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# Attachment Style and Subjective Motivations for Sex

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*The relation of attachment style to subjective motivations for sex was investigated in an Internet survey of 1999 respondents. The relations of attachment anxiety and avoidance to overall sexual motivation and to the specific motives for emotional closeness, reassurance, self-esteem enhancement, stress reduction, partner manipulation, protection from partner's negative affect and behavior, power exertion, physical pleasure, nurturing one's partner, and procreation were explored. As predicted, attachment anxiety was positively related to overall sexual motivation and to all specific motives for sex, with the exception of physical pleasure. Avoidance was negatively related to emotional closeness and reassurance as goals of sex and positively related to manipulative use of sex but minimally related to most other motives. Sexual passion was positively related to attachment anxiety and negatively related to avoidance, and anxiety was related to the maintenance of passion over time, whereas avoidance was related to loss of passion over time.*

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**Keywords:** *attachment; sex; motivation; passion; manipulation; reassurance*

**S**haver, Hazan, and Bradshaw (1988) proposed that romantic love, or pair-bonding, can be conceptualized in terms of three innate behavioral systems discussed by Bowlby (1982): attachment, caregiving, and sex. Perhaps because Hazan and Shaver (1987) provided a measure of individual differences in attachment, research on the attachment aspect of love quickly resulted in scores of publications (reviewed by Mikulincer & Shaver, 2003; Shaver & Clark, 1994). More recently, researchers have begun to investigate the caregiving aspect of love (e.g., Feeney & Collins, 2001; George & Solomon, 1999), but there have been relatively few studies of the sexual aspect of love as conceptualized by attachment theorists (e.g., Brennan, Wu, & Love, 1998; Hazan, Zeifman, & Middle-

ton, 1994; Stephan & Bachman, 1999; see Feeney & Noller, 2004 for a review).

Theoretically, the attachment system emerges during the first few years of life. Once the attachment system is developed, attachment-related motivations, feelings, mental models of self and others, and characteristic behavioral tendencies influence the operation of the caregiving and sexual systems, which provide new arenas in which to seek gratification of attachment needs (Fraley & Shaver, 2000). Hence, the motivational, affective, cognitive, and behavioral propensities that characterize a particular attachment style in adulthood are expected to influence all three behavioral systems. Although each system has its own primary function (seeking protection and support in the case of attachment, caring for and protecting another in the case of caregiving, sexual intercourse and reproduction in the case of sex), behaviors characteristic of one system also can serve needs of another. For example, behaviors that appear to be purely sexual or caregiving to another may actually be attempts to serve attachment-related needs for proximity, approval, protection, or intimacy.

The present article explores the hypothesis that sexual behavior can serve the needs of the attachment system. Specifically, if sexual behavior tends to serve these needs, (a) sexual behavior should be motivated by conditions that activate attachment-related motives, (b) attachment-related motives (such as needs for closeness or reassurance) motivate sexual behavior, (c) individual

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differences in motives associated with attachment style (e.g., the association between need for reassurance and attachment anxiety) should likewise be associated with motivations for sexual behavior (as reflected, for example, in an association between attachment anxiety and having sex to obtain reassurance), and finally, (d) attachment-related individual differences in behavioral strategies used to satisfy attachment needs in general should be reflected in corresponding attachment-related differences in strategic use of sexuality. Specific predictions reflecting these general hypotheses are developed below, following a brief section on attachment theory.

#### ATTACHMENT THEORY AND ADULT ATTACHMENT STYLE

Attachment theory (Bowlby, 1973, 1980, 1982) proposes that most young children form emotional attachments to one or more caregivers on whom they rely for protection, comfort, and support. Bowlby (1982) proposed that a young child's "attachment system" is activated in response to three kinds of threats: (a) internal distress from hunger or other physical and emotional discomfort, (b) external threats to safety or well-being, and (c) threats to the availability of an attachment figure. Under ideal conditions, the child's response to these kinds of threats is to seek proximity to the attachment figure and communicate its needs, whereupon the attachment figure responds with appropriate comfort, reassurance, and caregiving. Different attachment styles develop primarily in response to individual differences among caregivers in reacting to children's bids for comfort, reassurance, and caregiving.

A security-enhancing caregiver is one who provides what Bowlby and Ainsworth called a safe haven in times of danger or stress and a secure base of operations when exploration is undertaken. If a child's primary caregivers, or attachment figures, are sufficiently sensitive and responsive, the child will develop a "secure" attachment style, characterized by confidence in one's own competence and personal value (positive internal working models of self) and confidence in the availability, reliability, and beneficence of relationship partners (positive internal working models of others). These models provide a foundation for personal competence and healthy peer relations (reviewed by Weinfield, Sroufe, Egeland, & Carlson, 1999).

If one or more attachment figures are generally insensitive or unresponsive, the child is likely to develop an insecure attachment style, involving negative internal working models of self, relationship partners, or both. When caregivers are inconsistent and unreliable in responding, and awkward, self-centered, or intrusive in their caregiving, the children in their care tend to become anxiously attached. They tend to remain chronically hypersensitive to threats and hypervigilant regard-

ing the availability and sensitivity of relationship partners. Such anxiety fuels a high level of desire for closeness and interdependence, proximity-seeking, clinginess, and need for reassurance. The importance of reassurance as a motive for contact is generally higher for anxious individuals than for those who feel confident about the love and availability of their attachment figures.

In contrast, highly avoidant individuals are likely to have had caregivers who responded consistently, but negatively, to bids for closeness and comfort, being cool, distant, angry, or rejecting—particularly in response to displays of distress. The caregivers of avoidant children actively discourage negative emotional expressions (e.g., Main, 1990; Main & Weston, 1982) and withdraw from their children in response to expression of negative (but not positive) affect (Grossmann, Grossmann, & Schwan, 1986). As a result, avoidant children are less likely to communicate with their mothers when upset (Grossmann et al., 1986). To obtain the required amount of protection and support from such a caregiver, a child must either learn to seek support without displaying distress or deactivate the tendency toward support-seeking in response to distress and develop a coping style Bowlby (1982) called "compulsive self-reliance." Fraley, Davis, and Shaver (1998) suggested that, over time, the habitual process of attachment-system deactivation becomes overlearned, allowing avoidant individuals to eliminate most attachment-related distress, in part by focusing attention away from attachment-related issues. (This defensive strategy can collapse, however, under the pressure of stressors too demanding to ignore; Berant, Mikulincer, & Florian, 2001.) Hence, avoidant individuals tend to be uncomfortable with emotional closeness and interdependence and tend not to expect comfort or reassurance, particularly in response to expressions of distress.

In summary, individuals differing in attachment anxiety and attachment avoidance develop different resting levels of activation of attachment behaviors. Those high in anxiety develop higher resting levels of a sense of threat to the availability of attachment figures and therefore higher levels of desire for contact, closeness, and reassurance. Those high in avoidance tend to develop the conviction that emotional closeness and communication of their needs to attachment figures will not reliably serve their needs. They do not expect attachment figures to reassure or comfort them and therefore do not generally seek contact for such purposes. Secure individuals, who are low in both anxiety and avoidance, are generally confident of their caregiver's availability and able to tackle most challenges autonomously and therefore are less prone to seek attachment figures for reassurance and less dependent on them for distress regulation (see

review by Mikulincer & Shaver, 2003). Having summarized these theoretical fundamentals, we turn to their implications for motives in the sexual domain.

#### SEX IN THE SERVICE OF ATTACHMENT NEEDS

A variety of motives for having sex have been identified in the literature on sexual behavior. Although these motives have been shown to relate to such variables as gender, age, and aspects of relationship status (reviewed by Christopher & Sprecher, 2000; Hill & Preston, 1996; Regan & Berscheid, 2001; Thompson, 1995), there is reason to expect that an individual's personal motives for having sex will also be predictably related to the combined influence of attachment style and attachment-system activation.

#### *Conditions of Activation: Relationship Anxiety, Relationship Threat, and Sexual Motivation*

To the extent that sexual behavior serves attachment needs, conditions that activate attachment motives such as need for proximity or reassurance also should enhance sexual motivation. Hence, our first hypothesis is that sexual motivation will be fueled by perceived relationship threat (i.e., insecurity regarding the love and affection of one's partner), particularly for those high in attachment anxiety. Anxious individuals are characterized by a "hyperactivating" response to threats, including relationship threats. This hyperactivating response includes chronically greater worry about potential loss of important attachment figures; more vigilance regarding threats to significant relationships; greater tendency to interpret specific circumstances as threatening; and when confronted with a specific relationship threat, stronger protest reactions to real or potential separation, stronger efforts to obtain reassurance, and more intense efforts to reestablish contact or restore the relationship (Davis, Shaver, & Vernon, 2003; Mikulincer & Shaver, 2003). To the extent that sexual behavior can provide reassurance of partner love and availability, anxious individuals should be particularly likely to desire sex when experiencing relationship insecurity. This should not be true of avoidant persons, however, because avoidant adults seem to employ "deactivating" strategies that suppress attachment-related distress (e.g., Edelstein & Shaver, 2004; Fraley et al., 1998) and do not tend to react to relationship threat with enhanced reassurance seeking, proximity-seeking, or efforts to restore the relationship.

These propositions have already received support from two studies (Davis et al., 2003; Davis & Vernon, 2000b) regarding attachment-style differences in reaction to breakups. In adult samples from the Internet and the community, attachment anxiety was associated with enhanced efforts to reestablish the lost relationship and

with enhanced sexual motivation, as reflected in reports of constant sexual arousal, constant sexual fantasies about the lost partner, and extreme sexual arousal in the presence of the lost partner following a break-up. In contrast, attachment avoidance was negatively associated with efforts to regain the lost partner and unassociated with sexual motivation when breaking up.

#### *Analogous Functions of Attachment and Sexual Behaviors*

Proximity-seeking and bids for caretaking are assumed to increase the subjective probability of safety, reassurance, comfort, and distress-regulation. To the extent that sex serves these functions, we would expect respondents to report having sex for emotional closeness, reassurance of partner's love and affection, and distress regulation. These functions of proximity are most important and reinforcing to people who feel uncertain, fearful, or insecure regarding the availability of their attachment figure. Because people high in attachment anxiety experience more distress—including low self-esteem (Bartholomew & Horowitz, 1991), less mastery of the external world (Elliot & Reis, 2003), and greater insecurity regarding partner affection and commitment (Hazan & Shaver, 1987)—their resting level of need for a sense of emotional closeness, comfort, and reassurance is high, and thus, the reinforcement value of intimacy, comfort, and reassurance is high. Avoidant individuals, who try to downplay threats and cope with distress on their own (Mikulincer & Shaver, 2003), should be least likely to use sex in these ways.

*Sex to achieve emotional closeness/intimacy.* Although no studies have directly assessed attachment-style differences in emotional closeness as a motive for sex, indirect evidence of such differences is provided by four lines of inquiry. First, Brennan, Clark, and Shaver (1998) found that avoidance was negatively associated, and anxiety positively associated, with use of touch to express affection. Second, Hazan et al. (1994) found that avoidance was negatively correlated with enjoyment of affectionate presexual activities such as cuddling, kissing, and holding hands, whereas anxiety was positively associated with enjoyment of such activities. Third, Birnbaum, Gillath, and Mikulincer (2003) found that avoidance was associated with reported feelings of estrangement and emotional detachment during sex. Finally, a number of studies have found that secure respondents were least likely to report preference for, and/or involvement in, relatively uncommitted relationships such as one-night stands and sex outside of established relationships, whereas avoidant respondents were most likely to do so (Brennan, Clark, & Shaver, 1998; Brennan & Shaver, 1995; Hazan et al., 1994; Schachner & Shaver, 2002; see Feeney & Noller, 2004 for a review). Hence, avoidance

should be negatively related to having sex to establish emotional closeness or intimacy.

*Sex to obtain approval/reassurance.* To the extent that sexual behavior is interpreted as reflecting a partner's love, attraction, or other positive emotions toward oneself, sex may serve to reassure an insecure person. This should be especially appealing to people high in attachment anxiety, who are higher in their resting levels of insecurity regarding partner love and commitment, higher in need for reassurance, and higher in "excessive reassurance seeking" (Schachner & Shaver, 2002), a tendency that might well be reflected in enhanced or obsessive sexual motivation. Indeed, several lines of research have offered support for the association between attachment anxiety and use of sex for reassurance.

Anxious individuals appear to consider sexual engagement an index of the status of their relationship, to expect that their refusal of sex will result in rejection or abandonment, and to report being more interested in sex when feeling insecure about a relationship (Davis, Follette, Vernon, & Shaver, 2001; Davis & Vernon, 2000a; Impett & Peplau, 2002). Research with adolescents has shown that anxious individuals engage in sex primarily to please their partners, feel accepted, and avoid abandonment, whereas avoidant adolescents have sex for self-defining or self-enhancing reasons, such as losing their virginity or impressing peers (Tracy, Shaver, Albino, & Cooper, 2003). Finally, strong needs for reassurance, approval, and acceptance appear to lead those high in attachment anxiety to suppress expression of their own needs in favor of deference to those of their partners. For example, Davis et al. (2001) found that both attachment anxiety and avoidance were related to greater anxiety and worry during sex (see also Birnbaum et al., 2003) and to failure to communicate sexual needs to one's partner, just as they relate to failure to express more general needs (Davis & Follette, 2000a). Worry during sex and failure to express one's needs, in turn, are negatively related to sexual or general relationship satisfaction (Davis & Follette, 2000a; Davis et al., 2001).

Furthermore, presumably because of a high need for reassurance, approval, and acceptance, and the association of this need with deference to sexual partners, attachment anxiety is associated with engaging in voluntary but unwanted sex (Davis et al., 2001; Impett & Peplau, 2002), the experience of sexual coercion (Davis et al., 2001), risky sex (Feeney, Kelly, Gallois, Peterson, & Terry, 1999), unwanted pregnancy (Davis, Follette, & Vernon, 2001), and dissatisfaction with sex (Davis et al., 2001; see Feeney & Noller, 2004 for a review of many of these issues). Together, such results suggest that for anxious individuals, sexual motivation is strongly fueled by need for approval and reassurance.

*Sex to raise self-esteem.* Corollary to the proposition that anxious individuals may be particularly prone to use sex to gain approval or reassurance is the idea that they may use sex to enhance self-esteem by increasing the feeling of being desirable and wanted.

*Sex for stress reduction.* Proximity to an attachment figure often provides comfort and relief from distress. Similarly, sex may provide stress reduction, particularly for those high in anxiety, who feel especially vulnerable to threats, tend to experience enhanced distress in response to stressors, and tend to exhibit enhanced dependence on attachment figures. Avoidant individuals, in contrast, are generally less inclined to seek partner support in response to stress and hence may be less likely to use sex for stress reduction (Mikulincer & Shaver, 2003).

*Sex as a tool: Manipulative sexuality to achieve other attachment goals.* Attachment theory suggests that there will be differences in manipulative sexuality between people who differ in attachment style. In particular, the "coercive strategy" of need satisfaction is central to Crittenden's classification of anxiously attached children (Crittenden, 1992, 1997) and may become manifest as manipulative use of sexuality in adulthood. Crittenden argued that a coercive strategy of need satisfaction becomes characteristic of children with inconsistent caregivers. The coercive strategy involves, in effect, a "win stay, lose change" strategy of alternation between the two poles of aggressive/threatening behavior (crying, screaming, throwing tantrums) and "coy"/disarming behavior.

This strategy involves displaying angry threats and/or aggression at high intensity until the parents respond. If the parent's response is appeasing, the display of anger usually escalates until the need is satisfied. If, on the other hand, the parent's response is angry, the child switches to coy behavior. Coy, feigned helplessness is used to "bribe" the parent until he or she becomes exasperated with that also; then the child switches back to threatening aggressiveness. (Crittenden, 1997, p. 56)

Crittenden's (1997) analysis of the use of the coercive strategy by anxiously attached children suggests two predictions regarding adult sexuality. First, her analysis is consistent with our prediction (described below) that anxious adults will prefer to have sex more frequently. Crittenden (1997) suggested that because coy and coercive behaviors can be used only in the physical presence of the attachment figure, anxious individuals should have a strong need to be in this figure's presence. In adulthood, sexuality provides one of the main avenues to closeness.

Second, Crittenden's (1997) analysis concerns the use of the coercive strategy to elicit caregiving behaviors from an attachment figure. To the extent that sexual behaviors correspond to either the coy or the aggressive form of the coercive strategy, they may be employed by anxious individuals to elicit caregiving from sexual partners. In fact, Crittenden (1997) pointed out that coy behaviors are, in many instances, morphologically identical to flirtatious, sexually seductive behaviors. For example, feigning helplessness or incompetence is a common flirtation/seduction strategy used by both men and women, as are such strategies as acting cute, talking baby talk, and making flirtatious glances. To the extent that anxious people use coy strategies to elicit caregiving, they may also use sexual flirtation and sex itself for this purpose.

*Sex to disarm and protect.* According to Crittenden's (1997) analysis of the coercive strategy, anxious individuals sometimes use the coy strategy to defuse or deflect a caregiver's anger or aggression. This suggests that anxious adults may use sex to protect themselves from hostility, negative moods, or violence from romantic partners.

*Sex as control.* Implicit in this analysis of the coercive strategy is the idea that sex may provide a means to control or exert power over one's partner and, furthermore, that the coy strategy (and its analog, sex) can be used for this purpose. Because anxiety is associated with the tendency to use the coercive strategy, anxious individuals should view the exercise of control of their partners as a motive for sex. Furthermore, anxious individuals also may view experiencing a partner's power through sexual activity as a motive for sex. Power may be attractive to anxious persons because they are themselves relatively dependent. Also, another's attempts to control may be viewed as a form of attention, or a reflection of one's own importance, which would be particularly reinforcing to those high in attachment anxiety.

#### *Sex as Caregiving*

The literature on attachment and caregiving has shown that whereas anxious individuals tend to be relatively intrusive and inept as caregivers, they are often highly motivated to provide comfort (e.g., Collins & Feeney, 2000; Feeney & Collins, 2001, 2003). For this reason, among others, they seek proximity to their distressed partners and then often become overinvolved, controlling, or intrusive (Kunce & Shaver, 1994). Avoidant individuals, while also being relatively inept as caregivers, are less likely to offer care to their partners (Feeney & Collins, 2001).

Caregiving behaviors are often morphologically similar to sexual behavior. Hugging, kissing, holding, and

caressing, for example, are characteristic of both. Furthermore, caregiving can sometimes be a pretext for behavior that is more strongly motivated by needs for closeness or reassurance, suggesting that those high in anxiety may be more likely to experience caregiving motivation that is fueled by unmet attachment needs. If so, those high in anxiety should report greater use of sex to nurture and care for their partners.

*Procreation.* Unmet needs for intimacy, closeness, and caregiving can be partly satisfied by parenting. Among common reasons for having children are such attachment-related motives as having someone to love, having someone to take care of, and being needed and loved by a child. Thus, we examined the possibility that anxiety would be positively related, and avoidance negatively related, to having children as a motive for sex. Although there has been little research on this topic, Davis (1999) found that anxiety is positively related, and avoidance negatively related, to reports of having children as a motive for getting involved in romantic relationships. Rholes, Simpson, Blakely, Lanigan, and Allen (1997) reported that more avoidant college students were less interested in having children (although they did not find that more anxious students were more interested in having them). Motivation to procreate may contribute to the tendency of anxious adolescent girls to engage in risky sexual behaviors (Feeney et al., 1999): Some of them may be motivated to become pregnant.

#### *Overall Sexual Motivation and the Course of Passion Over Time*

Thus far, our analysis has suggested that attachment anxiety is positively associated with all attachment/caregiving motives for sex. Hence, it is expected that overall sexual motivation will be positively related to anxiety. Attachment theory also allows us to make predictions concerning the course of sexual passion over time. These predictions are based on the assumption that attachment style is related to two factors known to fuel passion: (a) threat to the relationship and (b) changes in intimacy. We consider each of these factors briefly before turning to our hypotheses.

According to Bowlby (1982), the attachment system is activated by perceived threats, including threats to the attachment relationship itself. We have already hypothesized a link between activation of the system by threats to the relationship and proximity-/reassurance-seeking through sex. Stating the proposed association in reverse, feeling unthreatened by relationship loss might be conducive to loss of passion. In *Peer Marriage*, Schwartz (1994) describes the difficulties of maintaining sexual passion in relationships characterized by deep friend-

ship, intimacy, security, and equality. Baumeister and Bratslavsky (1999) highlighted the role of escalating intimacy in creating passion. In some cases, this escalation comes after an argument or fight, when "making up" produces a sharp increase in intimacy that can arouse sexual passion. "Long-term couples should find that sex is especially likely or especially good when they are making up after a fight" (p. 56). Gottman (1994) noted that couples with a volatile style of arguing tended to have the most sexually passionate marriages. In a study of the association between attachment style and Gottman's (1994) three styles of fighting (validating, volatile, avoidant), Davis and Follette (2000b) found that attachment-related anxiety was significantly associated with the volatile fighting style (see also Creasey & Nesson-McInnis, 2001; Pistole & Arricale, 2003).

To the extent that attachment style is associated with either perceived relationship threat or changes in intimacy during the course of a relationship, passion would be expected to track such changes. Because attachment anxiety is associated with greater perceived relationship threat and desire for closeness and intimacy, combined with greater cycling between threats to intimacy through more frequent and more volatile relationship conflict (e.g., Creasey & Nesson-McInnis, 2001; Davis & Follette, 2000b; Pistole & Arricale, 2003; Simpson, Rholes, & Phillips, 1996), followed by rising intimacy while making up, it also should be associated with chronically high levels of sexual interest and passion.

The pattern for avoidant individuals should be different. They are not as threatened by relationship difficulties, not as likely to seek or enjoy intimacy, and more likely to cope with strains and disagreements by distancing themselves from problems and their relationship partners (Mikulincer & Shaver, 2003). Avoidant spouses are likely to lead separate lives (Davis & Follette, 2000b) and engage in fewer shared activities. Hence, after the very early stages of their relationships, avoidant individuals are unlikely to experience the surges of intimacy that can heighten sexual passion.

#### OVERVIEW OF HYPOTHESES

To summarize, the following seven hypotheses were proposed:

##### *Hypothesis 1 (H1):*

Sexual behavior will be motivated by perceived threat to the relationship, particularly among those high in anxiety.

##### *Hypothesis 2 (H2):*

Sexual behavior will serve the attachment functions of (a) emotional closeness, (b) reassurance, (c) enhancement of self-esteem, and (d) stress reduction,

particularly for those high in attachment anxiety, whereas avoidance will be negatively related to these motivations for sex (particularly to the desire for emotional closeness and reassurance).

##### *Hypothesis 3 (H3):*

Sex will be used as a tool to (a) elicit caregiving from one's partner and (b) protect oneself from one's partner's negative affect, anger, or violence, particularly among anxious individuals.

##### *Hypothesis 4 (H4):*

The exertion of one's own power and the experience of a partner's power will serve as sexual goals, particularly for anxious individuals.

##### *Hypothesis 5 (H5):*

Sex will function as caregiving, particularly for anxious individuals, who may also be more inclined to report having children as a motive for sex.

##### *Hypothesis 6 (H6):*

Overall, sexual motivation will be positively associated with attachment anxiety.

##### *Hypothesis 7 (H7):*

Anxiety will be associated positively, and avoidance negatively, with both the overall level of sexual passion and the maintenance of sexual passion over time.

#### *Methods*

##### *PARTICIPANTS*

Participants were selected from respondents to an Internet survey about "sex in relationships" on the basis of age (15 or older) and having ever been in a relationship in which regular sexual intercourse was involved. A total of 1,999 participants met this criterion, including 757 men, 1,241 women, and 1 with sex unspecified. The sample was 77.4% Caucasian, 5.4% African American, 4.9% Hispanic, 3.8% Asian, 1% American Indian, and 6.8% "Other." The average age was 25.25 years, with a range of 15 to 78. The bulk of the sample (81.4%) was younger than 30, with 12.7% in their 30s, 4.5% in their 40s, 1.2% in their 50s, and 0.2% older than 60. Given a three-category question about sexual orientation, 85.5% called themselves heterosexual, 3.1% homosexual, and 9.8% bisexual.

##### *PROCEDURE*

The survey was posted on the Internet with the title "The Dating Survey VII: Sex in Our Relationships." Links to the online survey were located in three different subcategories of the Yahoo search engine. The Internet site was described in all locations as follows: "Dating Survey—participate in the first study of Internet singles." The cat-

egories that held links to the survey included Dating (under the parent category Society and Culture/Relationships), Tests and Experiments (under Psychology/Research), and Surveys (also under Society and Culture/Relationships). The survey was programmed such that IP addresses were read and surveys submitted from the same address for the second time were automatically rejected.

#### THE SURVEY

The survey was introduced as follows:

The sex and relationships survey is one of a series designed to learn more about how our behavior in romantic relationships changes throughout life. Specifically, this survey is concerned with the role of sex at various points in a relationship and at various ages in life.

The instructions included assurances that responses would be completely anonymous once transmitted. They also included a warning that responses were not secure until transmitted. To ensure that participants responded anonymously, the first question asked, "Are you alone at your computer?" Data from those who responded "no" were deleted.

*Attachment style.* Attachment-related anxiety and avoidance were measured by representative 10-item subsets of the two 18-item scales that comprise the Experiences in Close Relationships measure (Brennan, Clark, & Shaver, 1998). Alphas for the two shortened scales were .90 and .85, only slightly lower than the reliabilities of the full scales. The correlation between the two scales, which are meant to tap orthogonal dimensions, was appropriately low,  $r(1,992) = .11$ .

*Neuroticism.* Neuroticism, included to index a possible confound with attachment insecurity, especially attachment anxiety (Shaver & Brennan, 1992), was assessed with a 12-item scale from the NEO Personality Inventory (Costa & McCrae, 1985). In our sample, the scale's  $\alpha$  was .85.

*Measurement of motivations for sex.* The survey assessed 10 motives for sex. Eight were adapted from the AMORE measure of Hill and Preston (1996), one of the most widely used sexual motivation measures. The scales assessed (a) feeling valued by one's partner (the adapted version of which we call Reassurance), (b) being close and affectionate (Emotional Closeness), (c) obtaining relief from stress (Stress Reduction), (d) providing nurturance to one's partner (Nurturance), (e) enhancing feelings of personal power (Power Self), (f) experiencing the partner's power (Power Other), (g) fun and physical pleasure (Physical Pleasure), and (h) procreation (Children).

To assure the attachment-relevance of some of the scales, a few items were added and the "fun and physical pleasure" scale was altered to represent physical pleasure specifically. In every case, alpha was increased beyond that of the original scale, indicating that none of the additions altered the gist of the original scale. Three items were added to the Reassurance scale: "Sex helps to reassure me about where the relationship stands," "Sex is important to me because it makes me feel loved," and "An important reason to have sex is to make my partner love me more" ( $\alpha$  for the altered scale = .91).

A single item, "I tend to be most interested in sex when I feel insecure about my partner's feelings for me," was added to assess the hypothesis that sexual motivation can be activated for some individuals by relationship threat. This item was not incorporated into any of the previously existing scales.

Four items were added to the Emotional Closeness scale: "Having sex makes me feel very emotionally close to my partner," "Emotional closeness/intimacy with my partner is one of the most satisfying things about sex," "Emotional enjoyment is one of the most satisfying things about sex," and "Sex is important to me as a way to express my love to my partner" ( $\alpha$  for the altered scale = .94).

Three items were added to the Nurturance scale: "An important reason to have sex is to make my partner feel loved," "An important reason for me to have sex is to make my partner happy," and "One of the things I like most about sex is making my partner(s) happy" ( $\alpha$  for the altered scale = .91).

Our Physical Pleasure scale included one of Hill and Preston's (1996) items ("The sensations of physical pleasure and release are major reasons that sexual activity and fantasy are so important to me") and two new items: "One of the most important reasons to have sex for me is physical release/orgasm" and "Physical enjoyment is one of the most satisfying things about sex" ( $\alpha = .82$ ).

#### ADDITIONAL SCALES

*Manipulative use of sexuality: General.* To test hypotheses regarding the general manipulative use of sexuality, the following items were included: "I often have sex to get other things I want from my partner," "I often have sex to avoid complaints from my partner," "Sometimes I flirt with my (a) partner and pretend I want to seduce him (her) just to get him (her) excited and aroused and then refuse to have sex after all," "One of the best ways to get my (a) partner interested in sex when I want to is to act helpless in some way and make him (her) feel like I need him (her)," "Sex is a powerful tool I can use to get other things I want from my partner," "I often do use sex as a way to get other things I want from my partner(s)," "For me, sex can sometimes be an expression of anger,"

"I sometimes refuse to have sex with my (a) partner as a way of punishing him (her)," "I have sometimes promised my (a) partner sex in exchange for him (her) doing (or giving) me something else I want," "I have often used sex as a bargaining tool," "I can usually succeed in getting what I want from my partner(s) with proper use of sexual flirtation/seduction," "I don't hesitate to use my sexuality to get what I want from members of the opposite sex," and "Sometimes I pretend to be more helpless than I really am in order to get attention from members of the opposite sex." These items were all written especially for this study and they cohered well ( $\alpha = .93$ ).

*Manipulative use of sexuality: Protection.* Three additional items were included to test the specific notion that sex may serve to deflect others' anger or bad moods: "When my partner is *angry at me*, I sometimes use sexual flirtation or seduction to get him(her) over it," "When my(a) partner is *in a bad mood*, I sometimes use sexual flirtation or seduction to get him (her) over it," and "Generally, I find that flirting with people is a good way to keep them happy and protect myself from their anger and bad moods" ( $\alpha = .84$ ).

*Self-esteem.* Only two items were added to assess the use of sex to enhance self-esteem: "Sex makes me feel good about myself" and "Having sex helps me to feel masculine (feminine)" ( $\alpha = .69$ ).

*The course of passion over time.* Participants were instructed that "By sexual 'passion' we mean very intense physical attraction to your partner(s) and intense emotional and sexual arousal." Two items assessed the tendency to feel passion in romantic relationships: "I feel intense sexual passion for my partner(s)" and "I rarely feel that much sexual passion for my partner(s) in any circumstances" (the latter was reverse-scored,  $\alpha = .63$ ).

For those currently in a romantic relationship, the tendency to gain or lose passion over time was assessed by responses to the following item: "Over time, my feelings of sexual passion for my partner have (a) increased a great deal, (b) increased somewhat, (c) stayed about the same, (d) decreased somewhat, (e) decreased a great deal." For those not currently in a sexual relationship, the question was worded, "Over time, my feelings of sexual passion for my partner(s) have generally tended to (a) increase a great deal, (b) increase somewhat, (c) stay about the same, (d) decrease somewhat, (e) decrease a great deal."

## Results

Consistent with previous research (e.g., Mikulincer, Gillath, & Shaver, 2002), Neuroticism was associated with both attachment anxiety,  $r(1,992) = .60$ ,  $p < .001$ , and attachment avoidance,  $r(1,996) = .17$ ,  $p < .001$ , but especially with anxiety. In tests of our hypotheses,

**TABLE 1: Mean Scores for Motivation Scales as a Function of Gender**

Motivation for Sex	Men	Women	Total
Emotional closeness	6.90 <sub>a</sub>	6.69 <sub>b</sub>	6.77 (1.71)
Physical pleasure	6.85 <sub>a</sub>	6.33 <sub>b</sub>	6.52 (1.45)
Enhance self-esteem	6.35 <sub>a</sub>	5.69 <sub>b</sub>	5.93 (2.14)
Nurture	5.91 <sub>a</sub>	5.38 <sub>b</sub>	5.54 (1.91)
Feel partner's power	5.49 <sub>a</sub>	5.38 <sub>a</sub>	5.42 (2.16)
Reassurance	5.12 <sub>a</sub>	4.87 <sub>b</sub>	4.96 (1.81)
Protect	4.87 <sub>a</sub>	4.83 <sub>a</sub>	4.85 (2.26)
Stress reduction	5.19 <sub>a</sub>	4.40 <sub>b</sub>	4.69 (2.15)
Feel one's own power	4.65 <sub>a</sub>	4.53 <sub>a</sub>	4.58 (1.97)
Manipulate	2.66 <sub>a</sub>	2.89 <sub>b</sub>	2.81 (1.68)
Children	2.37 <sub>a</sub>	2.38 <sub>a</sub>	2.38 (1.64)

NOTE: Means that do not share a subscript differ from one another at the .05 level or better. Standard deviations are in parentheses.  $N$ s = 1686 to 1894 (total), 604 to 698 (men), 1,082 to 1,196 (women). Scale range is from 1 to 9.

Neuroticism was therefore statistically controlled. From the perspective of attachment theory, this is a very conservative procedure because Neuroticism may be partially due to attachment history. The means and intercorrelations for the motivation for sex scales are presented in Tables 1 and 2, respectively.

## TESTS OF HYPOTHESES

The main tests of our hypotheses were performed using linear regression analyses in which gender and age were entered in the first step; Neuroticism, attachment anxiety, and attachment avoidance were entered in the second step. No meaningful interactions emerged in subsequent steps and, hence, they are not reported. In initial analyses, we included a variable indicating whether respondents reported on a current sexual relationship or their sexual relationships in general. Because this variable did not interact with any of the others, it is not included in the analyses reported here.

Because of the large number of significance tests involved in the necessary regressions, we set alpha at .01 rather than .05.

*H1: Sexual system activation due to relationship threat.* We proposed that sexual motivation would be activated by perceived relationship insecurity, particularly for anxious individuals. As expected (see Table 3, Column 1), anxiety was positively related to reports of interest in sex being higher when feeling insecure about the relationship,  $\beta = .38$ ,  $p < .0001$ .

*H2: Sexual behavior that serves attachment functions.* We proposed that sexual behavior serves the attachment functions of (a) emotional closeness, (b) reassurance, (c) enhancement of self-esteem, and (d) stress reduction, particularly for people who are high in attachment anxiety, whereas avoidance should be negatively related to these motivations for sex, particularly emotional closeness and reassurance.

**TABLE 2: Correlations Between Motivations for Sex**

	<i>Emotional Closeness</i>	<i>Reassurance</i>	<i>Self-Esteem</i>	<i>Stress Reduction</i>	<i>Manipulate</i>	<i>Protect</i>	<i>Own Power</i>	<i>Partner Power</i>	<i>Nurture</i>	<i>Children</i>
Physical pleasure	.36	.41	.54	.56	.15	.29	.49	.40	.42	-.11
Emotional closeness		.59	.41	.25	-.09	.15	.16	.20	.56	.10
Reassurance			.57	.61	.26	.38	.37	.35	.66	.15
Enhance self-esteem				.58	.21	.31	.49	.32	.49	.02 <sup>a</sup>
Stress-reduction					.35	.46	.53	.42	.55	.08
Manipulate						.54	.47	.27	.20	.23
Protect							.42	.34	.41	.15
Feel one's own power								.49	.37	.09
Feel partner's power									.36	.08
Nurture										.16

NOTE: All correlations are significant beyond .001, except the correlation noted with a superscripted a. *N*s = 1,684 to 1,894.  
a. The correlation between self-esteem enhancement and having children is not significant.

**TABLE 3: Conditions of Sexual Activation and Attachment-Related Motives for Sex**

	<i>Want Sex When Insecure</i>	<i>Emotional Closeness</i>	<i>Reassure</i>	<i>Self-Esteem</i>	<i>Stress Reduction</i>
Step 1					
Gender	.01	-.04	-.05	-.13***	-.17***
Age	-.11***	.07*	.06	.07*	.01
Step 2					
Gender	-.01	.01	-.06	-.12***	-.18***
Age	-.05	.14***	.16***	.11***	.05
Neuroticism	.03	-.09*	.04	-.01	.06
Anxiety	.38***	.31***	.49***	.20***	.26***
Avoidance	.08***	-.31***	-.08***	-.03	.06*
Step 1					
<i>F</i>	10.15	6.03	6.68	19.39	25.51
<i>df</i>	2, 1,717	2, 1,655	2, 1,707	2, 1,542	2, 1,673
<i>p</i> <	.001	.01	.001	.001	.001
<i>R</i> <sup>2</sup> change	.01	.01	.01	.03	.03
Step 2					
<i>F</i>	72.67	60.38	110.95	19.69	47.20
<i>df</i>	5, 1,714	5, 1,652	5, 1,704	5, 1,539	5, 1,670
<i>p</i> <	.001	.001	.001	.001	.001
<i>R</i> <sup>2</sup> change	.16	.15	.24	.04	.09

\**p* < .01. \*\**p* < .001. \*\*\**p* < .0001. Gender was scored as 1 = Male, 2 = Female.

Measures of the four attachment motivations for sex were significantly correlated with one another,  $r(1, 1,559 \text{ to } 1,697) = .24 \text{ to } .61$ ,  $p$ s < .001, although the four motives related somewhat differently to the two attachment scales. These results are presented in Columns 2 through 5 of Table 3.

As expected, attachment anxiety was significantly associated with all four attachment-related motives for sex,  $\beta$ s = .20 to .49,  $p$ s < .0001. The largest of these associations were between attachment anxiety and the motives of reassurance,  $\beta = .49$ ,  $p < .0001$ , and emotional closeness,  $\beta = .31$ ,  $p < .0001$ , the two motives most clearly linked theoretically to attachment anxiety.

Also as expected, attachment avoidance was most strongly and negatively related to the attachment-related

sexual motive of emotional closeness,  $\beta = -.31$ , followed at some distance by the motive of reassurance,  $\beta = -.08$ ,  $p < .001$ . Unexpectedly, avoidance was related positively to the motive of stress reduction,  $\beta = .06$ ,  $p < .01$ , although the association was quite small.

As an aside, we note that the attachment motives of enhancing self-esteem and reducing stress were endorsed somewhat more by men than women,  $\beta$ s =  $-.12, -.18$ ,  $p$ s < .001 (see Tables 1, 3).

*H3, H4: Power and manipulation as motives for sex.* We proposed that sex would be used as a means to (a) elicit caregiving from one's partner and (b) protect oneself from a partner's negative affect or violence, particularly among anxious individuals. Furthermore, we proposed

**TABLE 4: Predictors of Attachment-Related Motives for Sex**

	<i>Manipulate</i>	<i>Protect</i>	<i>Power Self</i>	<i>Power Partner</i>	<i>Nurture</i>	<i>Children</i>
Step 1						
Gender	.03	-.04	-.05	-.06	-.18***	-.01
Age	-.20***	-.20***	-.12***	-.15***	.05	-.08**
Step 2						
Gender	.01	-.05	-.06	-.06	-.16***	.00
Age	-.19***	-.18***	-.10***	-.12***	.11***	-.05
Neuroticism	.05	-.05	.01	.00	.02	-.01
Anxiety	.14***	.24***	.13***	.17***	.25***	.14***
Avoidance	.17***	.08*	.09**	.01	-.17***	-.11***
Step 1						
<i>F</i>	37.41	30.63	11.02	17.62	32.81	5.51
<i>df</i>	2, 1,557	2, 1,544	2, 1,672	2, 1,674	2, 1,699	2, 1,674
<i>p</i> <	.0001	.0001	.001	.001	.001	.004
<i>R</i> <sup>2</sup> change	.05	.04	.01	.02	.04	.01
Step 2						
<i>F</i>	38.98	31.23	13.76	17.08	46.61	11.24
<i>df</i>	5, 1,554	5, 1,541	5, 1,669	5, 1,671	5, 1,696	5, 1,671
<i>p</i> <	.001	.001	.001	.001	.001	.001
<i>R</i> <sup>2</sup> change	.07	.05	.03	.03	.12	.03

\**p* < .01. \*\**p* < .001. \*\*\**p* < .0001. Gender was scored as 1 = Male, 2 = Female.

that the exertion of one’s own power and the experience of a partner’s power would serve as a motive for sex, particularly for anxious individuals.

Correlations among the four measures of power-self, power-other, manipulation, and protection were all significant, *r*s(1, 1,726 to 1,890) = .29 to .54, *p*s < .001. Again, however, whereas attachment anxiety related similarly to the four measures, attachment avoidance did not. Results for these measures are presented in Table 2 and Columns 1 to 4 of Table 4.

As expected, attachment anxiety was related to all power/manipulation motives for sex, βs = .13 to .24, *p*s < .001. The strongest of these associations was between attachment anxiety and protection. Avoidance was not associated significantly with having sex to feel a partner’s power. There were, however, small but significant associations between avoidance and the motives of getting what one wants from one’s partner (manipulation), β = .17, *p* < .001, feeling powerful oneself, β = .09, *p* < .001, and protecting oneself, β = .08, *p* < .01.

*H5: Sex as caregiving/procreation.* We proposed that sex and its procreation function can serve a caregiving function and thereby serve a person’s own unmet attachment needs, particularly for anxious individuals. In contrast, we proposed that avoidance would be negatively related to caregiving and procreation as motives for sex. Results are presented in Columns 5 and 6 of Table 4. As expected, both nurturance, β = .25, *p* < .0001, and having children, β = .14, *p* < .0001, as motives for sex were positively related to anxiety but negatively related to avoidance, βs = -.17, -.11, *p*s < .0001. Furthermore, although

gender was unrelated to procreation as a motive for sex, men were more inclined to report having sex to nurture their partners, β = .16, *p* < .0001.

*H6: Overall sexual motivation.* Overall sexual motivation was assessed by computing the mean of the 10 motive scales. As predicted, attachment anxiety was positively related to overall sexual motivation, β = .35, *p* < .001. Also, overall motivation was somewhat higher for men than for women, β = -.13, *p* < .001. No other effects reached significance (see Column 2 of Table 5).

*H7: Passion and its maintenance over time.* The final hypothesis predicted that attachment anxiety would fuel and maintain passion, whereas attachment avoidance would dampen it over time. Although both hypotheses were supported, avoidance had a stronger impact than anxiety. Columns 3 through 5 of Table 5 display results from regression analyses for the tendency to feel passion and change in passion across time (for participants who were in a specific relationship at the time of the survey and those reporting on their relationships in general). Anxiety was significantly related to the tendency to feel passion and to maintain passion over time (for those reporting on a current relationship), although the beta coefficients were modest in size, βs = .11 and -.13, *p*s < .001. Anxiety was not significantly related to maintenance of passion over time for those reporting on their tendencies in most relationships.

As predicted, avoidance was negatively associated with feeling passion, β = -.31, *p* < .001, and positively associated with the tendency to lose passion over time in

TABLE 5: Predictors of Motivations for Sex and of Feelings of Passion for Partner

	Physical Pleasure	Overall Sexual Motivation	Feel Passion	Passion Specific Change	Passion General Change
Step 1					
Gender	-.12***	-.13**	-.03	-.04	.01
Age	.06	-.10**	.00	.21***	.11**
Step 2					
Gender	-.12***	-.13**	.03	-.08	-.02
Age	.04	-.04	.03	.19***	.10*
Neuroticism	-.04	-.03	-.16***	.15***	.12*
Anxiety	-.03	.35**	.11***	-.13*	-.04
Avoidance	.08**	-.02	-.31***	.20***	.18***
Step 1					
<i>F</i>	17.60	18.16	.76	24.19	5.67
<i>df</i>	2, 1,668	2, 1,682	2, 1,714	2, 932	2, 960
<i>p</i> <	.001	.001	<i>ns</i>	.001	.004
<i>R</i> <sup>2</sup> change	.02	.02	.00	.05	.01
Step 2					
<i>F</i>	10.12	48.59	45.21	22.41	12.27
<i>df</i>	5, 1,665	5, 1,679	5, 1,711	5, 929	5, 957
<i>p</i> <	.001	.001	.001	.001	.001
<i>R</i> <sup>2</sup> change	.03	.11	.12	.06	.05

NOTE: For the change in passion variable, scores ranged from 1 (*increased a great deal*) to 5 (*decreased a great deal*). Participants in a relationship responded to changes in that relationship. Those not in a relationship responded for close relationships in general.

\**p* < .01. \*\**p* < .001. \*\*\**p* < .0001. Gender was scored as 1 = Male, 2 = Female.

both a current relationship,  $\beta = .20$ ,  $p < .001$ , and in relationships in general,  $\beta = .18$ ,  $p < .001$ .

Finally, to assess the possibility that length in the current relationship might explain the above results, we conducted an additional regression for those reporting on a current relationship that included length of time in the relationship. The effects of anxiety and avoidance remained unchanged by this addition.

#### PHYSICAL PLEASURE AS A MOTIVE FOR SEX

No hypotheses were proposed regarding physical pleasure as a motive for having sex. Attachment avoidance was slightly positively related to this motive,  $\beta = .08$ ,  $p < .001$ , whereas women were slightly less inclined than men to endorse physical pleasure as a motive for sex,  $\beta = -.12$ ,  $p < .001$ . No other effects were significant.

#### NEUROTICISM

Although the Big Five Neuroticism scale was related to several sexual motivation variables, it did not eliminate effects of either attachment anxiety or avoidance, thus adding to the growing evidence that attachment anxiety is not simply a facet of, or another name for, Neuroticism.

#### Discussion

Overall, the results indicate that sexual motivation is shaped by the attachment and caregiving behavioral systems and that sexual behavior can function in the service of those other systems. Sexual motivation is activated by conditions such as relationship insecurity that are

known to activate other attachment behaviors such as proximity-seeking. Sex serves attachment-related functions analogous to those of other forms of proximity-seeking in general and also can serve caregiving functions such as providing physical comfort to a partner. In line with the coy/disarming pole of the coercive strategy for eliciting care, sex can be used as a strategic means of manipulating attachment- and care-related behaviors on the part of a relationship partner. Finally, similar to other attachment and caregiving behaviors, motivated sexual behaviors are predictable from the two major attachment-style dimensions—*anxiety and avoidance*.

#### ANALOGOUS CONDITIONS OF ACTIVATION

Theoretically, the attachment system, including attachment behaviors such as proximity-seeking, can be activated by threat to the availability of an attachment figure (Bowlby, 1982). Both the current results and those of two previous investigations (Davis et al., 2001; Davis & Vernon, 2000a) support our prediction that sexual behavior can likewise be motivated by felt relationship insecurity, particularly for those high in anxiety; that is, anxious people reported being most interested in sex when feeling insecure about their relationships.

#### ANALOGOUS FUNCTIONS

Our findings support the hypothesis that the sexual system can serve functions similar or identical to those of the attachment and caregiving systems and that these functions would fuel sexual behavior predictably as a function of attachment anxiety versus avoidance.

*Attachment functions.* Attachment anxiety in the present study was positively related to all attachment-related motivations for sex, including emotional closeness, reassurance, self-esteem enhancement, stress reduction, the experience and exertion of power, elicitation of caregiving from a partner, protection from a partner's anger or bad moods, and procreation. Indeed, because anxiety was also associated with providing care (nurturance) to one's partner as a motive for sex (see below), the only motive not positively associated with anxiety was that of physical pleasure. Notably, physical pleasure is the only motive included in our study that is theoretically unrelated to either attachment or caregiving.

Given that attachment anxiety was positively associated with all but one motive for sex, it is not surprising that, as expected, we found a positive association between overall sexual motivation and attachment anxiety. Of interest, when controlling for anxiety, Neuroticism was unrelated to sexual motivation. Previous research has linked Neuroticism to high sexual motivation (e.g., Eysenck, 1971). Our findings suggest that the overlap between attachment anxiety and Neuroticism is responsible for these findings.

The findings for avoidance were somewhat more complicated than those for anxiety. Consistent with the very nature of attachment avoidance, it was strongly and negatively associated with emotional closeness as a motive for sex. Avoidance was also weakly negatively associated with reassurance and having children as motives for sex but not significantly associated with the motives of self-esteem enhancement or experiencing one's partner's power.

Avoidance was positively associated with use of sex to manipulate and exert power over one's partner and to protect oneself from a partner's negative affect, although the latter two associations were weaker than the corresponding associations with anxiety. Avoidance tends to be associated with a desire for mastery and control (Mikulincer & Shaver, 2003), which may be reflected in control/power-oriented motives for sexual behavior. Furthermore, because parents of avoidant children tend to punish displays of negative affect, avoidant children learn to falsify affect (to display positive affect when feeling more negative or distressed) to avoid such punishment and elicit caregiving instead (e.g., Crittenden, 1997). Hence, for avoidants, sexual behavior may sometimes be used to display apparently positive affect to diffuse negative partner affect.

Unexpectedly, avoidance was associated with stress reduction as a motive for sex. This small but positive association is surprising in light of the theoretically expected and empirically documented negative association between avoidance and seeking partner support when

distressed (e.g., Simpson, Rholes, & Nelligan, 1992; Simpson, Rholes, Orinea, & Grich, 2002). It may be that avoidants feel comfortable using sex as a mechanism of stress reduction in part because there is no need to display distress to one's partner or to ask in any way for support or caregiving. Indeed, one may display substantial positive affect to one's partner, enjoy the sexual encounter, and even benefit from closeness and reassurance while never offering the slightest hint of one's own distress. In contrast, laboratory studies of support-seeking when distressed (e.g., Collins & Feeney, 2000; Simpson et al., 1992, 2002) do not allow such effective disguise of the motives for seeking contact. Instead, the support seeker in such studies must communicate the need for emotional support. It will be of interest for future research to examine differential support seeking among avoidants under conditions where the motives for contact can, or cannot, be disguised. Likewise, it would be of interest to examine how, rather than whether, avoidants seek support. They may well seek social support when distressed but do so indirectly, such as through sex or other distracting forms of socializing.

*Caregiving functions.* Overtly sexual behaviors are viewed by many people as comforting, caring, and reassuring for the recipient. Hence, those more motivated to care for partners also might be expected to use sex as a mechanism for providing care. Consistent with findings in the caregiving literature that anxiety is positively related and avoidance negatively related to caregiving motivation (e.g., Collins & Feeney, 2000; Feeney & Collins, 2001, 2003), our results indicate a positive association between anxiety and partner nurturance as a motive for sex and a negative association between avoidance and nurturance as a motive.

Although we have suggested that attempts to nurture a partner may reflect, in addition to true caregiving motivation, attachment-related motives such as desire for closeness and reassurance, the present data cannot establish such underlying motives. It is interesting to note, however, that research examining motives for caregiving has shown that attachment anxiety is associated with egoistic motives for caregiving (e.g., Feeney & Collins, 2001, 2003). In fact, Feeney and Collins (2003) found that attachment anxiety was most strongly associated with caregiving for "relationship purposes," including keeping the partner in the relationship. Hence, using sex for nurturance could well serve the underlying function of maintaining partner closeness and availability. Feeney and Collins also found that avoidance was associated with the caregiving motives of obligation and self-benefit. But consistent with our finding of a negative relationship between avoidance and partner nurturance

as a motive for sex, avoidance was negatively associated with caregiving for "relationship purposes."

#### SEX AS A "COERCIVE" STRATEGY

Sex appears to function for adults as a manipulative tool analogous to the coy/flirtatious pole of the coercive strategy identified by Crittenden (1997) in children. Our adult respondents reported using sex both to elicit caregiving behavior from a partner and to protect against partner anger and negative affect. Furthermore, as Crittenden theorized, the use of sex as a coy strategy appears to be characteristic primarily of anxious individuals.

In some respects, our hypotheses regarding manipulative and protective use of sexuality are the most novel of our predictions. Whereas attachment anxiety has been clearly linked to such general needs as those for emotional closeness, approval, and reassurance, and tendencies toward support seeking, there has been little examination of the association between adult attachment style and use of the "coercive strategy" that Crittenden (e.g., 1997) has considered central to classifying a person as anxious (or Type C). Our own previous study of reactions to breaking up (Davis et al., 2003) documented the association of anxiety with both angry, aggressive responses toward the lost partner and intense efforts to reestablish contact. Similarly, Dutton (1999) found partner abuse to be associated with attachment anxiety, which includes a repetitive cycle of angry, aggressive behavior followed by romantic and appeasing attempts to regain partner favor and deflect partner anger.

The coercive strategy essentially refers to how a person attempts to elicit desired behaviors from others. Just as attachment researchers have begun to classify motives for caregiving (in addition to simple degree of caregiving motivation and behavior) and relate them to attachment style (e.g., Feeney & Collins, 2003), in addition to studying degree of support seeking, they may profitably begin to study the relation of attachment style to strategies for eliciting caregiving, keeping in mind methods for assessing both the coy and aggressive poles of the coercive strategy.

#### ATTACHMENT AND THE COURSE OF PASSION ACROSS TIME

We predicted that attachment anxiety would fuel and maintain passion in part through its effects on proximity-seeking and need for reassurance and in part through the cyclical processes of conflict and making up, which cause dips and peaks in intimacy. Although we did not investigate the intimacy cycle in this study, our results confirm the hypothesis that anxiety is related to greater maintenance of passion over time, although only for those reporting on their current relationship. (Perhaps anxious people are unaware of their general ability or

tendency to maintain passion in sexual relationships more than other people do.)

We further proposed that because avoidant attachment is associated with avoidance of emotional closeness and intimacy, avoidance would be related to less overall passion and greater loss of passion over time. Both hypotheses were supported, and they were supported both for people reporting on their current relationship and for those reporting on their relationships in general.

#### LIMITATIONS AND CONCLUSIONS

Clearly, attachment-related motives and behavioral tendencies permeate the sexual domain. Attachment theory therefore provides a useful framework for understanding a wide variety of sexual issues, including some yet to be addressed by mainstream sex researchers. We hope our study will attract attention to the basic and applied research issues raised by associations between attachment style and sexual motives and behaviors.

The current study was limited in several respects that may be corrected in future research. Most important is the limited sample. Our sample was limited to relatively younger and single respondents. This was done of necessity in the Internet context because the dating links on the net provided ready access to the single population. However, future research on sexuality and attachment should include older samples and those in ongoing relationships of greater length. Although we see no reason to expect the theoretically predicted relationships to change in established relationships, they should nevertheless be tested in this context.

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