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# Adult attachment, sexual satisfaction, and relationship satisfaction: A study of married couples

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## Abstract

The goal of this research was to extend prior work on adult attachment and sexuality, which has tended to focus on samples of adolescents and undergraduate students. A Canadian sample of 116 married couples aged 21–75 years completed self-report measures of adult attachment, marital, and sexual satisfaction. Results revealed that participants with higher levels of anxiety and avoidance reported lower levels of sexual satisfaction at the individual level. Individuals with more avoidant spouses also reported lower levels of sexual satisfaction. Furthermore, the relationship between sexual and marital satisfaction was stronger for more anxiously attached individuals and those with more anxiously attached spouses. These results suggest that attachment is linked in theoretically predictable ways to marital and sexual satisfaction.

Sexuality is an integral part of most romantic relationships, with society emphasizing marriage as the main dyadic relationship within which sex occurs (Sprecher, Christopher, & Cate, 2006). One theoretical perspective that is particularly applicable to research on sexuality is attachment theory, as this theory focuses on the processes involved in the development of close affectional bonds with others (Feeney & Noller, 2004). Using a large community sample of married couples, the present research tests specific hypotheses regarding sexual and marital satisfaction from an attachment perspective.

## *Adult attachment theory*

Bowlby (1969, 1973, 1980) posited that early interactions with significant others instill expectations and beliefs that subsequently shape social perceptions and behavior regarding what relationships and relationship partners should be like during adulthood. Two relatively orthogonal dimensions define individual differences in adult attachment (see Brennan, Clark, & Shaver, 1998). The first dimension, labeled *avoidance*, reflects the degree to which individuals feel comfortable with closeness and emotional intimacy in relationships. People who score higher on avoidance tend to be less invested in their relationships and strive to remain psychologically and emotionally independent of their partners (Hazan & Shaver, 1994). The second dimension, termed *anxiety*, taps the degree to which individuals worry and ruminate about being rejected or abandoned by their partners. Prototypically secure people tend to score lower on both attachment dimensions.

Mikulincer and Shaver (2003, 2007) recently introduced a model that specifies the activation and operation of the adult attachment

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We gratefully acknowledge the support of a Doctoral Canadian Graduate Scholarship awarded to Bethany Butzer, a grant from the Social Sciences and Humanities Research Council of Canada, and a Premier's Research Excellence Award awarded to Lorne Campbell to assist in the preparation of this paper. We would also like to thank William Fisher for his valuable feedback on a previous draft of this manuscript.

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system. According to this model, the primary strategy of the attachment system involves seeking proximity to attachment figures during times of need. A secure attachment style tends to develop when attachment figures are available and responsive to an individual's needs. In this case, the individual experiences a sense of felt security, which encourages the formation of close affectional bonds with others. On the other hand, if attachment figures are consistently unavailable or unresponsive, this indicates that the primary strategy of proximity seeking is unsuccessful, which results in the use of secondary attachment strategies to deal with the resulting sense of insecurity. These secondary strategies involve *hyperactivation* or *deactivation* of the attachment system. The main goal of hyperactivating strategies is to get an unresponsive attachment figure to pay attention to the individual and provide care and support, a strategy that is most typical of individuals who score highly on attachment anxiety. Thus, anxiously attached individuals make strong attempts to maintain proximity to attachment figures and monitor their relationship partners closely for signs of deficient or waning physical or emotional proximity (Cassidy & Berlin, 1994; Simpson, Ickes, & Grich, 1999).

Deactivating strategies, on the other hand, involve the inhibition of proximity seeking in response to an unavailable attachment figure, which is most typical of individuals who score highly on attachment avoidance. Thus, avoidantly attached individuals seek to maintain independence and self-reliance, while also denying needs or emotional states that might activate the attachment system (Mikulincer & Shaver, 2003, 2007). As such, highly avoidant people often do not allow themselves to become close to their romantic partners (e.g., Campbell, Simpson, Kashy & Rholes, 2001) or turn to their partners for support in times of distress (e.g., Simpson, Rholes, & Neligan, 1992).

#### *Adult attachment and sexuality*

Adult romantic relationships involve the integration of three behavioral systems, namely, attachment, caregiving, and sexual mating

(Shaver, Hazan, & Bradshaw, 1988). The least studied of the three behavioral systems is the sexual mating system, but recent attempts to link adult attachment styles with sexuality have resulted in a number of intriguing empirical findings (e.g., [Birnbaum, 2007](#); [Davis et al., 2006](#)). Researchers, however, have conducted little work on the links between adult attachment and sexual satisfaction specifically, with most prior work focusing on beliefs about sex and types of sexual behaviors in undergraduate students.

Due to their successful use of the primary attachment strategy of proximity seeking during times of need, prior research suggests that securely attached individuals should have more positive sexual experiences and more positive sexual satisfaction in their relationships (Mikulincer & Shaver, 2007; Shaver & Hazan, 1988). Indeed, securely attached individuals tend to be comfortable with their sexuality, are open to sexual exploration, and enjoy a variety of sexual activities ([Feeney & Noller, 2004](#)). Securely attached individuals are also more likely to have sex with intimate relationship partners and are more likely to have sex that is mutually initiated (Brennan & Shaver, 1995; [Feeney, Noller, & Patty, 1993](#)). Finally, securely attached individuals are less likely to have casual or promiscuous sexual partners, one-night stands, or sex outside of their primary relationships ([Bogaert & Sadava, 2002](#); [Feeney & Noller, 2004](#)).

The sexual relationships of anxiously attached individuals, however, tend to be organized around the hyperactivation of their attachment system, which causes them to be chronically dependent on others for approval and to be concerned about abandonment and rejection (Mikulincer & Shaver, 2007; Shaver & Hazan, 1988). For example, research shows that anxiously attached individuals report having sex to reduce insecurity and establish intense closeness, while also having low self-efficacy for sexual negotiation, fears that requests for sexual discussions will alienate partners, negative beliefs about condoms, lower levels of orgasmic responsivity, and higher levels of erotophobia ([Birnbaum, 2007](#); [Feeney, Kelly, Gallois, Peterson, & Terry, 1999](#); [Feeney & Noller, 2004](#); [Schachner & Shaver, 2004](#);

Tracy, Shaver, Albino, & Cooper, 2003). In men, greater anxiety relates to more restrictive sexual behavior ([Gentzler & Kerns, 2004](#)) and a lower likelihood of using sex to cope with negative emotions or to bolster self-esteem ([Cooper et al., 2006](#)). In women, however, greater anxiety relates to a higher likelihood of having ever had sex, higher rates of infidelity, a younger age at first intercourse, and having sex to bolster self-esteem ([Bogaert & Sadava, 2002](#); [Cooper, Shaver, & Collins, 1998](#); [Cooper et al., 2006](#)). Thus, although attachment anxiety tends to relate to a desire to foster closeness in both males and females, the adverse effects of attachment anxiety on sexuality seem to be more pronounced for females.

In line with their goal of deactivating attachment concerns, avoidant individuals should find close sexual relationships uncomfortable and unrewarding due to their general discomfort with intimacy and a desire to avoid closeness ([Mikulincer & Shaver, 2007](#); [Shaver & Hazan, 1988](#)). Overall, avoidant individuals attempt to deactivate their attachment system in two main ways with regards to sexual behavior. First, avoidant individuals can try to distance themselves from most sexual activities by, for example, having sex at a later age, engaging in fewer non-coital sexual behaviors, having greater concern about sexually transmitted diseases, and having stronger beliefs in the benefits of condoms ([Bogaert & Sadava, 2002](#); [Feeney, Peterson, Gallois, & Terry, 2000](#); [Gentzler & Kerns, 2004](#)). Second, avoidant individuals can engage in sexual relations only in contexts where intimacy is unlikely. For example, avoidant individuals have less restrictive attitudes towards sex, have sex to impress their peer group (as opposed to having romantic goals for sex), and have higher numbers of casual, uncommitted sex partners ([Cooper et al., 1998](#); [Gentzler & Kerns, 2004](#); [Schachner & Shaver, 2004](#)). This pattern of effects is very similar for both men and women, although they tend to be more pronounced in men ([Cooper et al., 2006](#)).

#### *Links between sexual and marital satisfaction*

Recent research shows that higher levels of sexual satisfaction are related to greater rela-

tionship quality and stability ([Sprecher & Cate, 2004](#)), with factor-analytic studies showing that sexuality is a core component of the prototype of relationship quality ([Hassebrauck & Fehr, 2002](#)). [Birnbaum, Reis, Mikulincer, Gillath, and Orpaz \(2006\)](#) note, however, that clinical evidence exists suggesting that some couples can be satisfied with their relationships in general but unsatisfied with their sexual relationship, and vice versa ([Edwards & Booth, 1994](#); [Kaplan, 1974](#)). The link between sexual and marital satisfaction can therefore be stronger for some people than for others. For example, recent research shows that the use of sex to foster intense closeness and calm fears of rejection and abandonment in more anxiously attached individuals ([Tracy et al., 2003](#)) results in relatively strong links between day-to-day sexual experiences and subsequent relationship interactions; however, avoidant individuals do not show this association ([Birnbaum et al., 2006](#)). These results suggest that anxious individuals tend to use sexual experiences as a barometer of their relationship quality, whereas avoidant individuals do not.

#### *Limitations of previous research*

Although investigators have made progress in the examination of adult attachment and sexuality in recent years, this research is limited in two important ways. First, researchers have conducted most of the previous work in this area on individuals, with very few studies focusing on sexuality and sexual satisfaction in dyads. While [Birnbaum and colleagues \(2006\)](#) examined the links between adult attachment, the daily experience of sexual intercourse, and relationship interactions (e.g., relationship enhancing vs. damaging behaviors) in a sample of cohabitating couples, this research did not examine how attachment might relate to individuals' overall satisfaction with their sexual relationship. Thus, the present study is unique in that it focuses on how individuals in long-term marital relationships feel about their sexual relationship as a whole, as opposed to focusing on feelings and behaviors regarding a particular sexual episode.

Second, investigators have conducted most of the work in this area on samples of

adolescents and undergraduate students, who, in most cases, have not yet had a chance to become involved in long-term, committed relationships, and generally have less sexual experience. In this sense, it is difficult to generalize these findings to more committed marital relationships.

### *Hypotheses*

*Attachment anxiety.* Based on previous research showing that anxious individuals tend to defer to their partner's sexual needs, are distracted by relational concerns during sex, fear rejection and abandonment, and experience anxiety regarding sexual experiences (Birnbaum, 2007; Brennan et al., 1998; Davis et al., 2006), we hypothesized that more anxiously attached individuals would report lower levels of satisfaction with their sexual relationship. The possible links between one partner's anxious attachment and the other partner's sexual satisfaction, however, are unclear. For example, individuals with anxiously attached partners might be very satisfied with their sexual relationship since their partners may often sacrifice their own sexual needs for those of their partner (Davis et al., 2006). On the other hand, they may also begin to see sex as another way for their partner to display the clingy and dependent behavior that is characteristic of anxiously attached individuals (e.g., Campbell, Simpson, Boldry & Kashy, 2005). Thus, we made no specific hypotheses regarding the link between partner anxiety and sexual satisfaction.

In addition, consistent with prior research (Birnbaum et al., 2006), we expected that anxiety would moderate the link between sexual satisfaction and marital satisfaction. Specifically, we expected that individuals who were low in anxiety, as well as individuals with less anxious partners, would show similar levels of marital satisfaction regardless of their level of sexual satisfaction. On the other hand, we predicted that individuals who were high in anxiety, as well as individuals with more anxious partners, would report higher levels of marital satisfaction when they were also high in sexual satisfaction.

*Attachment avoidance.* Based on previous research suggesting that avoidant individuals

experience aversive feelings and intrusive thoughts with regards to sex, prefer to distance themselves from intimate sexual activities, and experience lower levels of sexual intimacy and pleasure-related sexual feelings (Birnbaum, 2007; Birnbaum et al., 2006; Brennan et al., 1998; Cooper et al., 2006), we expected that avoidantly attached individuals would report lower levels of satisfaction with their sexual relationship. In addition, we expected that individuals with more avoidantly attached partners would show lower levels of satisfaction with their sexual relationship due to their partners' discomfort with closeness and intimacy, as well as their partners' tendency to focus on their own sexual needs (Birnbaum et al., 2006).

Finally, based on research suggesting that attachment avoidance inhibits the links between positive and negative sexual experiences and subsequent relationship behaviors (Birnbaum et al., 2006), we did not expect actor or partner avoidance to moderate the link between sexual satisfaction and marital satisfaction.

## **Method**

### *Participants*

Our sample consisted of 116 heterosexual married couples from the community of London, Ontario, Canada who responded to advertisements in various local newspapers to participate in a Married Couples Survey. We used this convenience sample as no appropriate sampling frame was available from which married couples could be recruited. The city of London is located in Southwestern Ontario, and is an urban community with a population of approximately 348,000. Individuals each received Can \$50.00 as an honorarium for their participation. The average length of marriage was 10.02 years and ranged from 2 months to 53 years ( $SD = 10.59$ ). The average age of participants was 38.56 years for men (range = 22–75 years,  $SD = 11.22$ ) and 36.7 years for women (range = 21–71 years,  $SD = 10.71$ ). The majority of couples were Caucasian, with an average household income per year of Can \$55,000–\$65,000. Sixty

percent of the married couples reported that they had children ( $M = 1.31$  children per couple) ranging in number from 1 to 5.

### Procedure

Married couples attended a 2-hr laboratory session to separately and privately complete a booklet of questionnaires. The questionnaires asked about their perceptions of their attachment style, sexual satisfaction, and marital satisfaction, along with a number of additional questionnaires that will not be considered in the present study. We informed participants that their responses would remain confidential and would not be shared with their partners.

### Materials

**Attachment style.** Participants completed the Experiences in Close Relationships Questionnaire-Revised (ECR-R; Fraley, Waller, & Brennan, 2000). The ECR-R is a 36-item self-report questionnaire containing 18 items measuring avoidance and 18 items measuring anxiety. Examples of avoidance items include "I find it difficult to allow myself to depend on romantic partners" and "I get uncomfortable when a romantic partner wants to be very close." Examples of anxiety items include "I often worry that my partner doesn't really love me" and "I rarely worry about my partner leaving me" (reverse scored). Participants rated each item on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). We created the two scales, avoidance and anxiety, by averaging the responses across the 18 items for each participant, with higher mean scores representing greater avoidance and anxiety, respectively (anxiety dimension: Cronbach's  $\alpha = .89$  for men,  $\alpha = .89$  for women; avoidant dimension:  $\alpha = .93$  for men,  $\alpha = .94$  for women).

**Sexual satisfaction.** We measured satisfaction with the sexual relationship using two scales. Fournier, Olson, and Druckman (1983) created the 10-item Enriching and Nurturing Relationship Issues, Communication, and Happiness (ENRICH) Sexual Relationship subscale to serve as an assessment tool for both

personal and relationship issues for couples. We removed one item ("I am satisfied with our decisions regarding family planning or birth control") from the original ENRICH scale due to its low coherence with other items (i.e., its low item-total correlation for both men,  $r = .22$  and women,  $r = .18$ ). Samples of the remaining nine items include: "Sometimes I am concerned that my spouse's interest in sex is not the same as mine" (reverse scored) and "Our sexual relationship is satisfying and fulfilling to me." Participants responded to each item on a 7-point scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher mean scores indicate greater satisfaction with various aspects of the sexual relationship, such as communication about sexual issues and sexual behavior ( $\alpha = .81$  for men,  $\alpha = .82$  for women). We also measured satisfaction with the sexual relationship using the Index of Sexual Satisfaction (ISS; Hudson, Harrison, & Crosscup, 1981). The ISS is a 25-item scale including items such as "I feel that my sex life is lacking in quality" and "My spouse does not satisfy me sexually." Participants responded to each item on a scale ranging from 1 (*none of the time*) to 7 (*all of the time*). For the current study, we scored this measure such that higher scores reflected higher levels of sexual satisfaction ( $\alpha = .94$  for men,  $\alpha = .95$  for women). Preliminary analyses revealed that the ISS and the Sexual Relationship subscale of the ENRICH were highly correlated ( $r = .74$  for men and  $.79$  for women). Thus, we standardized and aggregated the items for both scales to compute one composite score of sexual satisfaction, with higher scores indicating higher levels of sexual satisfaction ( $\alpha = .85$  for men  $\alpha = .88$  for women).

**Marital satisfaction.** We used Hendrick's (1988) 7-item Relationship Assessment Scale to measure spouses' overall satisfaction with their marriage. Participants responded to items such as "In general, how satisfied are you with your relationship?" and "To what extent has your relationship met your original expectations?" on a 7-point scale (1 = *not at all/poor*, 7 = *a great deal/extremely good*). We averaged the responses across the items for each

**Table 1.** Means, standard deviations, and paired sample *t* tests of the study variables

Study variables	<i>M</i> ( <i>SD</i> )		<i>t</i> ( <i>df</i> = 115)
	Men	Women	
Anxious attachment	1.90 (0.75)	1.93 (0.90)	-.32
Avoidant attachment	2.19 (0.96)	1.95 (1.00)	2.42*
Sexual satisfaction-ENRICH	5.23 (1.08)	5.37 (1.21)	-1.54
Sexual satisfaction-ISS	5.49 (0.93)	5.55 (1.05)	-.71
Marital satisfaction	6.05 (0.83)	6.02 (0.96)	.27

Note. ENRICH = Enriching and Nurturing Relationship Issues, Communication, and Happiness Sexual Relationship subscale; ISS = Index of Sexual Satisfaction.

\**p* < .05

participant, with higher mean scores indicating greater relationship satisfaction ( $\alpha = .91$  for men,  $\alpha = .91$  for women).

## Results

The Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000; [Kenny, Kashy & Cook, 2006](#)) guided the data analytic approach we adopted for testing our hypotheses. According to the APIM, when individuals are involved in an interdependent relationship, their outcomes depend not only on their own characteristics and inputs (called actor effects) but also on their partner's characteristics and inputs (called partner effects). We tested all of the models reported below using multilevel modeling (MLM, also known as hierarchical linear modeling; [Kenny, Kashy, & Bolger, 1998](#); [Raudenbush & Bryk, 2002](#)) and followed the suggestions of [Campbell and Kashy \(2002](#); see also Kashy, Campbell, & Harris, 2006; [Kenny et al., 2006](#)) regarding the use of MLM with dyadic data. In the dyadic case, MLM treats the data from each partner as nested scores within a group that has an *N* of 2. We effect coded gender (-1 for men, 1 for women), and we centered all continuous predictor variables on the grand mean.

We present the means and standard deviations of the study variables in Table 1.

The means for anxiety and avoidance are similar to those found in previous studies using the ECR-R ([Sibley, Fischer, & Liu, 2005](#)). The only significant differences that emerged between husbands and wives on the

study variables were for the avoidant attachment scores, with husbands reporting greater avoidance than wives. We show the intercorrelations for all study variables, as well as participant age and number of years married (in months) in Table 2. The zero-order correlations for both husbands (displayed below the diagonal) and wives (displayed above the diagonal) show that more anxious and avoidant individuals reported lower levels of marital satisfaction and sexual satisfaction. In addition, the within-dyad correlations (displayed along the diagonal) between marital satisfaction and sexual satisfaction were positive and significant, indicating that if one partner was satisfied with their marriage in general and satisfied with their sexual relationship, the other one was also. Moreover, consistent with prior research, partners who were more sexually satisfied in their marriage were also more satisfied in general with their marriage.

Table 2 also shows that the attachment orientations were positively correlated both within and between partners. Specifically, individuals who scored higher on the avoidance dimension also tended to report being more anxiously attached. Prior research using the Experiences in Close Relationships Questionnaire-Revised has also found positive correlations between the two attachment dimensions within individuals ([Sibley et al., 2005](#)), and partly for this reason, we included scores on both dimensions in our analyses to statistically control for this overlap. In addition, Table 2 shows that if one

**Table 2.** Intercorrelations for attachment dimensions, sexual satisfaction, marital satisfaction, age, and years married

Study variables	1	2	3	4	5	6
1. Anxiety	.27**	.67***	-.51***	-.71***	.10	.01
2. Avoidance	.67***	.38***	-.63***	-.73***	.06	.03
3. Sexual satisfaction	-.53***	-.62***	.63***	.64***	-.08	-.11
4. Marital satisfaction	-.66***	-.64***	.55***	.51***	-.06	.02
5. Age	.03	.08	-.08	-.07	.92***	.83***
6. Years married (in months)	-.02	.04	-.06	.02	.82***	1.00***

Note. Correlations for husbands appear below the diagonal, whereas correlations for wives appear above the diagonal. Correlations along the diagonal are between dyad members.  
\*\*  $p < .01$ . \*\*\*  $p < .001$ .

partner was highly anxious or avoidant, the other one was also.

In the first MLM analysis, we estimated the actor and partner effects of the attachment orientations on reported sexual satisfaction. Sexual satisfaction served as the dependent variable in this analysis. The predictor variables in the model included gender, as well as the actor and partner scores on both the anxious and the avoidant attachment dimensions. We also included as predictors the number of months married as well the age of each spouse in order to statistically control for these variables. We also entered the interactions between gender and the actor and partner effects of the attachment dimensions into the model, but no significant interactions with gender emerged so we do not discuss them further.<sup>1</sup> We present the results of this analysis in Table 3.

Consistent with predictions, a significant actor effect emerged for the anxious attachment dimension showing that more anxiously attached individuals reported lower levels of sexual satisfaction, controlling for their own level of attachment avoidance and their partner's scores on both attachment dimensions. Similarly, an actor effect for avoidant attach-

ment emerged, showing that more avoidantly attached individuals also reported lower levels of sexual satisfaction, controlling for their own level of attachment anxiety and their partner's scores on both attachment dimensions. Also as predicted, a significant partner effect emerged for attachment avoidance, suggesting that people reported lower levels of sexual satisfaction when they had more avoidant partners, controlling for their partner's level of attachment anxiety and their own scores on both attachment dimensions. A partner effect for anxious attachment, however, did not emerge.

**Table 3.** Actor and partner effects of anxiety and avoidance predicting sexual satisfaction

Predictor variables	<i>b</i>	<i>SE</i>
Intercept	.29	
Gender	.02	.07
Years married	-.00	.00
Actor age	.00	.02
Partner age	.02	.02
Attachment anxiety		
Actor effect	-.38*	.16
Partner effect	.01	.16
Attachment avoidance		
Actor effect	-.88***	.13
Partner effect	-.30*	.13

Note. We report all effects as unstandardized regression coefficients.

\* $p < .05$ . \*\*\* $p < .001$ .

1. We also entered the interactions between anxiety and avoidance both at the individual level and between partners as predictors in the model predicting sexual satisfaction but none of these interactions were significant, and we therefore removed them from the final model.



In the next MLM analyses, we tested for the potential moderating effect of anxious attachment on the link between sexual satisfaction and marital satisfaction. Marital satisfaction served as the dependent variable in these analyses. In the first model, the predictor variables included gender, the actor and partner effects of sexual satisfaction, as well as the actor and partner scores on both the anxious and avoidant attachment dimensions. Again, we included as predictors the number of months married as well the age of each spouse. In the second model, we added all of the two-way interactions involving actor sexual satisfaction and the actor and partner effects of the attachment dimensions. We also entered the interactions between gender and the actor and partner effects of the attachment dimensions into this model, but no significant interactions with gender emerged so we do not discuss them further.<sup>2</sup> We present the results of these analyses in Table 4.

As seen in Table 4, a significant main effect of gender emerged, suggesting that women reported lower levels of marital satisfaction than men when controlling for the main effects of both attachment dimensions and sexual satisfaction. In addition, a significant actor effect of sexual satisfaction emerged, suggesting that individuals who were more satisfied with their sexual relationship were also more satisfied with their marriage in general. Significant actor and partner effects also emerged for attachment anxiety. Specifically, individuals who reported higher levels of anxiety, as well as individuals with more anxious partners, reported lower overall levels of marital satisfaction. A significant actor effect also emerged for attachment avoidance, showing that indi-

viduals with higher levels of avoidance reported lower levels of marital satisfaction.

Some significant interactions emerged, however, that qualified these main effects. First, significant interactions between the actor and partner effects of attachment anxiety and the actor effect of sexual satisfaction emerged. We followed the recommendations of Aiken and West (1991) for decomposing interactions between two continuous variables. As shown in Figure 1, the link between sexual satisfaction and marital satisfaction was fairly strong for more anxiously attached individuals (simple slope test,  $b = .18$ ),  $t(210) = 5.22$ ,  $p < .001$ , but was much weaker for individuals who were less anxiously attached (simple slope test,  $b = .07$ )  $t(200) = 2.07$ ,  $p < .05$ . Similarly, as shown in Figure 2, sexual and marital satisfaction were significantly associated for individuals that had more anxiously attached partners (simple slope test,  $b = .21$ ),  $t(206) = 5.30$ ,  $p < .001$ , but were not significantly associated for individuals that had less anxiously attached partners (simple slope test,  $b = .04$ ),  $t(213) = 1.07$ , *ns*.

An unexpected interaction between partner avoidance and actor sexual satisfaction also emerged. As seen in Figure 3, the link between sexual and marital satisfaction was fairly strong for individuals that had less avoidantly attached partners (simple slope test,  $b = .19$ ),  $t(204) = 4.55$ ,  $p < .001$ , but this link was only marginally significant for individuals that had more avoidantly attached partners (simple slope test,  $b = .07$ ),  $t(212) = 1.95$ ,  $p = .05$ .

## Discussion

Despite a number of advances that investigators have made in their work on adult attachment and sexuality in recent years, this work is limited in two important ways. First, researchers in this area tend to focus on individuals, despite the obviously dyadic nature of sexual experiences between couples. Second, researchers in this area tend to focus on adolescents and undergraduates, most of whom have probably not yet had a chance to become involved in long-term, committed sexual relationships. The present study addressed both of these limitations, and the results supported the hypotheses generated from attachment theory.

2. We also entered the interactions between anxiety and avoidance both at the individual level and between partners as predictors in the model predicting marital satisfaction, and one significant interaction between actor anxiety and actor avoidance emerged ( $b = -.11$ ),  $t(215) = -2.09$ ,  $p < .05$ . Specifically, individuals who were low in anxiety reported similar levels of marital satisfaction, regardless of their level of avoidance (simple slope test,  $b = -.11$ ),  $t(213) = -1.28$ , *ns*, whereas individuals who were high in anxiety reported lower levels of marital satisfaction when they were also high in avoidance (simple slope test,  $b = -.29$ ),  $t(212) = -4.06$ ,  $p < .001$ .



**Table 4.** Actor and partner effects of sexual satisfaction, anxiety, avoidance, and their interactions predicting marital satisfaction

Predictor variables	<i>b</i>	<i>SE</i>
Model 1		
Intercept	5.95	
Gender	-.07*	.03
Years married	.00	.00
Actor age	-.00	.01
Partner age	-.00	.01
Sexual satisfaction		
Actor effect	.12***	.03
Partner effect	-.02	.03
Attachment anxiety		
Actor effect	-.40***	.06
Partner effect	-.23***	.06
Attachment avoidance		
Actor Effect	-.24***	.06
Partner Effect	.09	.06
Model 2		
Actor Anxiety × Sexual Satisfaction	.06*	.03
Partner Anxiety × Sexual Satisfaction	.11**	.03
Actor Avoidance × Sexual Satisfaction	.00	.02
Partner Avoidance × Sexual Satisfaction	-.06*	.03

Note. We report all effects as unstandardized regression coefficients.

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

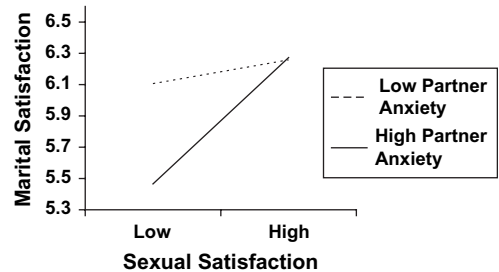
Importantly, the present study conceptually replicates the recent findings of Birnbaum and colleagues (2006) in a different sample using more global measures of sexual and

marital quality and also extends prior research by demonstrating the difficulty people may have in developing sexual intimacy and closeness with more avoidantly attached partners.



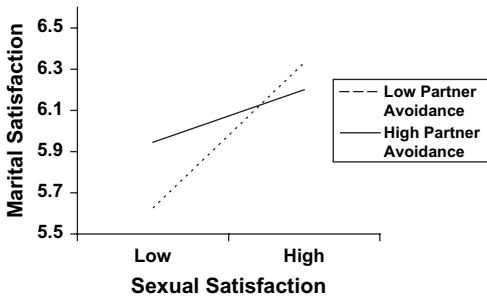
**Figure 1.** The interaction of actor anxiety and actor sexual satisfaction predicting actor marital satisfaction.

Note. We plotted regression lines for individuals scoring 1 *SD* above and below the sample means on each of the predictor variables.



**Figure 2.** The interaction of partner anxiety and actor sexual satisfaction predicting actor marital satisfaction.

Note. We plotted regression lines for individuals scoring 1 *SD* above and below the sample means on each of the predictor variables.



**Figure 3.** The interaction of partner avoidance and actor sexual satisfaction predicting actor marital satisfaction.

*Note.* We plotted regression lines for individuals scoring 1 *SD* above and below the sample means on each of the predictor variables.

Below, we discuss the pattern of actor and partner effects that emerged in this research.

#### *Adult attachment and sexual satisfaction*

As predicted, higher levels of anxiety and avoidance were related to lower levels of sexual satisfaction at the individual level. In particular, more avoidant individuals reported lower levels of sexual satisfaction in their marriage, controlling for their own level of attachment anxiety and their partner's scores on both attachment dimensions. Thus, it appears to be the case that the discomfort that avoidant individuals feel about being close and intimate with others extends to their sexual relationship with their spouses. These findings are consistent with avoidant individuals' orientation toward deactivating their attachment system (Mikulincer & Shaver, 2003, 2007), and with the suggestion that avoidant individuals should find sexual relationships with their partners uncomfortable and unrewarding (Shaver & Hazan, 1988). In addition, these findings support previous research showing that avoidant individuals have aversive feelings about sex and tend to be uncomfortable with intimacy and closeness (Birnbaum et al., 2006; Feeney, Hohaus, Noller, & Alexander, 2001; Feeney & Noller, 2004). Thus, the present results suggest that avoidant individuals may be particularly uneasy regarding sexual encounters with their

spouses and experience a less rewarding sexual relationship in their marriage.

In line with anxiously attached individuals' use of hyperactivating strategies (Mikulincer & Shaver, 2003, 2007), the present study provided support for the idea that anxious individuals should have difficulty experiencing sexual satisfaction and enjoyment, perhaps because they are often preoccupied with abandonment and tend to defer to their partner's sexual needs (Davis et al., 2006; Shaver & Hazan, 1988). Specifically, more anxious individuals displayed lower levels of sexual satisfaction in their marriage, controlling for their own level of attachment avoidance and their partner's scores on both attachment dimensions. Thus, the concerns about rejection and abandonment that anxious spouses commonly feel may influence their sexual satisfaction in a detrimental way. Indeed, Birnbaum (2007) found that attachment anxiety was positively correlated with intrusive thoughts during sex. Thus, it could perhaps be the case that, due to their chronic focus on potential cues of rejection, anxious individuals have difficulty enjoying sexual encounters, as they are often preoccupied with other matters.

A novel finding that emerged in the present research was that individuals with more avoidant partners reported being less sexually satisfied in their marriage, even after controlling for the individual's own level of avoidance. In other words, this partner effect suggests that having a spouse who is emotionally distant and uncomfortable with expressions of closeness relates to lower feelings of satisfaction with one's sexual relationship. This finding supports some of the theoretical assumptions of attachment theory as related to sexuality (Shaver & Hazan, 1988), and extends previous research by highlighting the importance of the dyadic relationship on sexual satisfaction.

We did not find a partner effect, however, for attachment anxiety. In other words, individuals with more anxious spouses did not report being less satisfied with their sexual relationship. It could perhaps be the case that being married to an anxiously attached individual does not result in lowered sexual satisfaction for some people due to the desire of

anxious individuals to foster intense closeness through sex (Schachner & Shaver, 2004). In addition, due to their chronic concerns about abandonment and their sensitivity to signs of waning physical or emotional proximity (Cassidy & Berlin, 1994; Simpson et al., 1999), anxiously attached individuals might be more likely to defer to their partners' sexual needs (Davis et al., 2006). Thus, the partners of anxiously attached individuals may experience adequate levels of sexual satisfaction due to their sexual needs being met. This hypothesis is speculative, and future research will need to further explore the possible links between the anxious attachment of one partner and the sexual satisfaction of the other partner.

#### *Links between sexual and marital satisfaction*

The current study also provided support for previous research examining the moderating role of attachment anxiety on the relationship between daily sexual experiences and subsequent relationship interactions (Birnbaum et al., 2006). In particular, anxious individuals, and individuals with anxious partners, showed higher levels of marital satisfaction when they were also high in sexual satisfaction. On the other hand, individuals who were low in anxiety showed a weaker association between their sexual and marital satisfaction, while individuals with less anxious partners showed similar levels of marital satisfaction regardless of their level of sexual satisfaction. These results are consistent with previous research suggesting that, due to their sensitivity to cues that may connote support or rejection (e.g., Campbell et al., 2005), anxious individuals may use their sexual experiences as indicators of their overall relationship quality, and as a way to foster closeness to their partners (Birnbaum et al., 2006; Tracy et al., 2003). Thus, anxious individuals appear to receive an extra "boost" in marital satisfaction when they experience positive and satisfying sexual encounters with their spouses, which may help to satisfy anxious individuals' needs for intimacy and closeness. This finding also suggests, however, that anxious individuals might have difficulty differentiating between

aspects of their sexual experiences and their relationships as a whole, which could potentially result in relational instability if their sexual experiences are negative or unsatisfying (Birnbaum et al., 2006).

With regards to avoidance, the current findings support previous research suggesting that sexual satisfaction and relationship satisfaction are not strongly linked for avoidant individuals. Specifically, individuals in the current study who were high in avoidance reported lower levels of marital satisfaction, regardless of their levels of sexual satisfaction. This finding supports previous research suggesting that avoidant individuals tend to engage in sex for self-enhancing reasons that are extraneous to their relationships (Cooper et al., 2006; Schachner & Shaver, 2004). As Birnbaum and colleagues (2006) suggest, avoidant individuals may find such a pattern beneficial in the sense that distressing or unsatisfying sexual experiences with their partners may not negatively affect their overall relationship satisfaction. This pattern also suggests, however, that avoidant individuals do not experience the potentially beneficial enhancements to relationship satisfaction that can occur in the context of a positive or satisfying sexual relationship.

Unlike the results of Birnbaum and colleagues (2006), we found an unexpected interaction between actor sexual satisfaction and partner avoidance. This finding may be consistent with prior research focusing on links between avoidant attachment and relationship well-being. For instance, avoidantly attached individuals do not tend to develop a high degree of closeness or dependence with their romantic partners (e.g., Campbell et al., 2001), and people tend to be less satisfied overall with their more avoidant partners (Feeney, 1999). It may therefore be the case that when people find themselves less sexually satisfied with a less avoidant partner (i.e., someone who is comfortable with closeness and intimacy), it is particularly disheartening. In general, this finding extends prior work by suggesting that actor sexual satisfaction and partner avoidance interact in a meaningful way to predict marital satisfaction. Future research should focus on the robustness of this effect.

### *Caveats and conclusions*

The results of this study should be interpreted with some caveats in mind. First of all, the participants from this study self-selected to participate by responding to newspaper ads. Thus, it might be the case that these participants are more satisfied in general with their relationship, and perhaps also more satisfied with their sexual relationship, than married couples in the general population. In addition, we recruited participants from a fairly urban Canadian city, meaning that couples from more rural communities, or even from other countries, might display a different pattern of results. Second, the data from this study are correlational and cross-sectional. Thus, we cannot ascertain any cause and effect relationships between attachment style and sexual satisfaction based on the present research. In this regard, future research could benefit from an examination of possible mediators of the link between adult attachment and sexual satisfaction. The present study suggests that higher levels of anxiety and avoidance are related to lower levels of sexual satisfaction; however, we have not uncovered why this might be the case. For example, it is possible, as Davis and colleagues (2006) suggest, that inhibited communication of sexual needs mediates the relationship between attachment and sexual satisfaction. In addition, the aversive thoughts and feelings about sex that anxious and avoidant individuals experience could also potentially mediate the link between attachment and sexual satisfaction (Birnbaum et al., 2006). Future research examining how the thoughts, feelings, and behaviors of anxious and avoidant individuals might mediate the relationship between attachment and sexual satisfaction would be helpful in terms of suggesting potential causal factors.

Another potential limitation of the present research is that it focused specifically on sexual satisfaction in marriage and not on sexual behaviors or experiences. Future studies could benefit from the use of a larger number of measures of sexual satisfaction, in addition to measuring actual sexual behaviors in marital relationships. We also cannot comment on how attachment orientations relate to sexual

satisfaction or other important marital processes, over time in marital relationships, which would be an additional avenue of interest for future research.

Despite these limitations, the present study makes a number of important and unique contributions to our understanding of the relationship between adult attachment and sexual satisfaction. First of all, the present study addresses a number of limitations of previous research in this area by focusing on a relatively large community sample involving both members of married couples. Second, the present study reveals the importance of attachment style in relation to overall levels of sexual and relationship satisfaction in marriage. With regard to potential practical implications, our findings suggest that adult attachment might be an important factor to consider in the context of therapy for couples who are experiencing sexual issues in their marriage. Taken together, these findings add to the theoretical conceptualization of attachment theory and sexuality in a number of unique and novel ways. Continuing to pay closer attention to the dyadic aspects of attachment and sexuality will be an asset for future research in this area.

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