrong answers. We just want to know what you think.

Physical Pleasure

because it feels good
 just for the excitement of it
 just for the thrill of it
 to be playful and to have fun
 to enjoy yourself physically

Physical Pleasure for Partner

because it makes your partner feel good
 because your partner likes the excitement/thrill of it
 to give your partner physical pleasure
 for your partner's enjoyment

Intimacy

to become more intimate with your partner
 to express love for your partner
 to make an emotional connection with your partner
 to become closer with your partner
 to feel emotionally close to your partner
 to communicate how much you care for and value your partner

Feeling Emotionally Valued by One's Partner

to feel cared for
 to feel like an important part of your partner's life
 to feel valued
 to feel loved

*Sex Motives Subscales (Self version) (continued)***Coping**

to cope with upset feelings
 because it helps you feel better when you're lonely
 because it helps you feel better when you're feeling low
 to cheer yourself up
 because it's a source of relief from stress and pressure (for you)

Self-Affirmation

to prove to yourself that your partner thinks you're attractive
 because it makes you feel more self-confident
 to reassure yourself that you are sexually desirable
 to help you feel better about yourself
 to reassure yourself about where the relationship stands
 to make your partner love you more
 when you feel insecure about your partner's feelings for you

Insecurity

out of fear that your partner won't love you anymore if you don't
 because you don't want your partner to be angry with you if you don't
 because you don't want your partner to complain if you don't
 to prevent your partner from becoming upset
 to prevent your partner from getting angry at you
 to prevent your partner from losing interest in you
 to avoid conflict (about sex) in your relationship

Manipulative Use of Sexuality

to get other things you want from your partner
 to distract your partner from complaining
 when your partner is angry at you to get him or her over it
 To what extent did you refuse to have sex with your partner as a way of punishing him/her?
 To what extent did you promise your partner sex in exchange for him/her doing (or giving) you something else you want?

Appendix B.

Intercorrelations Among Attachment Dimensions, Physical Pleasure Motives, and Sexual Satisfaction

Table B1. Intercorrelations Among Attachment Dimensions, Physical Pleasure Motives, and Sexual Satisfaction

Variable	1	2	3 ^a	4	5	6	7
1. Anxiety	--	.58	--	-.09	-.02	-.16	-.29
2. Avoidance	.65	--	--	-.11	-.08	-.23	-.37
3. Attachment interaction ^a	.36	.43	--	--	--	--	--
4. Self: Physical Pleasure motive	-.25	-.21	-.26	--	.62	.19	.36
5. Perception of partner's Physical Pleasure motive	-.21	-.19	-.16	.65	--	.18	.26
6. Partner's Physical Pleasure motive	-.07	-.10	-.02	.19	.37	--	.17
7. Sexual satisfaction	-.36	-.32	-.06	.21	.36	.20	--

^a Attachment interaction term used in husbands' model only.

Note. Correlations greater than or equal to .16 are significant at $p < .05$. Wives' values are presented above the diagonal. Husbands' values are presented below the diagonal.

Table B2. Intercorrelations Among Attachment Dimensions, Partner Pleasure Motives, and Sexual Satisfaction

Variable	1	2	3 ^a	4	5	6	7
1. Anxiety	--	.58	--	.05	.01	-.10	-.29
2. Avoidance	.65	--	--	-.14	-.13	-.31	-.37
3. Attachment interaction ^a	.36	.43	--	--	--	--	--
4. Self: Partner Pleasure motive	-.22	-.17	-.17	--	.36	.25	.13
5. Perception of partner's Partner Pleasure motive	-.13	-.20	-.18	.56	--	.34	.34
6. Partner's Partner Pleasure motive	.02	-.10	-.03	.25	.22	--	.17
7. Sexual satisfaction	-.36	-.32	-.06	.28	.33	.14	--

^a Attachment interaction term used in husbands' model only.

Note. Correlations greater than or equal to .16 are significant at $p < .05$. Wives' values are presented above the diagonal. Husbands' values are presented below the diagonal.

Table B3. Intercorrelations Among Attachment Dimensions, Intimacy Motives, and Sexual Satisfaction

Variable	1	2	3 ^a	4	5	6	7
1. Anxiety	--	.58	--	.03	.04	-.09	-.29
2. Avoidance	.65	--	--	-.12	-.06	-.14	-.37
3. Attachment interaction ^a	.36	.43	--	--	--	--	--
4. Self: Intimacy motive	-.04	-.11	-.12	--	.77	.20	.12
5. Perception of partner's Intimacy motive	.13	-.12	-.19	.74	--	.21	.15
6. Partner's Intimacy motive	.07	-.09	.00	.20	.26	--	.12
7. Sexual satisfaction	-.36	-.32	-.06	.11	.20	.27	--

^a Attachment interaction term used in husbands' model only.

Note. Correlations greater than or equal to .16 are significant at $p < .05$. Wives' values are presented above the diagonal. Husbands' values are presented below the diagonal.

Table B4. Intercorrelations Among Attachment Dimensions, Emotional Value Motives, and Sexual Satisfaction

Variable	1	2	3 ^a	4	5	6	7
1. Anxiety	--	.58	--	.18	.20	-.04	-.29
2. Avoidance	.65	--	--	.00	.14	-.10	-.37
3. Attachment interaction ^a	.36	.43	--	--	--	--	--
4. Self: Emotional Value motive	.14	.04	-.01	--	.71	.20	-.02
5. Perception of partner's Emotional Value motive	.10	.06	.01	.75	--	.24	.01
6. Partner's Emotional Value motive	.15	.10	.10	.20	.32	--	.01
7. Sexual satisfaction	-.36	-.32	-.06	-.08	.07	.13	--

^a Attachment interaction term used in husbands' model only.

Note. Correlations greater than or equal to .16 are significant at $p < .05$. Wives' values are presented above the diagonal. Husbands' values are presented below the diagonal.

Table B5. Intercorrelations Among Attachment Dimensions, Coping Motives, and Sexual Satisfaction

Variable	1	2	3 ^a	4	5	6	7
1. Anxiety	--	.58	--	.14	.14	-.07	-.29
2. Avoidance	.65	--	--	.08	.15	-.00	-.37
3. Attachment interaction ^a	.36	.43	--	--	--	--	--
4. Self: Coping motive	.25	.12	.14	--	.66	.25	.13
5. Perception of partner's Coping motive	.26	.18	.19	.70	--	.30	.04
6. Partner's Coping motive	.14	.09	.06	.25	.29	--	-.00
7. Sexual satisfaction	-.36	-.32	-.06	-.20	-.11	.08	--

^a Attachment interaction term used in husbands' model only.

Note. Correlations greater than or equal to .16 are significant at $p < .05$. Wives' values are presented above the diagonal. Husbands' values are presented below the diagonal.

Table B6. Intercorrelations Among Attachment Dimensions, Self-Affirmation Motives, and Sexual Satisfaction

Variable	1	2	3 ^a	4	5	6	7
1. Anxiety	--	.58	--	.34	.30	.06	-.29
2. Avoidance	.65	--	--	.08	.25	.09	-.37
3. Attachment interaction ^a	.36	.43	--	--	--	--	--
4. Self: Self-Affirmation motive	.45	.24	.15	--	.68	.19	-.10
5. Perception of partner's Self-Affirmation motive	.45	.19	.07	.71	--	.38	-.13
6. Partner's Self-Affirmation motive	.18	.12	.11	.19	.33	--	-.03
7. Sexual satisfaction	-.36	-.32	-.06	-.20	-.11	.07	--

^a Attachment interaction term used in husbands' model only.

Note. Correlations greater than or equal to .16 are significant at $p < .05$. Wives' values are presented above the diagonal. Husbands' values are presented below the diagonal.

Table B7. Intercorrelations Among Attachment Dimensions, Insecurity Motives, and Sexual Satisfaction

Variable	1	2	3 ^a	4	5	6	7
1. Anxiety	--	.58	--	.23	.30	.11	-.29
2. Avoidance	.65	--	--	.23	.24	.11	-.37
3. Attachment interaction ^a	.36	.43	--	--	--	--	--
4. Self: Insecurity motive	.41	.25	.25	--	.31	.03	-.19
5. Perception of partner's Insecurity motive	.39	.26	.14	.53	--	.40	-.22
6. Partner's Insecurity motive	.19	.19	.08	.03	.36	--	-.17
7. Sexual satisfaction	-.36	-.32	-.06	-.19	-.31	-.08	--

^a Attachment interaction term used in husbands' model only.

Note. Correlations greater than or equal to .16 are significant at $p < .05$. Wives' values are presented above the diagonal. Husbands' values are presented below the diagonal.