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A Behavioral Systems Perspective on the Psychodynamics of Attachment and Sexuality

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### Abstract

In this article we use Bowlby's ideas about innate "behavioral systems" to understand the psychodynamic interplay in adulthood between attachment processes and sexuality. We begin with a model of the activation and psychodynamics of the attachment behavioral system and then focus on attachment theory's explanation of both normative and individual-difference aspects of sexual-system functioning. We review research on the ways in which attachment orientation, or attachment style, contributes to the patterning of sexual motives, goals, strategies, feelings, and behaviors. We then focus on connections between sexuality and couple relationship quality, reviewing new evidence on the moderation of these connections by attachment style. Finally, we offer new ideas and present new findings from our laboratories concerning the role of attachment insecurity in failures to resolve the oedipal complex.

“Within the psychotherapy world, the reduction of things to their sexual bedrock has moved somewhat out of fashion. As the schools of what have become known as object relations and relational psychotherapy have grown in popularity, there has been a profound recognition that individuals are seeking relationships and affirmation as much as sexual discharge or erotic release. Yet . . .” – Mark Epstein (2005), *Open to Desire: Embracing a Lust for Life*, p. 16

The tension in psychoanalysis between emphasizing either sexuality or a broader relationality persists unabated, perhaps because both are extremely important to human life and human problems. One psychodynamic theory that emerged from the object relations “school” but makes ample room for sexuality is Bowlby and Ainsworth’s attachment theory. In the present article we show how the theory, when used as a guiding framework for empirical research, allows us to consider both sexuality and long-term attachment without slighting either one.

For several years we have been testing attachment theory as it applies to adult personality dynamics and close interpersonal relationships, including sexual ones (e.g., Ainsworth, 1991; Bowlby, 1988; Mikulincer & Shaver, 2003). Increasingly we have focused on Bowlby’s use of the “behavioral system” construct, which he imported from primate ethology and then adapted to his own purposes (which included replacing Freud’s emphasis on drives). Bowlby viewed each of several behavioral systems – e.g., attachment, exploration, caregiving, affiliation, and sex – as having evolved to accomplish a particular function. Later theorists (e.g., Cassidy & Kobak, 1988) showed how individual differences in attachment behavior can be conceptualized in terms of “hyperactivation” and “deactivation” of the attachment system. We have discovered that the same pair of concepts, hyperactivation and deactivation, can be applied to other behavioral systems, giving us a useful way to think about both individual differences in motives and the psychodynamic interplay between different behavioral systems.

In subsequent sections, we put forward a model of the activation and operation of the attachment behavioral system in adulthood, a model that addresses both optimal functioning and suboptimal functioning of the two major kinds: hyperactivation and deactivation. We then consider ways in which attachment theory characterizes normative and individual-difference

aspects of sexual-system functioning. In particular, we review published evidence, present new findings from our laboratories, and propose new ideas about the ways in which the sense of attachment security and attachment-related regulatory strategies contribute to patterns of sexual behavior. We also consider how attachment processes influence sexual motives, feelings, and attitudes; the role played by attachment processes in linking sexuality and relationship quality; and the effect of insecure attachment on failure to resolve the oedipal complex. We hope that this review will both stimulate further research and contribute to clinical interventions related to sexuality and relationship functioning.

### *Attachment Theory: Basic Concepts*

In explaining the motivational basis of attachment, caregiving, and sex, Bowlby (1969/1982) borrowed from ethology the concept of *behavioral system* – a species-universal neural program that governs the choice, activation, and termination of behavioral sequences designed to produce functional changes in the person-environment relationship, which in turn increase the likelihood of survival and reproduction. For various reasons, spelled out in the first volume of his *Attachment and Loss* trilogy, Bowlby (1969/1982) preferred the cybernetic metaphor of activation and deactivation of behavioral systems to the older notion of instincts or needs, even though he acknowledged that activation of a behavioral system is often experienced subjectively as a need or as striving for a goal. (The cybernetic view places greater emphasis on environmental triggers and termination signals, and less emphasis on the autonomous buildup of instinctual impulses.)

According to Bowlby (1969/1982), the attachment system's biological function is to protect a person (especially during infancy and early childhood) from danger by assuring that he or she maintains proximity to supportive others (*attachment figures*). The goal of the system is objective protection or support and the concomitant subjective sense of safety or security (which Sroufe & Waters, 1977, called "felt security"). This double-sided (objective and subjective) goal is made salient when a person encounters actual or symbolic threats and notices that an attachment figure is not sufficiently near, interested, or responsive (Bowlby, 1969/1982). In such

cases, the attachment system is activated and the individual is driven to reestablish actual or symbolic proximity to an external or internalized attachment figure until felt security is attained. Bowlby (1969/1982, 1988) assumed that although age and development result in an increased ability to gain comfort from symbolic representations of attachment figures, no one of any age is completely free from reliance on actual others. The attachment system therefore remains active over the entire life span, as indicated by adults' tendency to seek proximity and support when threatened or distressed (Hazan & Zeifman, 1999).

Bowlby (1973) also described individual differences in attachment-system functioning that arise as a result of the availability, responsiveness, and supportiveness of attachment figures in times of need. Interactions with attachment figures who are available and responsive facilitate optimal functioning of the attachment system and promote a core, dispositional sense of *attachment security* – a sense that the world is generally a safe place, that attachment figures are generally helpful when called upon, and that it is possible to explore the environment curiously and engage effectively with other people. During these interactions, a person learns that acknowledgment and display of distress elicit supportive responses from others and that turning to others when threatened is an effective means of coping. These experiences generate positive mental representations of self and others (*attachment working models*) that increase both self-confidence and confidence in attachment figures' willingness to provide support.

Bowlby (1988) viewed the sense of attachment security as crucial for maintaining emotional stability, developing a positive self-image and positive attitudes toward relationship partners, and forming mature, mutually satisfactory close relationships. Moreover, because the sense of attachment security implies that one can pursue goals in a safe environment and that support will be available when needed, it facilitates relaxed and confident engagement in non-attachment activities, such as exploration and sex, and thereby broadens a person's perspectives and skills and sustains personal growth and self-actualization (Bowlby, 1988).

When attachment figures are not reliably available and supportive, the sense of security is not attained, negative working models of self and others are formed, and secondary strategies of

affect regulation come into play. As mentioned already, these secondary strategies are of two kinds: *hyperactivation* and *deactivation* of the attachment system (Cassidy & Kobak, 1988; Mikulincer & Shaver, 2003.) Hyperactivation (which Bowlby, 1969/1982, called “protest”) is characterized by energetic, insistent attempts to get a relationship partner, viewed as insufficiently available or responsive, to pay more attention and provide better care and support. Hyperactivating strategies include clinging, controlling, and coercive responses; cognitive and behavioral efforts to establish physical contact and a sense of ‘oneness’; and overdependence on relationship partners as a source of protection (Shaver & Mikulincer, 2002). Hyperactivation keeps the attachment system chronically activated and constantly on the alert for threats, separations, and betrayals; it therefore unintentionally exacerbates relational conflict, heightens distress associated with attachment-figure unavailability, and reinforces doubts about one’s ability ever to attain a sense of security (Mikulincer & Shaver, 2003).

Deactivation refers to inhibition of proximity-seeking inclinations and actions, suppression or discounting of threats that might activate the attachment system, and determination to handle stresses alone (a stance Bowlby, 1969/1982, called “compulsive self-reliance”). These strategies involve maintaining physical and emotional distance from others, being uncomfortable with intimacy and interdependence, ignoring or downplaying threat- and attachment-related cues, and suppressing threat- and attachment-related thoughts (Shaver & Hazan, 1993). These tendencies are bolstered by a self-reliant attitude that decreases dependence on others and discourages acknowledgment of personal faults (Mikulincer, 1998).

In examining individual differences in the functioning of the attachment system in adolescence and adulthood, attachment researchers have focused on a person’s *attachment style* – the chronic pattern of relational expectations, emotions, and behaviors that results from internalization of a particular history of attachment experiences (Fraley & Shaver, 2000). Beginning with Ainsworth, Blehar, Waters, and Wall’s (1978) studies of infant-caregiver attachment and continuing through Hazan and Shaver’s (1987) conceptualization of romantic love as an attachment process, followed by many recent studies by social and personality

psychologists (reviewed by Mikulincer & Shaver, 2003), researchers have found that individual differences in attachment style can be measured along two orthogonal dimensions, attachment-related *avoidance* and *anxiety* (Brennan, Clark, & Shaver, 1998). A person's position on the attachment avoidance dimension indicates the extent to which her or she distrusts others' goodwill and relies on deactivating strategies for coping with attachment insecurities. A person's position on the anxiety dimension indicates the degree to which he or she worries that relationship partners will be unavailable in times of need and relies on hyperactivating strategies for dealing with these worries. People who score low on both dimensions have a chronic sense of felt security, are likely to have had a security-supporting attachment history, and are said to be secure or to have a secure attachment style.

### *The Sexual System and Its Interplay with the Attachment System*

#### *The Sexual Behavioral System*

According to attachment theory, sexual behaviors are governed by an inborn sexual behavioral system, and observable individual differences in sexual attitudes, preferences, and responses are a reflection of the activation and functioning of this system (Shaver & Hazan, 1988; Shaver & Mikulincer, in press). The major function of the sexual system is to pass genes from one generation to the next, and its innate aim (what Bowlby, 1969/1982, called its "set-goal") is to have sexual intercourse with an opposite-sex partner and either become pregnant oneself (in the case of women) or impregnate a partner (in the case of men) (Buss & Kenrick, 1998). (Because of space limitations, we forego a discussion of the special case of homosexuality, which has been considered effectively by Diamond, 2003.) This goal often becomes particularly salient when a person encounters an attractive, sexually interested, or fertile potential partner of the opposite sex. The primary strategy for achieving the set-goal is to approach such a partner, persuade him or her to have sex, and engage in genital intercourse. The smooth execution of this strategy often results in sexual encounters in which both partners gratify their sexual needs and have enjoyable, orgasmic experiences. Moreover, such encounters typically produce feelings of vitality and energy, a strong sense of self-efficacy for attracting and

interacting with sexual partners, and enhanced feelings of intimacy and communion with a particular relationship partner (Shaver & Mikulincer, in press).

In addition to considering universal aspects and functions of the sexual behavioral system, we have described the individual differences in sexual-system functioning that can result from unpleasant sexual experiences – e.g., failure to persuade a partner to have sex or having sex that does not lead to a gratifying outcome (Shaver & Mikulincer, in press). These interactions are a source of frustration, distress, and dejection; they generate doubts about one's sexual attractiveness and efficacy; and, in theoretical terms, they mean that the sexual system's primary strategy is not achieving its set-goal. As a result, the operating parameters of the sexual system must be adjusted and alternative strategies of responding to sexual stimulation are likely to be adopted. We believe that the sexual system's responses to frustration and failure, like the responses of the attachment system to failures to attain security, can be conceptualized in terms of hyperactivation and deactivation.

Hyperactivating strategies include effortful, mentally preoccupying, sometimes intrusive, and even coercive attempts to persuade a partner to have sex. When pursuing these strategies, a person can overemphasize the importance of sex, exaggerate appraisals of a partner's sexual interests or needs, and adopt a hypervigilant stance toward a partner's signals of sexual arousal, attraction, and rejection. This chronic sexual-system activation is accompanied by heightened anxiety and concerns about one's sexual attractiveness, the extent to which one is able to gratify a partner, and a partner's lack of responsiveness to one's sexual appeals. These worries may provoke intrusive or aggressive actions aimed at coercing a partner to have sex, which in turn can lead to further rejection and exacerbation of sexual-system dysfunction (Shaver & Mikulincer, in press).

In contrast, deactivating strategies are characterized by inhibition of sexual desire and an erotophobic or avoidant attitude toward sex, or by a shallow or cynical approach to sex that divorces it from other considerations, such as kindness and intimacy (Shaver & Mikulincer, in press). Deactivating sexual strategies may include dismissal of sexual needs, distancing from or

disparaging a partner when he or she expresses interest in sex, suppression of sex-related thoughts and fantasies, and inhibition of sexual arousal and orgasmic pleasure. These strategies can also, paradoxically, promote sexual promiscuity powered by narcissism or a desire to elevate one's self-image or one's standing in the estimation of peers. This kind of self-promotion through sexual conquest can occur in the absence of an intense sexual drive or without much enjoyment of sex per se (Schachner & Shaver, 2004).

### *The Dynamic Interplay of Sex and Attachment*

According to Diamond (2003), the sexual system is functionally independent of the attachment system. Although long-term romantic relationships typically integrate attachment and sexual feelings and behaviors, the systems themselves have distinct origins, functions, and underpinnings. Recent studies of the brain substrates of sexuality and attachment confirm this distinctness (e.g., Bartels & Zeki, 2000; Fisher, Aron, Mashek, Li, & Brown, 2002). Moreover, sexual relations often occur without affectional bonds; sexual partners do not necessarily function as attachment figures; affectional bonding between adults is not always accompanied by sexual desire; and the search for safety and security provided by a relationship partner does not automatically transform him or her into a sexual partner. Still, the formation of an affectional bond in long-term romantic relationships is frequently initiated by infatuation and sexual attraction (e.g., Hazan & Zeifman, 1999; Sprecher & Regan, 1998). Moreover, studies of long-term dating and married couples have shown that either attachment dysfunction or sexual dysfunction can have a powerful effect on the other behavioral system (see Sprecher & Cate, 2004, for an extensive review). In other words, even though sexual and attachment behaviors are governed by functionally different systems, the systems still influence each other and contribute jointly to relationship quality and stability.

In their initial articles on “romantic love conceptualized as an attachment process,” Hazan and Shaver (1987; Shaver & Hazan, 1988) generated explicit hypotheses about how individual differences in attachment-system functioning, which appear early in child development (during the first year of life), might shape the functioning of the sexual system,

which generally becomes manifest later in development, when hormonal changes initiate a capacity for full genital sexuality. Shaver and Hazan's (1988) analysis was based on Bowlby's (1969/1982) claim that, because of the urgency of threats to the self (especially during early childhood), activation of the attachment system inhibits or distorts activation of other behavioral systems and thus interferes with the activities associated with those systems. This process was most clearly demonstrated in Ainsworth et al.'s (1978) research on children's inhibited exploration in the "Strange Situation" laboratory setting, when an attachment figure was asked by the experimenter to leave the child alone in a strange room. The same kind of inhibition or distortion can occur when an anxious individual encounters an attractive, sexually interested potential relationship partner. Under conditions of threat, adults generally turn to others for support and comfort rather than thinking first about sexual attraction and orgasmic pleasure. At such times they are likely to be so focused on their wish for safety and security that they appraise a potential sexual partner as a possible protector (i.e., attachment figure) and begin to seek support rather than sexual involvement (or sometimes, support provided in the context of sexual involvement). Only when protection or support is attained and a sense of security is restored does a relatively secure person typically direct attention and energy to other behavioral systems.

In short, the aim of the sexual system is more likely to be achieved when a person is secure enough to allow him or herself to focus on sexual pleasure rather than a desire for protection. This reasoning led Shaver and Hazan (1988) to hypothesize that people who are relatively secure would be attentive to signals of sexual arousal and attraction, be able to perceive a partner's interests accurately, and therefore be able to engage in mutually satisfying genital sex.

A secure person's interaction goals (e.g., establishing mutual intimacy) and positive models of self and others foster comfort with sexuality and enjoyment of sexual intercourse. A secure person's comfort with closeness, self-disclosure, and interdependence (Shaver & Hazan, 1993) create a positive foundation for sexual relations, which are among the most intimate of human activities because they require unusually high degrees of physical closeness, potential

vulnerability, and personal disclosure. A secure person's positive mental representations of others may make it easier to view sexual partners as caring, loving, and well-intentioned (lacking inclinations to engage in sexual coercion, violence, or exploitation), which allows him or her to enjoy sex, be intimate and caring during sexual activities, and engage in relaxed, open, and mutually satisfying sexual exploration. Moreover, a secure person's positive models of self support feelings of being loved and esteemed during sexual activities and help to maintain a sense of confidence in one's ability to gratify one's own and a partner's sexual needs. As a result, positive models of self and others allow secure adults to relax their defenses and be less preoccupied with their sexual performance, which, when combined with comfort with closeness, is conducive to "letting go" sexually and experiencing maximal orgasmic pleasure.

Beyond facilitating sexual satisfaction, intimacy, and openness, attachment security encourages the channeling of sexual desires and activities in the direction of a long-term couple relationship. During interactions with supportive attachment figures, secure individuals learn that proximity maintenance is rewarding and that interdependent relationships are conducive to need satisfaction (Mikulincer & Shaver, 2003). That is, attachment-figure availability makes salient the perceived benefits of close relationships and thus enhances the motivation to be involved in a stable long-term relationship. Securely attached people can seek fulfillment of their sexual desires within these relationships and construe sexual activities as an important means of initiating and maintaining a long-term relationship (Gillath & Schachner, in press).

Insecure adults can be expected to have more sexual problems and be less able to enjoy conflict-free sex. This does not mean, however, that anxious and avoidant people, although both are conceptualized in attachment theory as insecure, react in the same way to sexual-system activation. Whereas an anxious person's negative models of self, unsatisfied attachment needs, and worries about rejection and disapproval may interfere with a relaxed, carefree approach to sex, and may cause him or her to construe sexual activities as means of garnering support and security, an avoidant person's lack of comfort with closeness and negative models of others may interfere with sexual intimacy and encourage a more negative construal of sexual activities. In

other words, anxious hyperactivating strategies may intensify worries about rejection during sex and motivate intense and sometimes coercive bids for support and security, and avoidant deactivating strategies may cause distancing from sex altogether or engaging only in non-intimate sex.

Attachment anxiety may be associated with a complex, ambivalent approach to sex. On the one hand, sex is one of the most obvious routes to closeness and intimacy, which should cause anxious people to be drawn to it, viewing it as a way to fulfill unmet needs for security and love. They may use sex to gain acceptance and reduce fears of abandonment and separation. While focusing on their own wishes for protection and security, however, they may have trouble attending accurately to a partner's sexual motives and behavior. On the other hand, anxious people's negative models of self and worries about rejection and abandonment may make it difficult to relax and "let go" sexually, thereby making sexual pleasure less intense and less conflict-free.

Avoidance, in contrast, may cause a person to remain emotionally distant from sexual partners, thereby blocking sexual intimacy. This stance may be associated with erotophobia, sexual abstinence, or a focus on nonintimate sex in casual, short-term relationships. Moreover, because deactivating strategies are associated with extreme self-reliance, personal control, and inflation of one's self-image (Mikulincer & Shaver, 2003), avoidant people may use sex to maximize control over a partner, gain social prestige, and enhance self-esteem, all with little regard for a partner's feelings. In other words, avoidant people's sexuality may be focused on their own narcissistic needs combined with dismissal of or blindness to a partner's sexual needs and preferences.

#### *Empirical Evidence Concerning the Interplay between the Attachment and Sexual Systems*

When Shaver and Hazan (1988) first generated hypotheses about the interplay of the attachment and sexual systems, there was no empirical evidence documenting the ways in which attachment insecurities of the anxious and avoidant kinds might affect sex. With the progress of research on adult attachment, however, the empirical gap is being filled. In the following

sections, we present brief overviews of the accumulating evidence. Specifically, we review studies that have examined associations between attachment style and engagement in sexual activities, attitudes toward casual, uncommitted sex, the subjective experience of sexual activities, sexual self-confidence, sexual motives, sexual exploration, sexual risk-taking, and sexual coercion.

*Engagement in sexual activities.* Several studies have looked for an association between attachment style and engagement in sexual activities, providing strong support for the hypothesized inhibitory relation between avoidant attachment and sexual-system activation. In a sample of American adolescents, Tracy, Shaver, Cooper, and Albino (2003) found that avoidant adolescents were less likely ever to have had sex, engaged in fewer non-coital sexual behaviors (e.g., making out, petting) before trying intercourse, and after they did begin having intercourse, had it less frequently than less avoidant age-mates. A negative association between avoidant attachment and frequency of sexual intercourse has also been noted in studies of young adults (Bogaert & Sadava, 2002; Gentler & Kerns, 2004; Hazan, Zeifman, & Middleton, 1994) and in a diary study in which participants were asked to report all interactions with members of the opposite sex that lasted 10 minutes or longer over a 6-week period (Feeney, Noller, & Patty, 1993). Interestingly, Bogaert and Sadava (2002) found that, although avoidant individuals reported engaging less frequently in sexual activities with a relationship partner, they masturbated more frequently – a solitary activity that fits well with Bowlby’s conception of “compulsive self-reliance.” Certainly this form of sexual behavior drastically reduces concerns about intimacy, vulnerability, and mutual coordination with another person.

Studies have also revealed consistent gender differences in the link between attachment anxiety and sexual activities. Among men, attachment anxiety, like avoidant attachment, is associated with less frequent sexual activity over a 6-week period (Feeney et al., 1993) and with older age at first intercourse (Gentzler & Kerns, 2004). However, among women, attachment anxiety is associated with greater likelihood of ever having had sex during adolescence (Cooper, Shaver, & Collins, 1998) and with younger age at first intercourse (Bogaert & Sadava, 2002;

Gentzler & Kerns, 2004). That is, whereas attachment anxiety seems to inhibit either sexual-system activation or its expression in actual sexual activities among men, it increases the likelihood of sexual activity in women. This may be a consequence of traditional sex roles, which assign the role of sexual initiator to men.

*Attitudes toward casual, uncommitted sex.* Beyond abstaining from sex, avoidant individuals seem to construe sexual activities in ways that make intimacy and interdependence unlikely. Four studies assessed attitudes toward casual sex (e.g., acceptance of casual sex without love, acceptance of uncommitted sex) and consistently found that avoidant attachment is associated with more positive attitudes toward casual sex (Brennan & Shaver, 1995; Feeney et al., 1993; Gentzler & Kerns, 2004; Simpson & Gangestad, 1991). Moreover, several studies found that adolescents and young adults who scored high on avoidance were more interested in emotionless sex, less likely to be involved in sexually exclusive relationships, and more likely to have sex with a stranger and engage in “one-night stands” (Bogaert & Sadava, 2002, Cooper et al., 1998; Feeney, Peterson, Gallois, & Terry, 2000; Gangestad & Thornhill, 1997; Hazan et al., 1994; Paul, McManus, & Hayes, 2000; Stephan & Bachman, 1999). Interestingly, a similar positive attitude toward casual, uncommitted sex has been found among anxiously attached women (Bogaert & Sadava, 2002, Feeney et al., 2000, Gangestad & Thornhill, 1997).

Consistent with the notion that avoidant individuals tend to detach sex from love, intimacy, and commitment, Schachner and Shaver (2002) found that “mate poaching” (stealing someone else’s mate) and being available for “poaching” – in the context of short-term but not long-term relationships – were associated with avoidance. Importantly, these associations between avoidance and signs of sexual promiscuity could not be explained by variations in libido or sexual drive (Schachner & Shaver, 2002).

In a recent series of studies, Gillath and Schachner (in press) constructed a 12-item scale to assess preference for long-term sexual mating (e.g., “I’m looking for a potential spouse and hope to get married before too long”) or short-term sex (e.g., “I have no objection to ‘casual’ sex, as long as I like the person I’m having sex with”). They found that avoidance was associated

with preference for a short-term rather than a long-term mating strategy. More important, whereas contextual priming of attachment security (thinking about people to whom one turns for help and support, thinking about a past relationship in which one felt secure) increased interest in a long-term sexual relationship, contextual priming of avoidance (thinking about a relationship in which one felt avoidant) increased interest in short-term sex. That is, avoidance, whether dispositional or manipulated, is associated with a preference for casual, uncommitted sex.

*The subjective experience of sexual activities.* Evidence is also available concerning attachment-style differences in the subjective experience of sexual activities. Specifically, both attachment anxiety and avoidance are associated with reports of negative feelings during sex (Birnbaum, Reis, Mikulincer, Gillath, & Orpaz, 2005; Gentzler & Kerns, 2004; Tracy et al., 2003), less enjoyment of sex (Hazan et al., 1994), and less positive appraisals of sexual aspects of oneself (Cyranski & Andersen, 1998). However, whereas avoidant individuals tend to dismiss the importance of sex, report relatively low levels of pleasure during sex, and fail to express feelings of love and affection for their partner during sex (Birnbaum et al., 2005; Brennan, Wu, & Loev, 1998; Hazan et al., 1994; Tracy et al., 2003), anxious individuals expressed a strong desire for their partner's emotional involvement during sex (Birnbaum et al., 2005) and reported having an erotophilic orientation to sex (Bogaert & Sadava, 2002). In line with Shaver and Hazan's (1988) hypothesis, avoidance seems to be associated with a negative conception of sex, whereas attachment anxiety is associated with an ambivalent approach to sex, in which aversive feelings co-exist with wishes for sexual intimacy and love.

*Sexual motives.* Four studies have examined the association between attachment style and sexual motives, and they provide strong support for the hypothesis that attachment insecurity affects people's reasons for engaging in sexual relations. In their study of adolescent sexuality, Tracy et al. (2003) found that attachment-anxious adolescents were more likely than their less anxious peers to say they had sex to avoid a partner's rejection, and avoidant adolescents were less likely than non-avoidant ones to say they had sex to express love and affection for their partner. In addition, avoidant adolescents were more likely to say their first intercourse was

motivated by a desire to lose their virginity, which might have been aimed at increasing self-esteem or peer acceptance. In an Internet survey assessing 10 motives for sex, Davis, Shaver, and Vernon (2004) extended Tracy et al.'s (2003) findings to a diverse sample of sexually active adults. Anxiously attached people were more likely to report having sex to foster closeness, gain a partner's reassurance, reduce stress, and manipulate a partner. In contrast, avoidant people were less likely to report having sex as a means of fostering closeness and gaining a partner's reassurance. Although these findings revealed which motives are not endorsed by avoidant adults, they failed to identify which motives are positively associated with avoidance and so did not reveal what motivates avoidant people to have sex.

In an attempt to fill this empirical gap, Schachner and Shaver (2004) asked a sample of young adults to complete two standard measures of sexual motivation – the Sex Motives scale (Cooper, Shapiro, & Powers, 1998) and the AMORE scale (Hill & Preston, 1996) – and found that people scoring high on avoidance endorsed more self-enhancement and self-affirmation reasons for engaging in sex. Specifically, they were more likely to have sex to fit in with their social group, to comply with peer pressure, and to be able to brag about it. In addition, replicating Davis et al.'s (2004) findings, Schachner and Shaver (2004) found that avoidant people were less likely to have sex to increase intimacy or to express affection for a partner, and attachment-anxious people were more likely to report having sex to feel loved, to avoid a partner's rejection, to feel confident and desirable, and to induce a partner to love them more.

Most of these findings were replicated in a recent longitudinal study (Cooper et al., in press) that assessed attachment orientations during adolescence and examined sexual motives 7 years later (during young adulthood). The authors also found that avoidant people's heightened endorsement of self-enhancement motives mediated their tendency to engage in casual, extra-pair sex. That is, avoidant people's desire for prestige and self-affirmation attained through sexual activities, free from any desire for intimacy, seemed to encourage promiscuous, uncommitted sex.

Overall, research findings to date suggest that the main sexual motive of anxious and avoidant people is not to enjoy sex per se, but rather to use sex as a means to meet attachment-related goals. For avoidant people, minimizing intimacy and gaining social status and power seem to be the main motives; for anxiously attached people the main motives are to allay fear of rejection and abandonment while maximizing proximity, reassurance, and love.

*Sexual self-confidence.* Attachment insecurity is also likely to erode one's confidence in one's sexual attractiveness and prowess. Higher scores on attachment anxiety and avoidance are associated with lower appraisals of ability to gratify one's sexual needs (Tracy et al., 2003), lower sexual self-esteem (Shafer, 2001), and lower self-perceptions of physical attractiveness and sensuality (Bogaert & Sadava, 2002; Shafer, 2001). In addition, Feeney et al. (2000) found that people who scored relatively high on either attachment anxiety or avoidance tended to endorse a more external sex-related locus of control, and to feel that sexual relations are controlled by the partner or situational factors. Attachment anxiety has also been associated with lower self-appraisals of ability to negotiate sexual encounters (Feeney et al., 2000), stronger concerns about sexual performance (Hazan et al., 1994), and more worries about losing sexual partners (Schachner & Shaver, 2002). Perhaps these worries explain the findings reviewed above concerning anxiously attached women's heightened sexuality as well as Davis and Vernon's (2002) finding that such women are more likely than less anxious women to have cosmetic surgery to increase their physical attractiveness.

*Sexual communication and exploration.* Research indicates that attachment anxiety and avoidance are associated with less willingness to experiment sexually within a romantic relationship (Hazan et al., 1994) and less openness in discussing contraception, safe sex, and other sexual matters with a partner (Feeney et al., 2000). These findings were conceptually replicated by Feeney, Hohaus, Noller, and Alexander (2001), who found that attachment insecurity at one point in time predicted less open sexual communication 9 months later in a sample of married couples making the transition to parenthood and in a sample of married couples without children. Feeney, Kelly, Gallois, Peterson, and Terry (1999) also found that

attachment anxiety, but not avoidance, was associated with reluctance to speak with sexual partners about AIDS-related issues. Overall, the findings support the hypothesis that attachment insecurity impairs open and relaxed patterns of sexual exploration and communication.

*Safe sex practices.* Several studies indicate that attachment anxiety interferes with safe sex. Specifically, more anxious adults have more negative beliefs about condom use (e.g., condoms are boring; they reduce intimacy), are less likely to use condoms, report a lower perceived risk of contracting AIDS, and are less willing to change their risky sexual practices (Bogaert & Sadava, 2002; Feeney et al., 1999, 2000). In addition, attachment anxiety is associated with higher rates of unplanned pregnancy among adolescent girls (Cooper et al., 1998) and, among people who are HIV-positive, with having unprotected sex (Ciesla, Roberts, & Hewitt, 2004). It therefore seems likely that anxiously attached people's desire for closeness and merger with sexual partners, or their reluctance to "turn off" their partners, causes them to risk their own and their partners' health. Interestingly, people who score high on attachment avoidance report more positive attitudes toward condoms and are more likely to use them (Feeney et al., 2000) – one case in which selfishness and willingness to forego complete intimacy may be health-promoting.

*Sexual coercion.* Attachment insecurity has been implicated in both victims' responses to sexual coercion and perpetrators' use of coercive sexual tactics. Tracy et al. (2003) and Gentzler and Kerns (2004) found that higher attachment anxiety and avoidance scores were associated with higher rates of physical coercion on the part of sexual partners and more involvement in unwanted but consensual sex. Impett and Peplau (2002) also found that women scoring high on attachment anxiety were more accepting of unwanted sex portrayed in hypothetical scenarios. These authors also found that anxiety and avoidance in sexually active women were related to different reasons, or motives, for accepting unwanted sex. Whereas anxiously attached women more often accepted unwanted sex to reduce relational conflicts and avoid rejection and abandonment, avoidant women more often had unwanted sex to avoid intimate and self-discussing discussions about relational issues. For anxious women, acceptance of unwanted sex

is another way to maintain a form of closeness and assuage fears of abandonment; for avoidant women, it is another way to avoid intimacy and self-disclosure.

Three studies have shown that both attachment anxiety and avoidance are associated, in men, with using physical force and other coercive strategies in the context of sexual relations (Smallbone & Dadds, 2000, 2001; Tracy et al., 2003). For anxious men, who have difficulty articulating their strong desires for love, attention, and reassurance (see Feeney, 1999, for a review), coercive sexual behavior may be a means to gain or regain proximity to what they perceive to be an unreliable or insufficiently responsive partner. In such cases, sexual coercion can be viewed as a dysfunctional form of “protest” behavior (Bowlby, 1969/1982) precipitated by attachment-related threats, such as interpersonal conflict and signs of rejection or betrayal. For avoidant men, sexual coercion may be another means of gratifying a need for self-affirmation, potency, and dominance. Additionally, sexual coercion may be a way to sidestep mutuality and psychological intimacy during sexual intercourse.

*Summary.* Stepping back from this broad sampling of preliminary evidence on attachment style and sexuality, we see that attachment anxiety and avoidance are both associated with theoretically predictable and coherent patterns of sexual motives, cognitions, and behaviors. Anxious individuals tend to sexualize their desire for acceptance, affection, and security, thereby assimilating sexual desire to their hunger for secure attachment. Unfortunately, this subordination of sexuality to attachment goes hand in hand with lack of sexual self-confidence, unsafe sex practices, and the use of coercion, which in turn, ironically, undermine genuine intimacy and mutuality and increase the likelihood of disappointing sexual encounters and the eventual breakup of what were hoped to be stable, mutually satisfying couple relationships. Avoidant people’s discomfort with closeness and negative models of others sometimes cause them to abstain from sexual intercourse, rely on masturbation, engage in casual, uncommitted sex, experience various forms of discomfort during sex, forego mutual sexual exploration, and seek self-enhancement or peer admiration through sex.

*Attachment, Sex, and Relationship Quality*

Beyond biasing sexual-system functioning, attachment insecurities distort the potential contribution of sexuality and sexual intercourse to relationship quality and satisfaction. Both clinical observations and empirical studies indicate that sexual dysfunctions heighten relational tensions and increase conflict; moreover, relational conflicts can interfere with sexual desire and satisfaction (see Metz & Epstein, 2002; Sprecher & Cate, 2004, for reviews). Nevertheless, the empirical findings have not always been consistent or strong, and most of the studies suffer from methodological problems (e.g., cross-sectional designs) that prevent valid assessment of the associations between sex and relationship quality (Sprecher & Cate, 2004).

Recently, Birnbaum et al. (2005) proposed that attachment anxiety moderates the bidirectional link between sexuality and relationship quality. They reasoned that, since anxiously attached people have sex to meet needs for security and affection (see our summaries, in earlier sections, of attachment-style differences in sexual motives), they are likely to rely heavily on sexual experiences when assessing relationship quality. That is, anxiously attached people are likely to equate gratifying and orgasmic sexual experiences with a sense of being loved, valued, and protected, which temporarily quells their fears of rejection, unlovability, and abandonment. By the same token, they are likely to interpret frustrating and disappointing sexual experiences as signs or portents of their partner's disapproval and revulsion, which can easily be viewed as omens of abandonment. Based on this theoretical analysis, Birnbaum et al. (2005) hypothesized that attachment anxiety would amplify the effects of sexual experiences on perceived relationship quality.

They also hypothesized that attachment anxiety would amplify the effects of positive and negative interactions with a partner on the quality of a person's sex life. This hypothesis is based on empirical findings showing that anxiously attached people's relational worries tend to be carried over into the sexual realm, eliciting doubts about sexual self-confidence and leading to conflicts, acceptance of unwanted sex, or the use of coercive tactics. As a result, positive interactions with a partner before sexual intercourse, which reduce relational worries and create a

heightened sense of felt security, are likely also to reduce *sexual* worries and tensions and increase the likelihood of sexual satisfaction. On the other hand, relational tensions and conflicts, which exacerbate an anxious person's insecurity and fear of rejection, can be expected to heighten worries during sexual activities and reduce and the person's sense of sexual satisfaction.

To test these hypotheses, Birnbaum et al. (2005) asked both members of heterosexual cohabiting couples about their attachment orientations and then asked them to complete daily diary measures of interactions with their partner and the quality of their relationship for a period of 42 consecutive days. Each time they had sex during the 42-day period, study participants were also asked to report immediately on their thoughts and feelings related to the sexual episode. Birnbaum et al. (2005) were thus able to explore whether attachment orientation moderates (a) the extent to which having sex on a given day and the quality of that sexual experience contribute to reports of relationship quality the next day (after controlling for relationship quality on the initial day), and (b) the effect of relationship quality on a given day on the likelihood of having sex the next day and on the quality of that sexual experience.

The findings supported the hypothesis that attachment anxiety would amplify the effects of sexual experiences on relationship quality: Having sex or experiencing positive feelings during sexual intercourse on one day had a significant positive effect on next-day interactions with the partner and on appraisals of relationship quality *among highly anxious persons but not among less anxious (more securely attached) persons*. The study also documented the importance of gratifying sexual experiences for dampening anxiously attached people's relational worries. The usual negative effects of attachment anxiety on daily interactions and appraisals of relationship quality were notably weakened on days following sexual activities with the partner and the experience of positive feelings during sexual intercourse.

Interestingly, although both anxious men and anxious women exhibited a strong association between daily sexual experiences and relationship quality, there were some notable gender differences. Whereas anxious women's appraisals of their interactions with their partner were mainly affected by the feelings they experienced while having sex the previous day, highly

anxious men's relational appraisals were mainly affected by the mere fact of having engaged in sexual activities. That is, for anxious men, having sex per se had a salutary effect on their assessment of the relationship. For anxious women, having sex per se was not enough to assuage relational worries; instead, the quality of their sexual experience determined their feelings about the relationship. In both cases, however, anxious people were using sexual activity (having sex at all or having a good sexual experience) as a "barometer" of relationship quality (Davis et al., 2004).

Birnbaum et al. (2005) also found that attachment anxiety amplifies the association between the quality of social interactions on one day and feelings during sexual intercourse the next day, although this effect was more pronounced for women than for men. Specifically, negative interactions on one day caused anxious women, but not their less anxious counterparts, to experience more negative feelings during sexual intercourse the next day. Interestingly, however, when anxious women had positive social interactions on one day and engaged in sexual intercourse the next day, they tended to report especially positive feelings about the sexual activity. These results are similar to findings obtained by Simpson, Rholes, Campbell, Tran, and Wilson (2003) in their studies of postpartum depression in married women. When anxious women perceived their husbands as supportive during the pregnancy, they were no more likely than less anxious women to become depressed after delivering the baby. But if they perceived their husband as unsupportive during the pregnancy, they were much more vulnerable than less anxious women to postpartum depression.

Overall, Birnbaum et al.'s (2005) findings indicate that attachment anxiety creates a stronger link between sexual experiences and relationship quality. Attachment anxious people, particularly women, seem to conflate sex and love, making it likely that feelings about sex will be translated to feelings about the relationship in general, and vice versa. At the same time, Birnbaum et al.'s (2005) findings imply that sex and other aspects of romantic love, such as attachment and caregiving, are relatively independent systems in less anxious (more secure) adults. This is consistent with Diamond's (2003) view that the processes underlying sexual desire

and affectional bonding are functionally distinct and that sexual and affectional motives and bonds are not necessarily the same.

*Resolution of the Oedipal Complex and Attainment of Mature Sexuality*

We now turn to a perhaps more surprising example of the interplay between attachment and sexuality, namely the effect of attachment style on resolution of the oedipal complex (which is thought by psychoanalysts to be part of normal development of mature sexuality). Although many psychoanalysts failed to consider the role of primary caregivers as attachment figures, they did contend that gratifying and loving interactions with primary caregivers during the first few years of life, and the consequent consolidation of “good object” representations, facilitate resolution of the oedipal complex (e.g., Klein, 1945; Lupinacci, 1998; Tognoli, 1987). In contrast, early painful experiences with primary caregivers can generate strong feelings of hostility, anger, and envy, unrealistic desires for merger and exclusivity, and reliance on archaic, schizoid-paranoid defenses (e.g., splitting, projection), which jeopardize effective handling of oedipal issues and give rise to subsequent conflicts in the sexual and romantic realms.

In a creative merger of attachment theory and other psychoanalytic writings, Eagle (1997) proposed that early experiences with responsive and supportive attachment figures and the consequent development of attachment security are likely to promote adequate resolution of the oedipal complex. In our view, attachment security is an inner resource that allows effective coping with many normative developmental transitions, including resolution of the oedipal conflict (Mikulincer & Shaver, 2005). Whereas secure children’s positive working models of others allow them to appreciate their parents’ goodwill and love despite competition with the same-sex parent and loss of an imagined exclusive relationship with the opposite-sex parent, secure children’s positive working models of self allow them to maintain a sense of self-worth and self-efficacy despite their “inferior” position in the oedipal triangle. These mental representations, combined with a sense of competence and autonomy, openness to new and challenging experiences, ability to empathize with parents’ feelings, and reliance on constructive ways of coping (Mikulincer & Shaver, 2005), facilitate a smooth transition through the oedipal

period. In other words, secure children, adolescents, and adults can integrate pre-oedipal and oedipal parental representations without feeling hostile or resentful. Moreover, they can become deeply involved with romantic partners without attempting to recreate the oedipal situation, and can direct both sexual desire and tender caregiving toward their adult romantic partners.

In contrast, negative attachment experiences in childhood and the consolidation of insecure patterns of attachment are likely to interfere with resolution of the oedipal conflict. For avoidant children, who possess negative models of primary caregivers, the oedipal triangle can further increase pre-oedipal hostility and anger, exacerbate their defensively detached stance in close relationships, and eventually extend this detachment into the sexual realm. For anxiously attached children, the oedipal triangle can be experienced as traumatic because it frustrates their infantile wish to control and merge with a primary caregiver and inflames their unmet needs for security and love. As a result, anxious children are likely to have difficulty abandoning their oedipal object, and may continue to search for a similar person in their adult romantic relationships. This in turn will perpetuate the oedipal drama and cause the anxious person to confuse sexual desire with yearning for love, acceptance, and merger. This lack of resolution of the oedipal conflict may exacerbate anxious adults' difficulties in establishing long-lasting couple relationships, their strong ambivalence toward sexuality and love, and their sexualization of the needs for security and affection.

We are currently examining some of these ideas empirically. In particular, we are exploring the extent to which unconscious activation of oedipal imagery has differential effects on secure and insecure adults' patterns of sexual and relational impulses. In an initial study, we examined the effects of subliminal exposure to an oedipal scene (an erotic picture of a nude child touching the genital area of a nude adult woman) on men's ratings of the sexual attractiveness of other women. If anxiously attached men continue to harbor oedipal remnants and express them in their sexual relationships, unconscious activation of oedipal representations should increase their sexual desire and heighten their perception of available women as attractive. This effect

should be absent in less anxious men, who might even react to oedipal representations with disgust or distaste and, as a consequence, view possible sexual partners as less attractive.

In a preliminary study, we assessed male undergraduates' attachment orientations during a class period and then invited them to participate in an experiment in which they were asked to rate the attractiveness and sexual allure of a series of women appearing in magazine advertisements. Before each rating, however, the men were exposed for 20 milliseconds (which is too brief a time to allow conscious perception) to either the oedipal picture or one of four control pictures (a nude woman, a nude child, a dressed child with a dressed woman in a non-erotic posture, a geometrical figure). The results supported our hypothesis. Men who scored high on attachment anxiety and were exposed subliminally to the oedipal picture rated the women as more attractive and more sexually arousing compared with ratings in the control conditions. In contrast, men who scored low on attachment anxiety and were exposed subliminally to the oedipal picture rated the women they were shown as less attractive and less sexually arousing compared with ratings in the control conditions. Interestingly, although the parallel results for avoidance were not statistically significant, more avoidant men reacted similarly to anxious men: They rated pictured women's attractiveness higher following subliminal exposure to the oedipal picture. These findings, though quite preliminary, are compatible with the hypothesis that attachment insecurity impedes resolution of the oedipal complex and therefore interferes with mature sexuality. The results need to be replicated, and parallel studies of women should be conducted.

Recent studies of pedophiles provide additional evidence for a link between attachment insecurity and failure to achieve mature sexuality. Six separate studies have examined differences in self-reported attachment orientation between incarcerated pedophiles and control samples of incarcerated non-sexual offenders, some of whom had engaged in violence and some who had not. Four of these studies (Lyn & Burton, 2004; Marsa et al., 2004; Sawle & Kear-Colwell, 2001; Ward, Hudson, & Marshall, 1996) found that pedophiles scored higher on attachment anxiety than other incarcerated men and were more likely to exhibit a fearful

attachment style (high anxiety combined with high avoidance). Hampering a clear conclusion on the matter, however, two other studies (Baker & Beech, 2004; Smallbourne & Dadds, 1998) found no significant difference in attachment orientation between pedophiles and other criminals. Despite the conflicting results, the preponderance of supportive evidence suggests that future studies should be conducted on links between attachment insecurity and sexual pathology.

### *Concluding Comments*

In a recent discussion of attachment-focused psychoanalytic psychotherapy, Laschinger, Purnell, Schwartz, White, and Wingfield (2004) extended Bowlby's (1973) distinction between "anger of hope" and "anger of despair" to the sexual realm. They proposed that attachment security is conducive to a "sexuality of hope," in which sexual desire provides a solid bridge between one's subjective world and a partner's subjectivity, and fosters genuine intimacy and a mutually satisfying relationship. In contrast, attachment insecurity can lead either to a sexuality of despair – "the sexuality of one whose subjectivity has been denied by past or present attachment failure, a sadomasochistic sexuality that denies the other [his or her] subjectivity" (Laschinger et al., 2004, p. 154) – or to melancholic sexuality, "an arctic wasteland, cold and devoid of relationships" (Laschinger et al., 2004, p. 156).

In this article we have summarized evidence indicating that anxiously attached adults are vulnerable to a sexuality of despair and avoidant adults are vulnerable to melancholic sexuality. In addition, new laboratory findings (Gillath & Schachner, in press) indicate that contextual priming of mental representations of attachment security fosters a sexuality of hope and creates a bridge between sexual desire and interest in a long-term relationship, even among avoidant individuals. We are therefore quite hopeful that further research on attachment and sexuality, along with the application in therapeutic venues of findings from attachment research, will result in better, more successful treatment of sexual and relational difficulties.

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