
Attachment, sexual experience, and sexual pressure in romantic relationships: A dyadic approach

AUDREY BRASSARD,^a PHILLIP R. SHAVER,^b AND YVAN LUSSIER^a

^a*Université du Québec à Trois-Rivières, Canada* and ^b*University of California, Davis*

Abstract

The goal of this research was to extend the previously documented associations between attachment style and sexual experiences in samples of adolescents and college students to adult couples in committed romantic relationships. A sample of 273 French-Canadian heterosexual couples aged 18–35 years completed measures of attachment-related anxiety and avoidance, sexual coercion, and sexual experiences in their relationships. Avoidant attachment was related to two strategies for limiting intimacy in sexual relationships: avoidance of sexual encounters and avoidance of sexual fantasies about one's partner (the latter for women only). Anxious attachment appeared to interfere with comfortable intimacy, especially among men, who viewed their partner as avoiding sex and who applied more insistent pressure to have sex.

Over the past 20 years, romantic attachment theory has strongly influenced the study of couple relationships (Hazan & Shaver, 1987; Mikulincer & Goodman, 2006), which conceptualizes romantic love, or pair-bonding, in terms of three behavioral systems (Bowlby, 1969/1982): attachment, caregiving, and sex. Perhaps because Hazan and Shaver (1987) provided an early measure of “romantic attachment style,” the issue of attachment has received more attention from researchers than either caregiving or sexuality. Nonetheless, sexuality obviously plays a central role in most romantic and marital relationships and is often a reason for seeking couple therapy (Gurman & Jacobson,

2002). The studies of attachment and sex that have been carried out so far have generally focused on uncoupled college students or individuals in dating relationships rather than committed couples (e.g., Davis, Shaver, & Vernon, 2003; Schachner & Shaver, 2004). The purpose of the present study was to fill part of this gap by examining associations between attachment-style dimensions (anxiety and avoidance, as explained below) and various aspects of sexuality within a large sample of married and cohabiting couples.

Attachment theory and attachment style

Audrey Brassard, Department of Psychology, Université du Québec à Trois-Rivières, Québec, Canada; Phillip R. Shaver, Department of Psychology, University of California, Davis; Yvan Lussier, Department of Psychology, Université du Québec à Trois-Rivières, Québec, Canada.

Audrey Brassard is now at Department of Psychology, Université de Sherbrooke, Québec, Canada.

This research was supported by a doctoral grant from Social Sciences and Humanities Council of Canada to Audrey Brassard and subsides from Conseil Québécois de la Recherche Sociale to Yvan Lussier.

Correspondence should be addressed to Audrey Brassard, Université de Sherbrooke, Department of Psychology, Sherbrooke, Québec, Canada J1K 2R1, e-mail: audrey.brassard2@usherbrooke.ca.

Patterns of attachment-related security and insecurity in romantic relationships (typically called attachment styles) were initially assessed qualitatively, as either secure, avoidant, or anxious (Hazan & Shaver, 1987). The tripartite categorization system was based on Ainsworth's early work on infants' attachment to their primary caregiver, usually the mother (Ainsworth, Blehar, Waters, & Wall, 1978). Bartholomew (1990) and Bartholomew and Horowitz (1991) extended the adult typology by distinguishing between “dismissing” and

“fearful” avoidance and showing that the resulting four attachment patterns could be arrayed in a two-dimensional space. Subsequently, various researchers attempted to measure the underlying dimensions with continuous scales (e.g., Collins & Read, 1990; Simpson, 1990), and Brennan, Clark, and Shaver (1998) eventually factor-analyzed these measures and showed that they could all be summarized in terms of two dimensions of attachment insecurity: anxiety and avoidance.

The anxiety dimension is characterized by fear of rejection and abandonment; the avoidance dimension, by discomfort with closeness and interdependence. A person's location in the two-dimensional space can be assessed with the two scales comprised by the Experiences in Close Relationships measure (ECR; Brennan et al., 1998). One's location in the space is thought to be determined by important experiences with previous attachment figures (i.e., close relationship partners, beginning with early caregivers; see Mikulincer & Shaver, 2007), but it might also be influenced by temperament or genetic factors (e.g., Crawford et al., 2007).

In the most recent models of romantic attachment (e.g., Mikulincer & Shaver, 2003, 2007), avoidance is characterized as a strategic “deactivation” of the attachment system, which reduces a person's feelings of vulnerability to rejection or abandonment and reliance on others for comfort and support. People who score high on the ECR avoidance scale generally do not want to rely on a partner for emotional support, do not like having to provide emotional support to a partner, and pride themselves on their autonomy and independence. Theoretically, they have developed this strategy as a way of coping with caregivers who did not approve of emotional displays of vulnerability and who insisted on premature self-reliance.

In contrast, anxious attachment is characterized by strategic “hyperactivation” of the attachment system, which involves extreme vigilance concerning a partner's interest, commitment, and faithfulness. This pattern is thought to develop in response to caregivers who were unreliable or overly anxious and self-focused, and who seemed to require a dra-

matic display of negative emotion in order to come to the aid of a needy child.

Attachment and sexuality

Based on Bowlby's (1969/1982) claim that activation of the attachment behavioral system affects the functioning of other behavioral systems, such as exploration, Shaver and Hazan (1988) hypothesized that attachment insecurity would interfere with perception of signals of sexual attraction and arousal, and affect the motives for and experience of sexual encounters. Theoretically, avoidant people's discomfort with intimacy and negative models of others (Bartholomew & Horowitz, 1991) make it likely that they will be more interested in short-term sexual relationships (which are generally less psychologically intimate) than are less avoidant people, but will not necessarily enjoy sex per se more than other people (e.g., Schachner & Shaver, 2002, 2004). More anxious people should be more likely to engage in sexual activities to reassure themselves that their partner cares about them and to captivate their partner's attention, sometimes going along with a sexual partner's demands in order to avoid disapproval or rejection.

Empirical studies have supported the hypothesis that attachment security creates a positive and stable foundation for sexual engagement. More securely attached people (those who score low on both the anxiety and avoidance dimensions) tend to believe that sex should occur within a committed romantic relationship (Brennan & Shaver, 1995). They report having fewer “one-night stand” sexual encounters (Cooper, Shaver, & Collins, 1998) and fewer “hook-ups” (sexual encounters with a stranger or mild acquaintance; Paul, McManus, & Hayes, 2000). Moreover, relatively secure individuals generally report having experienced more positive emotions and fewer negative emotions in sexual relationships than insecure individuals (Birnbaum, Reis, Mikulincer, Gillath, & Orpaz, 2006; Gentzler & Kerns, 2004; Tracy, Shaver, Albino, & Cooper, 2003).

Both major forms of attachment insecurity, anxiety and avoidance, are associated with

lower levels of sexual arousal, pleasure, and satisfaction (Fricker & Moore, 2002; Morrison, Urquiza, & Goodlin-Jones, 1997); higher rates of physical coercion on the part of sexual partners; and more involvement in unwanted sex (Gentzler & Kerns, 2004; Tracy et al., 2003). Attachment anxiety and avoidance have also been related to sexual coercion perpetrated by undergraduate male students (Smallbone & Dadds, 2001). More specifically, Davis (2006) suggested that anxious individuals are more likely to become sexually insistent or coercive when they experience threats to the relationship or closeness, whereas avoidant people are more likely to engage in the sexual coercion of strangers in new dating relationships, influenced by peers or intended to impress them. For various reasons, then, insecurity is associated with relationship distress and earlier relationship dissolution (see Feeney & Noller, 2004, for a review).

Avoidant attachment, specifically, is associated with trying not to become overly intimate with, or reliant upon, a partner by (a) avoiding sexual intercourse altogether or (b) engaging only in casual sex. At least in adolescent and young adult samples, avoidance correlates negatively with frequency of sexual intercourse (Bogaert & Sadava, 2002; Gentzler & Kerns, 2004) and positively with solitary masturbation (Bogaert & Sadava, 2002). It is also associated with greater acceptance of and engagement in casual sex (Brennan & Shaver, 1995; Feeney, Noller, & Patty, 1993; Gentzler & Kerns, 2004). Avoidant adolescents and college students are more likely than their less avoidant peers to have had sexual intercourse with a stranger or mere acquaintance (Cooper et al., 1998; Paul et al., 2000). They are less likely than their peers to have had sex to express love and affection for their partner and are more likely to dismiss the importance of sex (Birnbaum et al., 2006; Brennan et al., 1998; Tracy et al., 2003).

In contrast, anxious individuals' tendency to seek emotional closeness in their romantic relationships is indicated by their strong desire for their partner's emotional involvement during sex (Birnbaum et al., 2006) and their disapproval of sex outside the context of a committed relationship (Brennan & Shaver,

1995). Their strong desire for approval and affection can also cause them to feel ineffective in sexual negotiations (e.g., discussing contraception with partners or resisting being pressured to have unwanted sex or engage in unwanted sexual acts; Feeney, Peterson, Gallois, & Terry, 2000) and to engage in unsafe sex (Feeney, Kelly, Gallois, Peterson, & Terry, 1999; Feeney et al., 2000). Anxious individuals are more likely than their peers to engage in sexual activities because of not wanting to lose their partner (Schachner & Shaver, 2002; Tracy et al., 2003), and they tend to have more concerns about poor sexual performance (Birnbaum et al., 2006).

Although the findings reviewed so far have been similar for men and women, it is important to mention that gender differences are sometimes reported. Among men, for example, attachment anxiety is sometimes correlated with a lower frequency of sexual activity (Feeney et al., 1993) and with older age at first intercourse (Gentzler & Kerns, 2004), whereas anxious women are more likely to have sex relatively early during adolescence (Bogaert & Sadava, 2002; Cooper et al., 1998; Gentzler & Kerns). Unlike men, attachment-anxious women tend to have a more positive attitude toward casual sex and are more likely to have engaged in it (Allen & Baucom, 2004; Bogaert & Sadava, 2002; Feeney et al., 2000). These gender differences may occur because attachment anxiety lowers men's sexual confidence, whereas it causes women to engage in uncommitted sex to gain a partner's approval (Tracy et al., 2003).

Focusing on adult relationships

Although a few studies have focused on sex in adult romantic relationships, the majority have assessed only undergraduate students, who are likely to be involved in less committed relationships that may or may not qualify as attachment relationships (Tracy et al., 2003). Avoidant individuals in less committed relationships may be more likely than their older counterparts to have multiple sexual partners (Cooper et al., 2006), and it may be easier for them to end their relationships if sexual difficulties arise. But as they get older and become

involved in longer term committed relationships, their tendency to avoid intimacy might result in different problems and behaviors (e.g., having sexual difficulties, avoiding sexual relations with their steady partner, having fewer romantic fantasies to fuel the sexual aspects of their relationship).

It is also important to determine whether the sexual patterns of attachment-anxious college students can be generalized to people in more stable, longer term relationships. As Feeney and Noller (2004) stated, we know relatively little about anxious individuals' sexual experiences within committed, extended relationships, although the passage of time (and the end of the honeymoon phase of a relationship), the presence of children, and the partners' interactions are likely to influence the experience of sexuality (Aubin & Heiman, 2004).

The literature on couple satisfaction provides evidence that dating and stable relationships are different in terms of attachment: Avoidant attachment is more detrimental to satisfaction in dating couples (where the development of intimacy is important), whereas dissatisfaction in marriage is more consistently predicted by attachment anxiety (e.g., Feeney, Noller, & Roberts, 1998). Because longer term couples are more likely to have to deal with sexual difficulties (if they want a family; e.g., see Aubin & Heiman, 2004) and to seek therapeutic help for them (whereas dating partners often break up rather than seek professional help; see Simpson, 1987), it is important to learn more about how attachment insecurities interfere with sexual functioning in longer term couples.

Another feature of the present study is that it considers the attachment patterns and sexual experiences of both members of a couple, something that has rarely been done in the past because of its difficulty and expense (see Feeney, Hohaus, Noller, & Alexander, 2001, for an exception). Because most forms of sexual experience occur in a dyadic relationship (DeLamater & Hyde, 2004), but may be perceived differently by the different partners, perhaps partly as a function of attachment style, it is important to assess both partner's perspectives. Collecting both partners' reports

allows us to examine the association between a person's own attachment style and sexual experiences (an "actor effect"), as well as the association between that person's attachment style and his or her partner's sexual experiences (a "partner effect"; Cook & Kenny, 2005). Both the individual level and the dyadic level of analysis contribute to an understanding of relationship processes and outcomes (e.g., Collins & Read, 1990; Feeney, 2006). Taking into account both partners' attachment orientations and experiences of sexuality is likely to improve scientific as well as clinical knowledge about how attachment and sexuality interact in committed relationships.

Objectives and hypotheses

The main goal of this study was to extend the research on attachment style and sexuality to the domain of committed adult romantic relationships, taking both partners' perspectives and attachment styles into account. In line with the literature on young adults, we predicted that attachment insecurities would impair both partners' sexual experiences. More specifically, we predicted that each partner's avoidant attachment score would be related to his or her attempts to avoid sexual relations with a mate, with a lower frequency of sexual intercourse, and with having fewer romantic fantasies about the partner. We also predicted that attachment anxiety would be associated with pressuring one's partner to engage in sexual intercourse and perceiving a partner as insufficiently available (e.g., perceiving the partner as avoiding sexual intercourse). As for partner effects, we expected a partner's avoidant attachment score to be associated with one's own perception of the partner as avoiding sexual relations, whereas we expected a partner's anxious attachment score to be linked with one's own perception of being pressured to engage in sexual intercourse. Finally, we predicted that the combination of two highly avoidant partners would be associated with the lowest frequency of sexual intercourse and that the combination of a more anxious partner with a more avoidant partner would relate to the reports of sexual pressure and avoidance of sexual relations, as well as sexual difficulties

(interaction effects). In order to conduct the necessary analyses, we collected data on attachment insecurities and sexual experiences from both members of a large sample of French-Canadian couples.

Method

Participants and procedure

The sample consisted of 273 heterosexual French-Canadian couples residing in Quebec. A professional survey firm recruited them using random-digit dialing to locate people who were between 18 and 35 years of age and had been married or cohabiting for at least 6 months. When we reached an appropriate couple member by phone, we provided a brief explanation of the study and asked him or her to participate. To ensure confidentiality, we mailed two separate envelopes, each containing a questionnaire packet and a prepaid return envelope for one of the relationship partners, to 600 couples we initially reached by telephone. A total of 273 couples completed and returned questionnaires (response rate = 45.5%). This is a high response rate for a mail-in survey, but it is possible in the present case that some couples failed to participate because the partner not contacted by telephone did not agree with the contacted partner that the two should participate in the study. This might have biased the sample somewhat in a secure direction.

Of the couples who returned surveys, 29.3% were married and 70.7% were cohabiting, which is representative of this age group in Quebec province (Le Bourdais & Lapierre-Adamcyk, 2004). Couples had been living together for approximately 5 years on average ($SD = 3.82$), and half of them had children (53.1%). The mean age was 27.87 years ($SD = 3.99$) for women and 30.11 years ($SD = 5.49$) for men. The majority of the women (75.5%) and men (90.7%) were employed. The annual individual income was CAN\$28,110 ($SD = \$15,788$) for employed women and CAN\$39,643 ($SD = \$18,908$) for employed men. On average, men had received 15 years of education and women had received 14 years.

Measures

Attachment. We assessed people's attachment insecurities—that is, attachment anxiety and avoidance—with the ECR (Brennan et al., 1998), which includes 18 items assessing avoidant attachment and 18 items assessing anxious attachment. We asked participants to indicate their agreement or disagreement with each statement based on their current relationship. We assessed agreement with a 7-point Likert scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). We computed two scores for each participant by averaging the relevant items (following appropriate reversals of negatively worded items); higher scores indicate higher anxiety and avoidance. Previous studies using both English-language and French-language versions have demonstrated the reliability of the two scales (e.g., Lafontaine & Lussier, 2003; Shaver & Mikulincer, 2004). In the present study, Cronbach's alpha (an index of scale reliability) for the anxiety scale was .86 for women and .89 for men. For the avoidance scale, alphas were .88 for women and .85 for men.

Experiences of sexuality. We used five items to assess participants' experience of sexuality in their relationship: (a) How many times did you have sexual intercourse during the last month? (b) I try to avoid having sex with my partner. (c) My partner tries to avoid having sex with me. (d) I have sexual dreams and fantasies about my partner. (e) I experienced a sexual problem (e.g., with erection or lubrication). The first item was open-ended, allowing participants to insert any number they wished, and they rated the other four items on a 5-point scale ranging from 1 (*never true*) to 5 (*always true*). The correlation between men's and women's reports of sexual intercourse frequency during the last month was $r = .93$, indicating high validity of the reports. We followed up a subsample of 130 couples 1 year later, finding that the test-retest stability of the sexual experience items ranged from .50 to .66 for women and from .41 to .66 for men. These are good test-retest reliabilities for single-item measures of variables that are expected to change to some extent over time.

Insistence on having sex. To measure the tendency to pressure one's partner to have sexual intercourse, we included two items from the revised Conflict Tactics Scales (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). The first was "I insisted on having sexual intercourse (but without using physical force)." The second was "My partner insisted on having sexual intercourse (but without using physical force)." Participants answered with respect to the previous year, using the following 8-point scale: *this has never happened; not in the last year, but it did happen before; once; twice; 3–5 times; 6–10 times; 11–20 times; more than 20 times.* Because the vast majority of participants (between 83.2 and 93.0%) said that these things had never happened or had not happened in the last year, we scored the items dichotomously, with 0 indicating *not in the last year* and 1 indicating *at least once during the last year*. We also asked a question about physical coercion to have sex, but so few people answered this question affirmatively that we could not meaningfully analyze it in relation to other variables.

Results

Preliminary analyses revealed significant associations between sociodemographic variables and the main measures (attachment, sexual experience, and sexual insistence or pressuring). Couples with children had less frequent intercourse than those without children, as reported by both women, $t(245) = 3.20, p < .01$, and men, $t(244) = 3.01, p < .01$. The means for men and women with children were 6.58 and 6.66, respectively; the means for men and women without children were 9.23 and 9.43. Marital status, however, was not significantly associated with any of the measures (all $ps > .05$). Length of relationship was inversely related to frequency of sexual intercourse during the last month, as women, $r(235) = -.24, p < .001$, and men, $r(234) = -.21, p < .01$, reported. Women's age was negatively correlated with frequency of intercourse, $r(221) = -.20, p < .01$, and with insisting on having sex, $r(223) = -.30, p < .001$. Length of relationship was also negatively associated with a woman's insistently pressuring her partner

to have sexual intercourse, $r(237) = -.20, p < .01$. Men's age was negatively correlated with avoidance of sex, $r(224) = -.19, p < .01$ (meaning that, surprisingly, younger men avoided sex slightly more often than older men within the age range we studied) and positively correlated with having sexual difficulties, $r(224) = .19, p < .01$. Although these correlations were relatively small, they indicated that we should consider age of partners, length of relationship, and the presence of children in subsequent analyses.

Gender differences

Means and standard deviations for the major variables are displayed separately for women and men in Table 1. We explored sex differences within couples (between partners) using paired t tests. Overall, women had higher attachment anxiety scores and slightly lower avoidant attachment scores than their male partners. Results for women's avoidance of sexual activities indicated agreement between partners in that women perceived themselves as more avoidant of sex and men reported more partner avoidance of sex. Women reported having more sexual problems than men reported having. Means indicated, however, that both members of these couples were experiencing a fairly low degree of sexual avoidance and sexual difficulties. Women included their partner in their sexual dreams and fantasies slightly more often than men did. Finally, men (16.8%) more often than women (7.0%) said they pressured their partner to have sexual intercourse, $\chi^2(1, N = 272) = 5.77, p < .05$, whereas women were more likely to report being pressured in this way by their partner, 13.5% of women, 7.5% of men, $\chi^2(1, N = 267) = 31.95, p < .001$.

Zero-order correlations

The correlations among the variables for men and women are shown in Table 2. The correlation between attachment anxiety and avoidance was moderately high for both men and women. For women, attachment anxiety was significantly associated with avoidance of sexual activities, perceiving one's partner to

Table 1. Means and standard deviations for women and men on attachment dimensions and sexual experience and demographic variables

Variables	Women (<i>n</i> = 260)		Men (<i>n</i> = 260)		<i>t</i> paired
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Attachment anxiety	3.07	1.23	2.72	1.30	3.86***
Attachment avoidance	1.73	0.94	1.86	0.90	1.96*
Frequency of intercourse during the last month	7.76	7.10	7.65	6.95	0.70
I try to avoid sex	1.90	0.84	1.32	0.59	8.84***
My partner tries to avoid sex	1.42	0.77	2.05	1.11	7.79***
Sexual dreams and fantasies about partner	3.51	1.06	3.33	1.05	2.19*
Sexual problems	1.95	1.06	1.29	0.59	9.51***
Age	27.87	3.99	30.03	5.38	
Length of the relationship	5.04	3.82	5.04	3.82	
Number of children	1.01	1.11	1.01	1.11	

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

be avoiding sex, and having more sexual problems. Similarly, men's attachment anxiety was significantly correlated with avoidance of sexual interactions, perceiving one's partner to be sex avoidant, having sexual problems, and also with pressuring one's partner to have sexual intercourse. Women's avoidance was associated with lower intercourse frequency, more avoidance of sexual activities, perceiving the partner as sex avoidant, fewer romantic sexual fantasies, having more sexual problems, and being pressured more often by one's partner to have sexual intercourse. Avoidant men were more avoidant of sexual contact as well, their partner viewed them as avoiding sex, less frequently having romantic sexual fantasies, and having more sexual difficulties. Both men's and women's insistence on having sex was correlated with their perception of their partner's use of pressuring tactics.

Table 3 presents the correlations between male and female partners on all variables. Women's attachment anxiety was associated with both dimensions of men's insecure attachment (suggesting that more anxious women were, on average, paired with less secure men) and with men's perception of their partner as avoiding sex. Women's avoidant attachment was also linked with both dimensions of their partner's attachment insecurity (hence, his attachment insecurity), his perception of her as avoiding sex, and his use of pressuring

tactics to have sexual intercourse. For men, as already mentioned, attachment anxiety was correlated with partner's attachment insecurity as well as her sex avoidance. Men's avoidant attachment was related to partner's insecurity, to his being less likely to appear in his partner's sexual dreams and fantasies, and to her perception of him as sex avoidant.

In the same way that partners agreed on their frequency of intercourse in the last month, as mentioned in the Method section, they showed some agreement about each other's avoidance of sex, as correlations of .42 and .51 in Table 3 indicate. Partners also seemed to agree about each other's use of pressuring tactics, as the correlations of .43 and .45 indicate. These correlations are fairly high for single items assessing behaviors that couple members might easily define or view somewhat differently, suggesting a substantial level of agreement between partners and a basis in shared reality for their separate answers. Moreover, the correlations indicate the lack of independence of observations within dyads, suggesting that the dyad should be used as the unit of analysis (Cook & Kenny, 2005).

Regression analyses predicting sexual experiences

We conducted separate sets of hierarchical regression analyses for men and women to

Table 2. Correlations between attachment dimensions, experiences of sex, and sexual pressure for women (above the diagonal) and men (below the diagonal)

Variables	1	2	3	4	5	6	7	8	9
1. Anxiety		.42***	.01	.23***	.13*	-.11	.18**	.01	.11
2. Avoidance	.45***		-.17**	.40***	.16*	-.33***	.18**	-.04	.17**
3. Frequency of intercourse during the last month	.01	-.08		-.27***	-.17**	.07	-.21**	.12*	-.04
4. Avoidance of sexual activities	.13*	.35***	-.11		.02	-.21***	.38***	-.05	.23***
5. Partner's avoidance of sexual activities	.41***	.24***	-.33***	.18**		-.10	-.10	.23***	.07
6. Sexual dreams and fantasies about partner	.01	-.22***	.17**	-.12*	-.04		-.13*	-.01	-.17**
7. Sexual problems	.15*	.14*	-.03	.10	.09	-.02		-.04	.18**
8. Sexually pressuring partner	.13*	.02	-.09	-.02	.30***	.04	.14*		.40***
9. Being pressured by partner	.06	-.01	.13*	.09	.02	.01	-.06	.44***	

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

Table 3. Correlations between partners on attachment dimensions, experiences of sex, and sexual pressure

Men and women	1	2	3	4	5	6	7	8	9
1. Anxiety		.36***	.02	.29***	.09	-.09	.09	-.05	.12
2. Avoidance	.29***		-.06	.05	.23***	-.21**	.01	-.05	.08
3. Frequency of intercourse during the last month	.01	-.11	.93***	-.25***	-.15*	.06	-.14*	.08	-.04
4. Avoidance of sexual activities	.07	.06	-.07	-.11	.42***	-.02	-.11	.15*	.17**
5. Partner's avoidance of sexual activities	.16*	.38***	-.30***	.51***	.01	-.19**	.24***	-.07	.25***
6. Sexual dreams and fantasies about partner	-.03	-.01	.14*	-.07	-.06	.20**	-.10	.02	-.01
7. Sexual problems	.10	.03	-.03	.05	-.07	-.04	.12	-.06	.08
8. Sexually pressuring partner	.11	.25***	-.08	.27***	-.07	-.07	.15*	.15*	.45***
9. Being pressured by partner	.03	-.01	.08	-.10	.08	-.03	-.10	.43***	.35***

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

predict various aspects of sexual experience. We centered all predictor variables around their respective means. In the first step of each analysis, we entered the following sociodemographic variables to statistically control for them: the participant's own age, relationship length, and number of children. The second step consisted of the participant's own attachment anxiety and avoidance scores. In the third step, we entered the partner's anxiety and avoidance scores to assess hypothesized partner effects. The final step included four interactions between individuals' own and their partners' attachment scores (e.g., man's anxiety by woman's avoidance). We further analyzed all significant interaction effects using Aiken and West's (1991) procedures. To predict sexual pressuring (which we coded dichotomously), we conducted logistic regression analyses using the same set of predictors. We dummy coded the sexual-pressuring variables (0 = *no pressuring*; 1 = *some pressuring*).

Women's experiences. Results for the women are summarized in Table 4. The attachment variables significantly predicted four of the five variables assessing the women's experience of sexual activity, with the only exception being their report of sexual problems. The logistic regression model also predicted their perception of sexual pressure from their partner.

First, relationship length was negatively associated with women's reported frequency of intercourse. Moreover, there were two interactions between a woman's and her partner's attachment styles. Following Aiken and West's (1991) procedure, we found that more anxious women reported a higher frequency of sexual intercourse ($\beta = .22, p < .05$) when their partner's anxiety score was also high (1 *SD* above the mean); in contrast, when men's attachment anxiety was low (1 *SD* below the mean), women's attachment anxiety did not significantly predict frequency of sexual intercourse ($\beta = .07, p > .05$). As shown in Figure 1a, the frequency of sexual intercourse was therefore lower when a nonanxious woman was paired with an anxious man. The second interaction supported one of our pre-

dictions (see Figure 1b): More avoidant women reported less frequent intercourse when their partners were also avoidant ($\beta = -.25, p < .01$); in contrast, when women's avoidance score was low, men's avoidance did not predict frequency of sexual intercourse ($\beta = .07, p > .05$). These two patterns recurred throughout the results, suggesting repeatedly that sexual aspects of the relationship were hindered if the man was anxiously attached and his partner was not, or if both of them were avoidant.

Second, women's avoidance of sexual relations was predicted by their number of children, their own avoidant attachment (as predicted), and their partner's high score on anxiety (as predicted) and low score on avoidance. Moreover, the combination of men's high anxiety and women's low anxiety predicted more avoidance of sex by women. As shown in Figure 1c, when women's anxiety score was low (1 *SD* below the mean), men's anxiety predicted women's avoidance of sexual intercourse ($\beta = .39, p < .001$), whereas when women were themselves anxious (1 *SD* above the mean), men's anxiety did not predict women's avoidance of sexual intercourse ($\beta = .07, p > .05$). Thus, a more secure woman (in terms of anxiety) paired with an anxious man is more likely than usual to avoid sexual intercourse.

Third, women's perception of their partner's avoidance of sex was predicted by his avoidant attachment, which supports one of our predictions. Also in line with our expectations was a significant interaction between women's avoidance and men's avoidance (see Figure 1d), such that the women perceived their partner as more avoidant of sex if they were 1 *SD* above the mean on avoidance and their partner was more avoidant ($\beta = .33, p < .001$). When women's avoidance score was low (1 *SD* below the mean), men's avoidance did not predict women's perception of men's avoidance of sexual intercourse ($\beta = .04, p > .05$).

Fourth, as predicted, women were less likely to have romantic or sexual fantasies about their partner the more attachment avoidant the women were (the anticipated actor effect) and the more avoidant their partner

Table 4. Hierarchical multiple regression analyses for women's sexual experiences

Variables	Frequency of intercourse			Avoidance of sexual activities			Partner's avoidance of sexual activities			Sexual dreams and fantasies		
	B	SE B	β	ΔR^2	B	SE B	β	ΔR^2	B	SE B	β	ΔR^2
Step 1				.08**				.05*				.01
Women's age	.00	.10	.00		.05	.09	.05		-.02	.10	-.02	
Relationship duration	-.29	.10	-.19**		-.10	.09	-.10		.09	.11	.08	
Number of children	-.02	.09	-.02		.19	.09	.19*		-.02	.09	-.01	
Step 2				.01				.11***				.04*
Women's anxiety	.06	.08	.06		.05	.08	.05		.10	.09	.09	
Women's avoidance	.03	.09	.03		.38	.09	.38***		-.01	.10	-.01	
Step 3				.02				.04**				.04*
Men's anxiety	.08	.08	.08		.22	.08	.22**		-.07	.09	-.07	
Men's avoidance	-.05	.09	-.05		-.22	.08	-.22**		.21	.09	.21*	
Step 4				.07**				.05*				.04
W-anx \times M-anx	.22	.09	.21*		-.17	.09	-.17*		-.03	.10	-.03	
W-anx \times M-avoid	-.07	.09	-.08		.07	.09	.08		-.06	.10	-.07	
W-avoid \times M-anx	.05	.09	.05		-.13	.08	-.13		-.08	.09	-.08	
W-avoid \times M-avoid	-.19	.07	-.26*		-.01	.07	-.01		.20	.08	.27**	
Total				.18				.26				.13

Note. W-anx = women's anxiety; M-anx = men's anxiety; W-avoid = women's avoidance; M-avoid = men's avoidance. * $p < .05$. ** $p < .01$. *** $p < .001$.

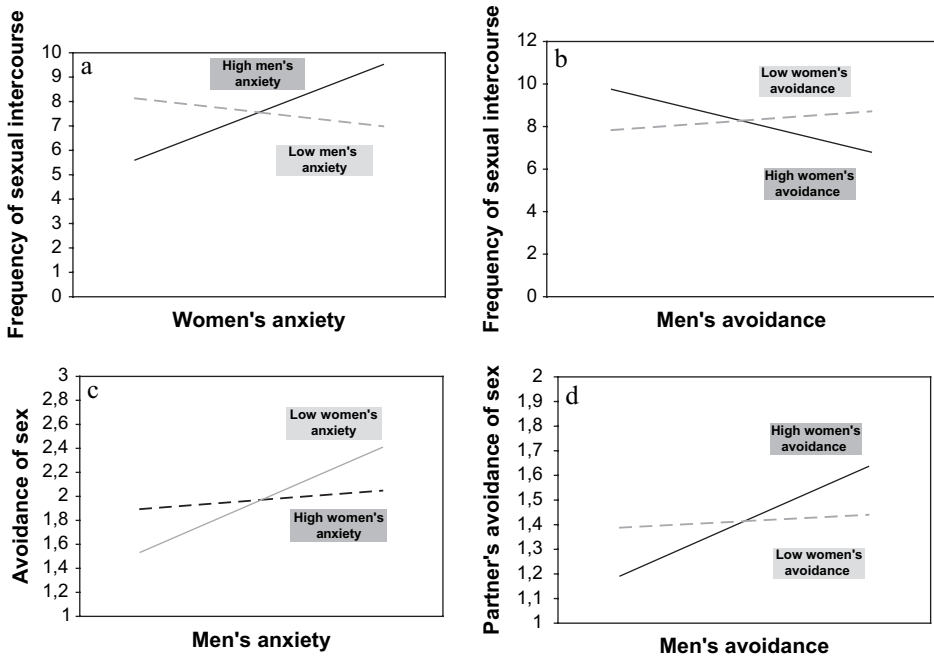


Figure 1. Interaction effects for women's reports of sexual experience: (a) the interaction of women's anxiety and men's anxiety in predicting women's reports of intercourse frequency, (b) the interaction of men's avoidance and women's avoidance in predicting women's reports of intercourse frequency, (c) the interaction of men's anxiety and women's anxiety in predicting women's avoidance of sex, and (d) the interaction of men's avoidance and women's avoidance in predicting women's reports of their partners' avoidance of sex.

was (the anticipated partner effect), suggesting less investment in the relationship or less passion. These two attachment-avoidance variables explained 17% of the variance in the dreams-and-fantasies variable.

Finally, the logistic regression analysis showed that women's perception of sexual pressure from their partner was predicted by their own age ($B = -.24, p < .001$) and their number of children ($B = .58, p < .01$). Specifically, the younger the women were and the more children they had, the more likely they were to report being sexually pressured by their partner. Attachment variables did not predict their perception of men's verbal insistence to engage in sexual activities.

Men's experiences. For men, as shown in Table 5, we obtained four of the five expected results—all except the one having to do with sexual dreams and fantasies. In addition,

men's use of pressure tactics to have sexual intercourse proved to be predictable. We will describe each result in turn.

First, men's frequency of intercourse was predicted by relationship length and two significant interactions. Specifically, men in longer relationships had sex less often, as was the case for women. Also consistent with the women's results, men reported having sexual intercourse more often to the extent that they and their partner were anxiously attached (see Figure 2a). Following Aiken and West's (1991) procedures, we found that when women's anxiety scores were low (1 *SD* below the mean), men's anxiety scores did not predict frequency of sexual intercourse ($\beta = .03, p > .05$), whereas when women's anxiety scores were high (1 *SD* above the mean) anxious men reported more frequent sexual intercourse ($\beta = .28, p < .01$). As anticipated (see Figure 2b), more avoidant men also reported

Table 5. Hierarchical multiple regression for men's sexual experiences

Variables	Frequency of intercourse			Avoidance of sexual activities			Partner's avoidance of sexual activities			Sexual problems		
	B	SE B	β	ΔR^2	B	SE B	β	ΔR^2	B	SE B	β	ΔR^2
Step 1				.05*				.03				.08**
Men's age	.12	.09	.13		-.18	.10	-.16		-.20	.08	-.20*	
Relationship duration	-.27	.10	-.27**		-.04	.11	-.03		-.07	.09	-.08	
Number of children	-.04	.09	-.04		.07	.11	.06		.21	.09	.21**	
Step 2				.02				.10***				.11***
Men's anxiety	-.03	.09	-.03		-.05	.10	-.04		.26	.08	.27**	
Men's avoidance	-.06	.09	-.06		.40	.10	.38***		.02	.08	.02	
Step 3				.01				.01				.07***
Women's anxiety	.10	.08	.11		-.11	.10	-.10		-.15	.08	-.15	
Women's avoidance	.07	.09	.08		-.01	.10	-.01		.39	.08	.42***	
Step 4				.08**				.02				.03
W-anx \times M-anx	.32	.10	.32**		.19	.12	.16		.04	.09	.04	
W-anx \times M-avoid	-.22	.10	-.24*		-.06	.11	-.06		.02	.09	.02	
W-avoid \times M-anx	-.14	.09	-.15		-.10	.10	-.10		-.15	.08	-.16	
W-avoid \times M-avoid	-.03	.08	-.05		.04	.09	.05		-.04	.07	-.06	
Total				.15				.16				.29
												.13

Note. W-anx = women's anxiety; M-anx = men's anxiety; W-avoid = women's avoidance; M-avoid = men's avoidance. * $p < .05$. ** $p < .01$. *** $p < .001$.

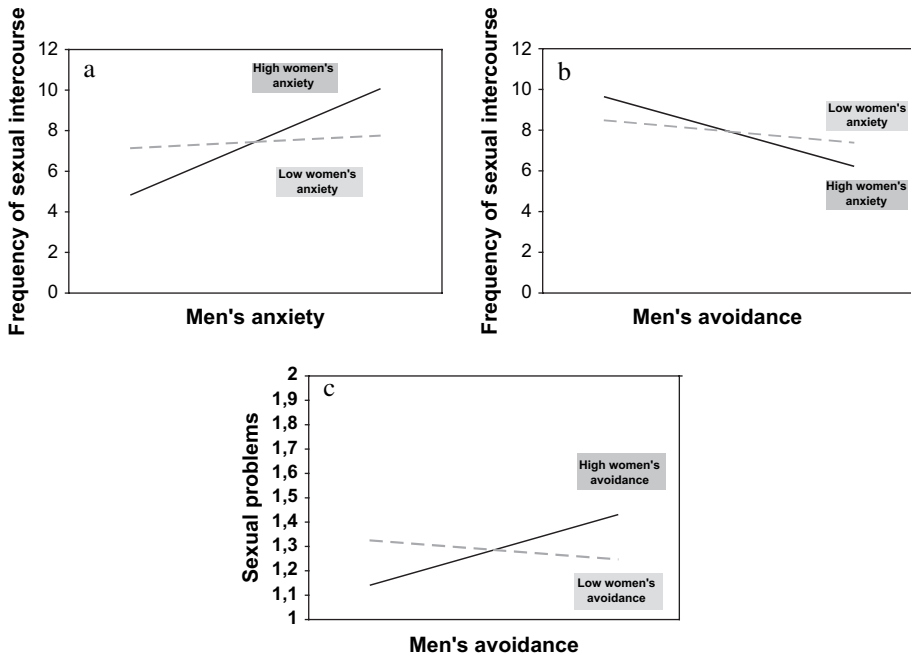


Figure 2. Interaction effects for men's reports of sexual experience: (a) the interaction of men's anxiety and women's anxiety in predicting men's reports of intercourse frequency, (b) the interaction of men's avoidance and women's anxiety in predicting men's reports of intercourse frequency, and (c) the interaction of men's avoidance and women's avoidance in predicting men's reports of sexual problems.

having sexual intercourse less often ($\beta = -.27, p < .01$) to the extent that their partner's anxiety score was high (1 *SD* above the mean), but men's avoidance did not predict their frequency of sexual interactions ($\beta = -.09, p > .05$) when their partner was not anxious (1 *SD* below the mean).

Second, men's avoidant attachment was the only significant predictor of their self-reported avoidance of sexual activities, once we considered other variables. As predicted (an actor effect), more attachment-avoidant men reported being more avoidant of sex, explaining 16% of the variance. There were no significant interactions.

Third, men's perception of their partner's avoidance of sex was predicted by the couple's number of children, men's age, and both the men's attachment anxiety (the anticipated actor effect) and their female partner's avoidant attachment (an anticipated partner effect) – part of the familiar pattern. This model

explained 29% of the variance in men's perceptions of women's avoidance of sex. There were no significant interactions.

Fourth, men's level of sexual problems was predicted by their own age and by the interaction between their and their partner's avoidance (see Figure 2c). When women's avoidance score was low (1 *SD* below the mean), men's avoidance did not predict their own reports of sexual problems ($\beta = -.07, p > .05$), but when women's avoidance was high (1 *SD* above the mean), men's avoidance predicted their own report of more sexual problems ($\beta = .28, p < .05$). Thus, men reported more sexual problems when they and their partner had avoidant attachment styles.

Finally, results of the logistic regression analysis showed that men's age and their attachment anxiety scores predicted their reports of sexually pressuring their partner. Men were more likely to pressure their partner if they were younger ($B = -.08, p < .05$),

consistent with women's reports. In line with our predictions, more anxiously attached men reported being more insistent about having sex ($B = .38, p < .05$), regardless of their partner's attachment style.

Discussion

We intended this study to expand research on attachment style and sexuality by considering adults who were older than the college students who are usually studied and by studying both members of long-term and more stable couple relationships. Gender differences on the attachment variables replicated findings from previous studies: Women were more attachment-anxious than men (see Bartholomew & Horowitz, 1991, for another example), whereas men were slightly more avoidant (as also reported by Schmitt et al., 2003). Women reported avoiding sex more than men did, and men seemed to agree (i.e., to report more partner avoidance of sex), which is compatible with the literature (Klusmann, 2002). Men were more likely than women to insist on having sex, as also reported by Anderson and Struckman-Johnson (1998). Women reported more sexual problems than men, although the rates of problems were low for both genders. Women also reported more romantic fantasizing than men did, which might be the simple truth or perhaps a result of men having the same number of fantasies as women but devoting more of them to people other than their primary romantic partner (Hicks & Leitenberg, 2001).

What is less compatible with the literature on attachment, particularly the literature on college-aged dating partners, is the correlation between the two attachment dimensions (anxiety and avoidance) for both men and women. Most research on attachment has focused on college student samples, within which about half of the participants were involved in relationships, and the correlations between the two scales have always fluctuated around zero. According to Brennan et al.'s (1998) use of Bartholomew's (1990) theoretical analysis, and based on their own results from a very large student sample, Brennan et al. believed that the two dimensions were orthogonal.

Feeney et al. (2001) conducted one of the few studies with married couples but did not mention the correlation between anxiety and avoidance in their sample. In our sample, the partners were engaged in stable relationships and they appeared to be relatively secure (which, as mentioned earlier, might have been partly a result of insecure couples opting out of the study). This might have had the effect (compared with student samples) of causing the two dimensions to be more correlated (because security is indicated by relatively low scores on both dimensions). This possibility seems not to have been specifically addressed in previous studies, but it might be an important difference between dating partners and married or cohabiting partners.

With respect to sociodemographic variables, we found that the presence of children, relationship duration, and age were important to consider in the case of our long-term couples. These variables might be less important in college dating studies because few college couples have children or are more than 24 years of age. Among our married and cohabiting sample, the number of children was associated with more avoidance of sexual relations on the part of women, as reported by the women themselves and their partners. Because women are still the main provider of care to children (Fredriksen-Goldsen & Scharlach, 2001), they may be less sexually available the more children they have. The presence of children was also related to women's sense of being sexually pressured by their partner. Women's perception of being sexually pressured by their partner was negatively associated with the women's age, which is consistent with Stets and Straus's (1990) finding that younger people are more likely to be aggressive with their romantic partners.

For both men and women, relationship duration was negatively associated with frequency of sexual intercourse, a pattern that is consistent with other studies (Willets, Sprecher, & Beck, 2004) and that may not occur so significantly in dating couples who are still in the so-called honeymoon phase of their relationships (Aubin & Heiman, 2004). Younger men reported fewer sexual problems, using more sexual pressuring tactics,

and having a greater tendency to perceive their partner as avoiding sexual activities. It is possible that young men have stronger sexual motivation, which might explain why they sexually pressure their partners and perceive their partners as more avoidant of sexual activities.

Turning to the main findings, the higher a woman's and her partner's scores on avoidant attachment, the less often she reported having sexual intercourse, which is not explainable in terms of the measure of avoidant attachment itself because it does not mention sex at all. This result is compatible with those from previous studies (e.g., Bogaert & Sadava, 2002; Gentzler & Kerns, 2004). As predicted, we also found that more avoidant men reported having sex less often if their female partner was attachment anxious, possibly because the women were interested in physical affection and psychological intimacy but the men were uncomfortable with manifestations of affection during sex (Hazan, Zeifman, & Middleton, 1994). Moreover, there was a pervasive interaction between men's and women's attachment styles: Whereas two anxious partners often had a high rate of sexual intercourse, the combination of an anxiously attached man with a less anxiously attached woman was related to a lower rate of sexual intercourse. It seems possible that anxious men's needs for reassurance and closeness were well received by more anxious women with similar needs but that this neediness was less acceptable to nonanxious women.

We observed the same kind of interaction with respect to women's avoidance of sex. When the male partner was anxiously attached and the woman was relatively low on the anxiety dimension, she was more likely to avoid sex according to her own report. Women's avoidance of sexual activity was also higher when their own score on avoidant attachment was high, suggesting that avoidant women notice their own avoidance of sexual encounters. In addition, women tended to avoid sex when their male partner's attachment anxiety was high, as well as when their partner's avoidance was low. This suggests that women may notice their avoidance of sexual interactions most when their partner anxiously seeks

sexual intimacy or at least does nothing to avoid it. For men, as anticipated, their own avoidant attachment score was the only significant predictor of their self-reported avoidance of sex. Thus, avoidant attachment within the context of a committed long-term relationship seems to encourage avoidance of sex in both men and women. Moreover, men's attachment anxiety also interferes with sexuality in that women seem to avoid sexual activities more when their partner is anxiously attached.

Women's perception of their partner's avoidance of sex was predicted by his avoidant attachment, consistent with the men's reports. There was also a significant interaction between women's and men's avoidant attachment, such that even an avoidant woman perceived her partner as avoidant of sexuality if she and he both scored high on avoidant attachment. In contrast, anxious men and men in a relationship with a more attachment-avoidant partner perceived her as more sex-avoidant. Thus, anxious men and men with an attachment-avoidant partner seemed the most likely to experience their partner as avoiding sex, consistent with the women's own reports.

Men's and women's avoidant attachment scores were associated with women having fewer sexual dreams and fantasies about their partner. This could reflect a general lack of passion experienced by the women paired with avoidant men or the tendency of avoidant women to imagine sex with extradyadic partners as a way to distance themselves from their primary partner (Fraleigh, Davis, & Shaver, 1998). Women's degree of sexual difficulty was not predicted, in the regression analyses, by their own or their partner's attachment style. But men's level of sexual problems was predicted by the interaction of their own and their partner's avoidant attachment. Specifically, more avoidant men reported more sexual problems if their partner was also avoidant. Perhaps men's sexual problems are more likely to reveal themselves in the presence of an avoidant partner because both partners might be uncomfortable discussing the problem (Feeney & Noller, 2004).

Finally, women's reports of sexual pressure from their partner were not predicted by the

attachment variables. Anxious men, however, were more likely to report pressuring their partner to have sexual intercourse, which we interpret as a sign of their intense neediness or insistence to obtain reassurance about sexual interactions with their female partner. Consistent with previous findings (e.g., Davis, 2006; Smallbone & Dadds, 2001), anxious men may be more likely to sexually pressure their partner as a way to increase intimacy or when they experience threats to the relationship or its degree of closeness.

In summary, avoidant attachment was linked with two strategies for limiting intimacy in sexual relationships of committed couples: avoidance of sexual encounters and having fewer sexual fantasies about one's partner, but only for women. Men's sexual difficulties were also associated with men's avoidant attachment (but only with an avoidant partner), which may reflect their discomfort with intimacy.

With respect to attachment anxiety, although anxiously attached individuals seek and value intimacy in their sexual relationships, their neediness and insecurity may undermine the development of mutually comfortable sexuality. We saw this tendency most clearly among anxious men, who had sex less often if their partner was not also anxious, perceived their partner as avoiding sex (which she was, according to the women's reports), and exerted more pressure to have sexual intercourse. Attachment anxiety worked somewhat differently for women. Women's anxiety (in interaction with men's avoidance) was linked with a lower frequency of sexual intercourse, but mainly in a relationship with an avoidant man, perhaps because the anxious women were seeking affection and the avoidant men were not interested in that kind of intimacy (Hazan et al., 1994). Overall, the results show how important it is to consider both couple members' attachment styles and sexual experiences, because the dynamics involved are complex.

Our study was limited in certain respects. First, one always has to worry about self-presentation biases when using self-report measures. In this study, however, there was fairly good agreement about frequency of inter-

course, avoidance of sexual activities, and one partner pressuring the other to engage in sexual intercourse, suggesting that people were generally honest. Moreover, sexual matters may be easier to discuss on an anonymous questionnaire than in person, and many of the participants' candid reports (e.g., about their own avoidance and anxiety, about their sexual problems and avoidance of sex) suggest that they were not simply attempting to present themselves positively.

A second weakness is the correlational nature of the study, which limits our ability to draw conclusions about causality. Insecure attachment styles could cause negative sexual experiences, or people could become less secure over time as a result of negative sexual experiences, or both insecurity and negative sexual experiences could be caused by some third variable (e.g., temperamental neuroticism). This seems unlikely, because attachment scores are fairly stable over time (Zhang & Labouvie-Vief, 2004), and attachment effects have been obtained in many studies even when neuroticism and other alternative explanatory variables were statistically controlled (e.g., Mikulincer, Shaver, Gillath, & Nitzberg, 2005). In order to assess temporal changes in attachment relationships, it might be possible to focus on state attachment securities and insecurities (instead of treating attachment style as a trait concept, as we did here), which may fluctuate hour by hour or day by day depending on experiences (e.g., Davila & Sargent, 2003). No matter how attachment is assessed, it will be important to conduct longitudinal research on attachment and sexuality to see the dynamic interplay of different variables over the course of a relationship.

Although interesting findings emerged from this study, the amount of variance explained in the sexual experience and sexual pressure variables ranged from 13% to 29%, indicating that more powerful measures should be developed and that other factors (e.g., sexual motives and attitudes, sexual satisfaction, relationship commitment and satisfaction) should be considered. It is also important to remember that we measured the sexual experience variables, which were part of a long and fairly broad-ranging questionnaire, with single

items. The variables should now be assessed with multi-item scales, and additional measures should be designed to test some of our interpretations and speculations about mediating processes. Another limitation of our measures was evident only after we analyzed the data: We did not ask about extradyadic sex or sexual fantasies about extradyadic partners. In several cases, it seemed possible that part of the explanation of our results might lie outside the relationships we studied. In future studies, it will be important to ask more broadly about partners' sexual fantasies and extrarelationship sexual activities.

The way the data were analyzed had both advantages and disadvantages. On the one hand, the separate multiple regression analyses allowed us to use the dyad as the unit of analysis (i.e., the N was the number of dyads) and to explore the actor, partner, and interactive effects we were interested in separately for men and women without violating the interdependence assumption (Cook & Kenny, 2005). This technique also had the advantage of allowing us to explore the dynamics of serious relationships with respect to sex, something that we could not have done with individual-level analyses (which allow for actor effects only). On the other hand, our statistical analyses tend to emphasize gender differences, although we cannot interpret differences between results from the two regression analyses as indicative of significant differences between men and women (Kashy, Campbell, & Harris, 2006). Other statistical approaches, such as structural equation modeling and multilevel modeling might, theoretically, have been good ways to test our hypotheses by considering the sexual variables for both partners at the same time. The nature of our measures (single items) and hypotheses (no gender differences anticipated) did not allow us to use those techniques, which usually require continuous, multi-item measures. This would be another worthy goal for future studies.

We do not expect differences between the French-Canadian couples studied here and couples from other Western societies, although the majority of the couples in our study were cohabiting rather than married. In the province of Quebec, cohabitation is relatively frequent

and perceived as a prelude to marriage as well as a fairly stable alternative type of union (Le Bourdais & Lapierre-Adamcyk, 2004). It is not clear, however, how applicable these findings would be outside of Western contexts.

Despite these limitations, our study adds considerably to previous findings on attachment and sexuality by showing that romantic attachment theory applies to a broad age range of young adults in committed, long-term relationships, and that the findings apply to both members of actual couples and not only to single members of couples or to uncoupled individuals, the groups most commonly studied in the past. In many cases, there were significant interactions between couple members' attachment insecurities, indicating that particular couple dynamics may be important in causing sexual difficulties. Future studies on attachment and sexuality should also consider both members of both satisfied, high-functioning couples and couples who are seeking couple counseling or sex therapy.

The findings should be useful to researchers studying the sexual aspects of couple relationships and to couple counselors and sex therapists who may wish to consider how avoidance of sexual activities, sexual coercion, and sexual problems are embedded in a network of sociodemographic and psychological factors including attachment styles. When working with couples, clinicians can use our findings to conceptualize sexual problems of married or cohabiting men by assessing both partners' attachment styles and seeing if there is a mutually avoidant dynamic in play. It is also possible that women who present with "low desire" as compared to their partner's level of desire are in fact experiencing less desire because of their partner's insistence on having sex to reassure themselves. Therapists can make good use of attachment theory in helping both partners acknowledge their respective emotional and sexual needs, as well as in teaching them how to express and fulfill those needs by using a wider range of sexual and nonsexual behaviors. By explaining to couples the manifestations of each individual's attachment style (and their particular combination of attachment styles), therapists can also help couples recognize how their attachment orientations

have contributed to the development and continuation of their sexual difficulties. Finally, therapists can provide a secure base for exploring each partner's attachment models to work against their expectations of rejection or unavailability and to prevent attachment injuries that may arise from their sexual interactions (see Johnson & Whiffen, 2003).

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Ainsworth, M. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Oxford: Lawrence Erlbaum.
- Allen, E. S., & Baucom, D. H. (2004). Adult attachment and pattern of extradyadic involvement. *Family Process, 43*, 467–488.
- Anderson, P. B., & Struckman-Johnson, C. (1998). *Sexually aggressive women: Current perspectives and controversies*. New York: Guilford Press.
- Aubin, S., & Heiman, J. R. (2004). Sexual dysfunction from a relational perspective. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 477–517). Mahwah, NJ: Lawrence Erlbaum.
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7*, 147–178.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61*, 226–244.
- Birnbaum, G. E., Reis, H. T., Mikulincer, M., Gillath, O., & Orpaz, A. (2006). When sex is more than just sex: Attachment orientations, sexual experience, and relationship quality. *Journal of Personality and Social Psychology, 91*, 929–943.
- Bogaert, A. F., & Sadava, S. (2002). Adult attachment and sexual behavior. *Personal Relationships, 9*, 191–204.
- Bowlby, J. (1982). *Attachment and loss: Vol. I. Attachment* (2nd ed.). New York: Basic Books. (Original work published 1969)
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult-attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford Press.
- Brennan, K. A., & Shaver, P. R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin, 21*, 267–283.
- Collins, N., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*, 644–663.
- Cook, W. L., & Kenny, D. A. (2005). The actor-partner interdependence model: A model of bidirectional effects in developmental studies. *International Journal of Behavior Development, 29*, 101–109.
- Cooper, M. L., Pioli, M., Levitt, A., Talley, A. E., Mischeas, L., & Collins, N. (2006). Attachment styles, sex motives, and sexual behavior: Evidence for gender-specific expressions of attachment dynamics. In M. Mikulincer & G. S. Goodman (Eds.), *Dynamics of romantic love* (pp. 243–274). New York: Guilford Press.
- Cooper, M. L., Shaver, P. R., & Collins, N. L. (1998). Attachment styles, emotion regulation, and adjustment in adolescence. *Journal of Personality and Social Psychology, 74*, 1380–1397.
- Crawford, T. N., Livesley, W. J., Jang, K. L., Shaver, P. R., Cohen, P., & Ganiban, J. (2007). Insecure attachment and personality disorders: A twin study of adults. *European Journal of Personality, 21*, 191–208.
- Davila, J., & Sargent, E. (2003). The meaning of life (events) predicts changes in attachment security. *Personality and Social Psychology Bulletin, 29*, 1383–1395.
- Davis, D. (2006). Attachment-related pathways to sexual coercion. In M. Mikulincer & G. S. Goodman (Eds.), *Dynamics of romantic love* (pp. 293–336). New York: Guilford Press.
- Davis, D., Shaver, P. R., & Vernon, M. L. (2003). Physical, emotional, and behavioral reactions to breaking up: The roles of gender, age, emotional involvement, and attachment style. *Personality and Social Psychology Bulletin, 29*, 871–884.
- DeLamater, J., & Hyde, J. S. (2004). Conceptual and theoretical issues in studying sexuality in close relationships. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 7–30). Mahwah, NJ: Lawrence Erlbaum.
- Feeney, J. A. (2006). Studying close relationships: Methodological challenges and advances. In P. Noller & J. A. Feeney (Eds.), *Close relationships: Functions, forms, and processes* (pp. 49–63). New York: Psychology Press.
- Feeney, J. A., Hohaus, L., Noller, P., & Alexander, R. P. (2001). *Becoming parents: Exploring the bonds between mothers, fathers, and their infants*. New York: Cambridge University Press.
- Feeney, J. A., Kelly, L., Gallois, C., Peterson, C., & Terry, D. J. (1999). Attachment style, assertive communication, and safer-sex behavior. *Journal of Applied Social Psychology, 29*, 1964–1983.
- Feeney, J. A., & Noller, P. (2004). Attachment and sexuality in close relationships. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 183–201). Mahwah, NJ: Lawrence Erlbaum.
- Feeney, J. A., Noller, P., & Patty, J. (1993). Adolescents' interactions with the opposite sex: Influence of attachment style and gender. *Journal of Adolescence, 16*, 169–186.
- Feeney, J. A., Noller, P., & Roberts, N. (1998). Emotion, attachment, and satisfaction in close relationships. In P. A. Andersen & L. K. Guerrero (Eds.), *Handbook of communication and emotion: Research, theory, applications, and contexts* (pp. 473–505). San Diego, CA: Academic Press.
- Feeney, J. A., Peterson, C., Gallois, C., & Terry, D. J. (2000). Attachment style as a predictor of sexual attitudes and behavior in late adolescence. *Psychology and Health, 14*, 1105–1122.
- Fraley, R. C., Davis, K. E., & Shaver, P. R. (1998). Dismissing avoidance and the defensive organization of emotion, cognition, and behavior. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 249–279). New York: Guilford Press.

- Fredriksen-Goldsen, K. I., & Scharlach, A. E. (2001). *Families and work: New directions in the twenty-first century*. New York: Oxford University Press.
- Fricker, J., & Moore, S. (2002). Relationship satisfaction: The role of love styles and attachment styles. *Current Research in Social Psychology*, 7, 182–204.
- Gentzler, A. L., & Kerns, K. A. (2004). Associations between insecure attachment and sexual experiences. *Personal Relationships*, 11, 249–265.
- Gurman, A. S., & Jacobson, N. S. (2002). *Clinical handbook of couple therapy* (3rd ed.). New York: Guilford Press.
- Hazan, C., & Shaver, P. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511–524.
- Hazan, C., Zeifman, D., & Middleton, K. (1994, July). *Adult romantic attachment, affection, and sex*. Paper presented at the 7th International Conference on Personal Relationships, Groningen, The Netherlands.
- Hicks, T., & Leitenberg, H. (2001). Sexual fantasies about one's partner versus someone else: Gender differences in incidence and frequency. *Journal of Sex Research*, 38, 43–50.
- Johnson, S. M., & Whiffen, V. E. (Eds.). (2003). *Attachment processes in couple and family therapy*. New York: Guilford Press.
- Kashy, D. A., Campbell, L., & Harris, D. W. (2006). Advances in data analytic approaches for relationships research: The broad utility of Hierarchical Linear Modeling. In A. L. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships*. Cambridge: Cambridge University Press.
- Klusmann, D. (2002). Sexual motivation and the duration of partnership. *Archives of Sexual Behavior*, 31, 275–287.
- Lafontaine, M. F., & Lussier, Y. (2003). Structure bidimensionnelle de l'attachement amoureux: Anxiété face à l'abandon et évitement de l'intimité [Bidimensional structure of romantic attachment: Anxiety over abandonment and avoidance of intimacy]. *Canadian Journal of Behavioral Science*, 25, 71–95.
- Le Bourdais, C., & Lapierre-Adamcyk, E. (2004). Changes in conjugal life in Canada: Is cohabitation progressively replacing marriage? *Journal of Marriage and the Family*, 66, 929–942.
- Mikulincer, M., & Goodman, G. S. (Eds.). (2006). *Dynamics of romantic love: Attachment, caregiving, and sex*. New York: Guilford Press.
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 35, pp. 53–152). San Diego, CA: Academic Press.
- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford Press.
- Mikulincer, M., Shaver, P. R., Gillath, O., & Nitzberg, R. A. (2005). Attachment, caregiving, and altruism: Boosting attachment security increases compassion and helping. *Journal of Personality and Social Psychology*, 89, 817–839.
- Morrison, T. L., Urquiza, A. J., & Goodlin-Jones, B. L. (1997). Attachment, perceptions of interaction, and relationship adjustment. *Journal of Social and Personal Relationships*, 14, 627–642.
- Paul, E. L., McManus, B., & Hayes, A. (2000). "Hook-ups": Characteristics and correlates of college students' spontaneous and anonymous sexual experiences. *Journal of Sex Research*, 37, 76–88.
- Schachner, D. A., & Shaver, P. R. (2002). Attachment style and human mate poaching. *New Review of Social Psychology*, 1, 122–129.
- Schachner, D. A., & Shaver, P. R. (2004). Attachment dimensions and motives for sex. *Personal Relationships*, 11, 179–195.
- Schmitt, D. P., Alcalay, L., Allensworth, M., Allik, J., Ault, L., Auster, I., et al. (2003). Are men universally more dismissing than women? Gender differences in romantic attachment across 62 cultural regions. *Personal Relationships*, 10, 307–331.
- Shaver, P. R., & Hazan, C. (1988). A biased overview of the study of love. *Journal of Social and Personal Relationships*, 5, 473–501.
- Shaver, P. R., & Mikulincer, M. (2004). What do self-report attachment measures assess? In W. S. Rholes & J. A. Simpson (Eds.), *Adult attachment: Theory, research, and clinical implications* (pp. 17–54). New York: Guilford Press.
- Simpson, J. A. (1987). The dissolution of romantic relationships: Factors involved in relationship stability and emotional distress. *Journal of Personality and Social Psychology*, 53, 683–692.
- Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology*, 59, 971–980.
- Smallbone, S., & Dadds, M. R. (2001). Further evidence for a relationship between attachment insecurity and coercive sexual behavior in nonoffenders. *Journal of Interpersonal Violence*, 16, 22–35.
- Stets, J. E., & Straus, M. A. (1990). The marriage license as a hitting license: A comparison of assaults in dating, cohabiting and married couples. In M. A. Straus & R. L. Gelles (Eds.), *Physical violence in American families* (pp. 227–241). New Brunswick, NJ: Transaction.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2). Development and preliminary data. *Journal of Family Issues*, 17, 283–316.
- Tracy, J. L., Shaver, P. R., Albino, A. W., & Cooper, M. L. (2003). Attachment styles and adolescent sexuality. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp. 137–159). Mahwah, NJ: Lawrence Erlbaum.
- Willems, M. C., Sprecher, S., & Beck, F. D. (2004). Overview of sexual practice and attitudes within relational contexts. In J. H. Harvey, A. Wenzel, & S. Sprecher (Eds.), *The handbook of sexuality in close relationships* (pp. 183–201). Mahwah, NJ: Lawrence Erlbaum.
- Zhang, F., & Labouvie-Vief, G. (2004). Stability and fluctuation in adult attachment style over a 6-year period. *Attachment and Human Development*, 6, 419–437.