

ATTACHING MEANING TO SEX: ATTACHMENT STYLES AND POSSIBLE
MEDIATORS OF SAFE SEX BEHAVIOR

by
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ABSTRACT

DOMININC ANTONACCI: Attaching Meaning to Sex: Attachment Styles and Possible Mediators of Safe Sex Behavior

(Under the direction of Dr. Carrie V. Smith)

Attachment theory, first posited by Bowlby (1969, 1973, 1980), has been expanded and applied to many aspects of human development as well as to adult relationships. Hazan and Shaver (1987), for example, define romantic relationships as an interaction between caregiving, attachment, and sex. It would then be expected that attachment has an effect on sexual behavior, and indeed, Strachman and Impett (2009) have reported that anxious individuals are typically less likely to use condoms than avoidant individuals. This study attempted to explore the link between attachment and beliefs about sex and condom use as possible mediators for the differences seen in safe sex behavior. A one-time questionnaire assessing participants' attachment styles, perceived barriers to condom use, reasons for engaging in sexual activity, perceptions of love and sex, and feelings of detachment was administered to 196 psychology students from the University of Mississippi and the University of Houston. A series of partial correlation analyses, controlling for gender, were run to analyze the relationships between attachment and these measures. Attachment anxiety was significantly correlated to engaging in unsafe sex because of partner barriers and a lack of access to condoms. It was also correlated to engaging in sex for intimacy, as a coping strategy, to affirm their own self-worth, for status among peers, and to please their partner. Attachment avoidance predicted engaging in sex for peer status, and was negatively correlated with having sex to foster intimacy.

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Attaching Meaning to Sex: Attachment Styles and Possible Mediators of Safe Sex Behavior

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Abstract

Attachment theory, first posited by Bowlby (1969, 1973, 1980), has been expanded and applied to many aspects of human development as well as to adult relationships. Hazan and Shaver (1987), for example, define romantic relationships as an interaction between caregiving, attachment, and sex. It would then be expected that attachment has an effect on sexual behavior, and indeed, Strachman and Impett (2009) have reported that anxious individuals are typically less likely to use condoms than avoidant individuals. This study attempted to explore the link between attachment and beliefs about sex and condom use as possible mediators for the differences seen in safe sex behavior. A one-time questionnaire assessing participants' attachment styles, perceived barriers to condom use, reasons for engaging in sexual activity, perceptions of love and sex, and feelings of detachment was administered to 196 psychology students from the University of Mississippi and the University of Houston. A series of partial correlation analyses, controlling for gender, were run to analyze the relationships between attachment and these measures. Attachment anxiety was significantly correlated to engaging in unsafe sex because of partner barriers and a lack of access to condoms. It was also correlated to engaging in sex for intimacy, as a coping strategy, to affirm their own self-worth, for status among peers, and to please their partner. Attachment avoidance predicted engaging in sex for peer status, and was negatively correlated with having sex to foster intimacy.

Attaching Meaning to Sex: Attachment Styles and Possible Mediators of Safe Sex Behavior

Condom use in college students is inconsistent, with only 20% of sexually active participants in one study reporting having used condoms on every occasion of sexual intercourse (Oncale & King, 2001). A study by Lewis, Miguez-Burbano, and Malow (2009) corroborates the reports of inconsistent condom use in college aged participants, while also finding that they are likely to engage in risky sexual behavior, such as sex with multiple partners, and combining sex with drugs and alcohol. This age group is also the most at risk for sexually transmitted infections (STIs), such as syphilis, gonorrhea, and chlamydia representing half of the approximately 20 million new cases of STI's in the United States every year, according to the Centers for Disease Control and Prevention (2013). These 20 million new cases cost the U.S. 16 billion dollars in health care costs annually. With 110 million Americans currently living with an STI, a better understanding of condom use practices has clear public health benefits. In attempting to understand sexual motives, as well as condom use, many researchers have focused on attachment theory, because romantic relationships can be conceived as an interaction of attachment, caregiving, and sex (Hazan & Shaver, 1987).

Attachment theory as proposed by Bowlby in three volumes (1969, 1973, 1980) attempts to explain how infants become attached to their primary caregivers and why they become distressed upon separation. He proposed that an innate psychological need to be close to a primary caregiver, whom he called the *attachment figure*, gives the species an evolutionary advantage, by ensuring that vulnerable infants seek out proximity and security when distressed. Over time, children and adolescents gradually build up expectations about the availability and responsiveness of their attachment figures. In order to identify individual differences in attachment styles, Ainsworth, Blehar, Waters, and Wall (1978) studied infants' reactions when

they were separated and then reunited with mothers or strangers. Three attachment styles were identified and characterized by different behaviors observed in infants and their mothers. When mothers (the attachment figures) are warm and responsive to proximity-seeking behavior, secure attachment develops. Securely attached infants feel safe enough to actively explore their environment in the presence of their mother, and show distress when separated from them but are easily comforted upon reunion. When mothers are distant or unresponsive to proximity-seeking behavior, avoidant attachment is observed. Avoidant infants are detached and typically avoid close contact with their attachment figures. In response to mothers that are inconsistently responsive, infants are extremely distressed upon separation from them, but display anger or ambivalence about their return, resulting in anxious-ambivalent attachment.

Although Bowlby mostly focused on childhood attachment, he thought of it as directing relationship formation throughout an individual's lifetime (Bowlby, 1973). Hazan and Shaver (1987) supported his theory by finding that the three attachment styles seen in infancy also characterize adult relationships in roughly the same proportions. It seems obvious that "experiences with attachment figures during times of need are cognitively encoded...and stored in the form of mental representations of self and others which...provide the skeleton of a person's attachment style" and shape behavior later in life (Mikulincer & Shaver, 2007). Adult relationships meet the criteria for attachment bonds because most individuals experience a sense of connection to, and reliance on another person, just as in childhood. In adulthood, however, it is the romantic partner that becomes the primary attachment figure (Hazan & Shaver, 1987). Adults seek proximity to romantic partners, are distressed when away from them, derive security from stable relationships, and turn to partners for support in times of stress (Ainsworth, 1989;

Weiss, 1991). Thus, the discussion of attachment theory in adulthood generally occurs within the framework of romantic relationships.

Adult romantic relationships typically have a sexual component, unlike that of the infant-caregiving (Shaver & Hazan, 1988). The existence of this component has led to the conceptualization of romantic love as an integration of sexuality, caregiving, and attachment. Attachment is the most basic of the three components because it forms first and directs the formation of the other two models (Shaver, Hazan, & Bradshaw, 1988). More specifically, research has suggested that sexuality and attachment share a particularly strong connection because sexuality fulfills attachment-related needs, promoting proximity, bonding, and intimacy (Hazan & Zeifman, 1994).

Several studies have examined the interaction of attachment, caregiving, and sexuality, and have provided strong support for the existence of links among them. Davis, Shaver, and Vernon (2004) found a link between attachment insecurity and motives for engaging in sexual intercourse. Attachment anxiety was positively related to all motives for sex except for physical pleasure, while attachment avoidance was positively related to manipulative use of sex and, negatively related to emotional closeness and reassurance goals. Overall, the study found a positive relationship between anxiety and partner nurturance as a motive for sex, and a negative relationship between avoidance and partner nurturance, supporting the belief that sexual activity is a way to satisfy caregiving needs. Péloquin, Brassard, Delisle, and Bédard (2013) extended the link between attachment and sexual motives to attachment, caregiving, sexual motives, and sexual satisfaction. Specifically, it was found that individuals low in attachment avoidance were more likely to use sexuality to show love for one's partner by seeking proximity to them and by being more responsive to their emotional needs, which was related to higher sexual satisfaction.

Conversely, attachment avoidance was related to low sexual satisfaction. Individuals high in avoidant attachment were less attentive to their partner's distress, and thus less likely to view valuing one's partner as a motive for sex. However, they reported more instances of using sex to show appreciation for their partner. These seemingly contradictory results are actually consistent with attachment theory, in that avoidant individuals are too preoccupied with their own internal needs to recognize their partner's distress cues, and they are more likely to use sexuality to show love for the partner in order to ensure relationship longevity. By analyzing motives for fixing a relationship after a break-up Davis and Vernon (2000) also give support to the link between attachment and sexuality. Those high in anxiety were found to be more likely to try to reestablish the relationship and with enhanced sexual desire after a break-up, while attachment avoidance was negatively associated with attempting to fix the break-up, and not associated with sexual desire.

The above studies offer empirical evidence for the theoretical interplay among attachment, caregiving, and sexuality in defining and maintaining adult romantic relationships by showing that perceived threats to attachment needs activate sexual behaviors as means of coping. In light of the seemingly strong connection between attachment and sexuality, we would expect to see that certain sexual activities correspond to particular attachment styles, and this is indeed the case. As adolescents, securely attached individuals report fewer one night stands and fewer partners in general than their less secure counterparts (Cooper, Shaver, & Collins, 1998), are more likely to endorse relationship-enhancing motives for sexual activity, and score lower on measures of erotophobia. They also report more positive emotions and less negative emotions about sexual encounters than insecure individuals (Tracey, Shaver, Albino, & Cooper, 2003).

This behavior is consistent with the secure individuals' goals for developing long-lasting, stable, and intimate relationships identified by Mikulincer and Shaver (2003).

The broad themes that characterize the two insecure attachment styles are related to underlying behavioral systems. If partners are not seen as being readily available or responsive to one's distress, either a hyperactivation or a deactivation strategy may be employed to cope with insecurities about the relationship. In the hyperactivation strategy, an individual is doubtful of the availability of the partner in times of distress, and relies on hyperactivating behaviors believed to attract the attention of the partner. This strategy underlies attachment anxiety in romantic relationships (Mikulincer & Shaver, 2003). Anxious individuals may use sex to fulfill unmet attachment-related needs like love or emotional closeness. In adolescence, anxiously attached individuals are more likely to engage in sexual activity to avoid losing their partners (Tracey et al., 2003), which makes them more likely to engage in consensual but unwanted sexual activity because they fear rejection or disapproval (Feeney, Peterson, Gallois, & Terry, 2000). As adults, they score relatively high on measures of erotophilia, (Bogaert & Sadava, 2002) yet are more likely to experience negative emotions like disappointment and dissatisfaction during sex (Brennan, Wu, & Love, 1998). As adults, anxious individuals use sex to elicit caregiving behaviors from their partner, to satisfy emotional needs, and to achieve intimacy and reassurance (Davis et al., 2004). In a more general sense, anxiety about relationships has been found to be negatively correlated with sexual communication, meaning that highly anxious individuals are less able to discuss contraception, are more likely to be pressured into sex, and are more likely to engage in unsafe sex than those who are low in relationship anxiety.

The deactivation strategy, on the other hand, is related to attachment avoidance, and involves ignoring relational threats, and maintaining physical and emotional distance and independence (Mikulincer & Shaver, 2003). Because of this desire for physical and emotional distance, avoidant individuals may find the prospect of an emotionally intimate relationship aversive. In order to avoid such discomfort, they either avoid sexual activity altogether or engage in casual sex outside of committed relationships, because of the emotion-free nature of such activity (Gentzler & Kerns, 2004; Tracey et al., 2003). Unsurprisingly, it has been found that avoidant adolescents are relatively erotophobic, and are less likely to engage in sexual interactions than their securely attached peers. If and when these individuals do become sexually active, they are more likely to report self-enhancing motives for engaging in sexual behavior, such as losing their virginity, than they are to report relationship-enhancing motives, such as showing love for the partner (Tracey et al., 2003). They are also more accepting of and more likely to engage in casual sex compared to those high in anxiety, and have fewer sexual experiences within the contexts of a relationship than securely attached individuals. As avoidant individuals grow older, they tend to be uninterested in promoting emotional closeness through sexuality, and more concerned with using sex as a tool to control or manipulate their partners (Gentzler & Kerns, 2004). Perhaps unsurprisingly sexual passion was negatively associated with attachment avoidance (Davis et al., 2004).

Just as in general sexual behavior, research has shown very clear differences in condom use based on attachment avoidance and attachment anxiety. Strachman and Impett (2009) found that anxious attachment is correlated with less frequent condom use on a daily basis, and that relationship satisfaction is inversely correlated with condom use for individuals high in attachment anxiety, but not for those high in attachment avoidance.

Building on what is already known about the sexuality of avoidant individuals it has been proposed that these individuals use the physical barriers of condoms as an emotional barrier as well, thereby taking both physical and emotional intimacy out of the act of intercourse. The need for emotional distance is certainly supported by other research. For instance, it has been found that a romantic partner's desire for proximity or emotional engagement is a prominent concern for avoidant individuals, and that this is a primary motive for seeking sex outside of the relationship. Avoidant attachment is positively associated with extradyadic sex, perhaps because it reduces the discomfort associated with increased emotional engagement with the romantic partner (Beaulieu-Pelletiera, Philippe, Lecours, & Couture, 2011). A physical barrier may reduce such individuals' discomfort with proximity as well, thus serving the avoidant individuals' needs to distance themselves emotionally from others.

Anxious individuals may show lower likelihood to use contraception because they lack the self-efficacy to communicate with their partners effectively or because they avoid talking about it altogether to avoid conflict. Relevant to the discussion of attachment avoidance, Edwards and Barber (2010) found that rejection sensitivity is related to increased condom use compliance when there is a discrepancy between one's preferences for condom use and one's perception of their partner's condom use preference. If the desire for condom use is congruent between both partners, rejection sensitivity does not predict condom use significantly. In a more general sense, high rejection sensitivity is related to more condom use in romantic relationships. The desire to use a condom is not necessarily predictive of the frequency of condom use as seen in a study by Smith (2003) who found that one half of her participants did not use condoms despite wanting to use them. The use of direct negotiation strategies, such as threatening to withhold sex or directly asking to use protection, are predictive of condom use constancy

(Holland & French, 2012). Another study by French and Holland (2013) supported the importance of the ability to employ negotiation strategies as it was shown to mediate the relationship between condom use self-efficacy and condom use. These findings suggest that despite a desire to use condoms, without the ability to successfully talk about their use, condom use is less likely. If avoidant individuals consistently fear rejection from their attachment figures, they may see a perceived difference in the view on condom use as a potential threat. By avoiding discussion of a topic that may induce conflict, anxious individuals might be less likely to negotiate the use of a condom, which is related to infrequent condom use.

The present study is interested in explaining the differences in condom use found by Strachman and Impett (2009). In light of the body of research on both attachment theory and condom use, several hypotheses are proposed. First, if anxiously attached individuals behave consistently with their intense need for assurance, then condom barriers (any barrier, real or imagined, that may prevent condom use) will be mostly partner oriented, meaning that they will be less likely to use a condom if their partner does not want to or does not discuss the topic at all, than either secure or avoidant individuals. In their fear of rejection, and intense need to get close to the attachment figure, anxious individuals may put their health and their partner's health in jeopardy. In the case of unsafe sex for avoidant individuals, in contrast, they will be more likely to see lack of access, lack of motivation, or negative effects on sexual experience as barriers to condom use, instead of focusing on partner barriers like their anxious counterparts.

I also predict that motivation for engaging in sexual intercourse will differ between the anxious and avoidant participants, replicating and reinforcing the results found by Davis et al. (2004). Anxious individuals should be mostly concerned with reinforcing feelings of self-worth, the emotional or physical closeness of the partner, feeling more intimate with their partner, or

copied with negative feelings as reasons to engage in sex. In contrast, avoidant individuals should indicate that they are motivated by self-serving reasons, such as physical pleasure or status among peers, and should not consider intimacy a strong motivator.

Consistent with their need for emotional and psychological distance, avoidant individuals should engage in safe sex if they feel it increases feelings of detachment. Therefore, if condoms do increase feelings of detachment, those individuals that do use condoms will feel less involved with the sex act and more detached from the sexual partner. These differences would support the theory that avoidant individuals see condoms as physical and emotional barriers that allow them to fulfill physical needs while avoiding deeper relationships.

Finally, anxious individuals should perceive the link between sexuality and love differently than their avoidant counterparts, which will undoubtedly affect their sexual behavior, and may, in part, explain the differences seen between anxiety and avoidance in terms of condom use. More specifically, anxious individuals should perceive a stronger link between sex and love than the avoidant individuals since they are relying on hyperactivating strategies to fulfill attachment related needs, and because sexuality represents the fulfillment of those needs by promoting bonding, intimacy, and proximity (Hazan & Zeifman, 1994; Mikulincer & Shaver, 2003).

Method

Participants

There were 196 participants in this study; 147 women and 49 men. The average age was 20.94 (SD=6.04). The sample was 62.8 % white/non-Hispanic, 24.5 % Black/African American, 5.1 % Hispanic, 3.6 % Asian, 1.5 % Alaskan Native, 1.5 % multiracial, and 1 % other. Forty one people (20.9 % of the sample) reported never having sex. Participants were drawn from

psychology courses at the University of Mississippi and the University of Houston, and were compensated with either extra credit or research credit.

Materials

Experiences in Close Relationships-Revised (ECR-R; Fraley, Waller, & Brennan, 2000).

This scale is a revised version of the Experiences in Close Relationships Questionnaire (ECR) created by Brennan, Clark, and Shaver (1998). It is designed to assess attachment style along two dimensions: anxiety and avoidance. Each is assessed by an 18 item subscale. Participants were asked to rate the randomly presented 36 statements about their romantic relationship on a Likert Scale (1=*strongly disagree*, 7=*strongly agree*). Responses on each subscale are averaged to determine the individual's level of attachment anxiety or avoidance, with several items being reverse scored on both subscales. High attachment security can also be measured, and is represented by low scores on both anxiety and avoidance. The ECR-R, does not measure attachment security as precisely as it can measure attachment insecurity (Fraley et al., 2000) Descriptive statistics and subscale correlations appear in Table 1. A copy of the Experiences in Close Relationships-Revised Scale can be found in Appendix A.

Sexual Motivation Scale (Cooper, Shapiro, & Powers, 1998). This scale assesses the reasons that individuals decide to engage in sexual activity, consisting of six subscales that measure enhancement, intimacy, coping, self-affirmation, partner approval, and peer approval as general reasons to engage in sex. Participants are given 35 randomly-arranged items drawn from the six subscales and are asked to indicate how often they personally engage in sex for each one. The responses for were averaged for each subscale. Frequency is assessed on a 5-point scale (1=*Almost never/never*, 5=*Almost always/always*). Descriptive statistics and subscale

correlations appear in Table 2. A copy of the Sexual Motivation Scale can be found in Appendix B.

Condom Barriers Scale (CBS; St. Lawrence, Chapdelaine, Devieux, O'Bannon, Brasfield, & Eldridge, 1999). This scale was developed to identify specific reasons why people may avoid using condoms during sexual activity. Participants responded to 29 randomly presented statements that represent four main categories of condom barriers: lack of access or availability, partner barriers, a negative effect on sexual experience, and motivational barriers. Participants indicated their level of agreement to each statement as being a valid barrier to condom use in their own experience on a five point scale (1=*strongly agree*, 5=*strongly disagree*). Two versions were used, one for males and one for females, as the wording for each gender differed slightly (e.g. If I suggested a partner use a condom, he would think I am accusing him of cheating/If I suggested a partner use a condom, she would think I am accusing her of cheating). Their responses were averaged for each subscale. Descriptive statistics and correlations appear in Table 3. A copy of the Condom Barriers Scale can be found in Appendix C.

Perceptions of Love and Sex Scale (Hendrick & Hendrick, 2002). This scale is designed to measure people's beliefs about the connection between sex and love, across four different subscales. The only subscale used in the present study was the four item Sex Demonstrates Love subscale, which determines how much a participant agrees that sexual activity is an expression of love for their partner. Participants are asked to indicate their level of agreement with each statement on a Likert scale (1=*strongly disagree*, 7=*strongly agree*), with an average of 2.65 (*SD* = 1.31). ($\alpha = .72$).

Procedure

The results presented are only based off analyses of the responses to a one-time questionnaire filled out during the orientation session of a longer two week event-contingent study. Participants were recruited from SONA and directly from various psychology classes, and were told that the study was anonymous and that they would be asked to answer questions regarding their sexual attitudes and behavior. On the day of the experiment, they were separated into same sex orientation sessions, where they gave consent and sat at individual computers to complete a series of questionnaires about their beliefs about sex and contraception. The questionnaire was submitted anonymously and electronically. Participants were fully debriefed at the end of the two week study.

Results

Plan of analysis. A series of partial correlation analyses were run to analyze the relationships between attachment and the various measures. The partial correlations were used to control for gender. This was important because the females in the sample greatly outnumber the males, which may have confounded the results. One gender may desire to use condoms more often than the other in any occasion, and any of the dependent variables could vary based on gender alone. For example, Cooper et al. (1998) have found that men are more likely than women to endorse every sexual motive except for intimacy.

Condom Barriers Scale. The first hypothesis, that anxious individuals will report condom barriers as being largely partner-oriented as compared to their avoidant peers was supported. Anxious attachment and partner barriers to condom use were significantly correlated. There was also a relationship between attachment anxiety and a lack of access or availability of condoms, which was not predicted. Consistent with expectations, there was no significant connection

between avoidant individuals and partner barriers to condom use. Furthermore, no significant correlations were found between attachment avoidance and any barrier to condom use. Results are reported in Table 4

Sexual Motivation Scale. The second hypothesis, regarding the reasons that individuals engage in sexual activity was partially supported. In the case of anxiously attached individuals, anxious attachment was indeed significantly related to partner motives, affirmation motives, and coping motives for engaging in sex. Somewhat surprisingly, no significant correlation was found between anxious attachment and intimacy motives. There was also a relationship between anxious attachment and peer motives, which was not included in the hypothesis.

In contrast, it was hypothesized that avoidant individuals would engage in sexual activity for self-serving reasons such as enhancement (e.g. “Because it feels good”), and status among peers (e.g. “Because people will think less of you if you don’t have sex”), and that they will be less likely to engage in sex to foster intimacy. The hypothesis was partially supported as the study found a positive correlation with peer motives and a negative correlation with intimacy motives as predicted. However there was also a relationship with partner motives and no significant relationship between attachment avoidance and enhancement motives. Results are reported in Table 5.

Detachment. The third hypothesis predicted that avoidant individuals who practice safe sex will feel more detached from the experience than avoidant individuals who do not practice safe sex. This was measured by how likely a participant was to indicate that the item “I feel closer to my partner without a condom” on the Condom Barriers Scale was a legitimate reason for avoiding safe sex. However, no statistically significant relationship was found between the two measures.

Perceptions of Love and Sex Scale. The hypothesis that anxious individuals will connect sex with love more strongly than their avoidant peers was also supported as determined by their responses to the Perceptions of Love and Sex Scale. A relationship between anxious attachment and the “sex demonstrates love” subscale was found, but no statistically significant relationship was found between avoidant individuals and the same measure. Results are reported in Table 6.

Discussion

In contrast to avoidant individuals, anxious individuals may be more likely to practice unsafe sex because of partner barriers. This result is expected as anxious individuals are constantly concerned with avoiding conflict in a relationship. As Edwards and Barber (2010) have found, individuals high in rejection sensitivity are more likely to agree with whatever their partner’s desire is regarding safe sex, and so it may be that individuals who are sensitive to rejection by their significant other will have less self-efficacy in negotiating successfully if they desire to use contraception but their partner does not. The correlation found between attachment anxiety and lack of access to condoms as a barrier to condom use seems less surprising when the components of the access/availability barrier subscale are looked at more closely. One of the items included in this measure asked participants to respond to the statement “I would be afraid to ask my partner to use a condom” on a Likert-type scale (1 = *strongly agree* and 5 = *strongly disagree*). If such individuals are afraid of conflict and view condoms as a potentially conflicting topic, they would certainly be afraid to broach the subject, which can explain the correlation seen between them and access/availability barriers to condom use. Avoidant individuals were less concerned with partner barriers as was expected, with no significant correlation found between avoidance and any condom barrier.

Also consistent with expectations and with the findings of Davis et al. (2004), anxious individuals are more likely to engage in sexual behavior as a coping strategy, to affirm their own self-worth, to please their partner, and to increase feelings of intimacy. Avoidant individuals were found to engage in sex for peer motives and partner motives, while they were less likely to engage in sexual activity to foster intimacy. The results are unsurprising and reinforce the idea that both attachment orientations create very different attitudes for viewing the sexual act, which is the main expression of proximity-seeking behavior in adults.

Surprisingly, no correlation between detachment and condom use was found for avoidant individuals, which does not support the thought that such individuals may use condoms as emotional and physical barriers. However, as noted before, there was a negative correlation between avoidance and likelihood to engage in sex for intimacy. Perhaps, then, there is a desire for a lack of intimacy or emotional involvement in the sexual act, but that condoms are not actually seen by avoidant individuals to increase feelings of detachment or emotional distance. They may seek to avoid emotional attachment through other means.

The finding that anxious individuals are likely to equate sex with love is significant, in that it demonstrates an important difference between their attitudes towards sex and avoidant individuals' attitudes towards sex, which may help explain their differences in behavior. With sexuality being perceived as a demonstration of love for the partner, it is not surprising that condom use would be less likely for these individuals, as studies have shown that higher levels of love, longer relationships, and greater commitment to those relationships are associated with less condom use (Civic, 1999). Another study found that while 50% of the sample of young adults used condoms for casual hookups, only 20% used condoms in the context of a romantic relationship (Gebhardt, Kuyper, & Greunsven, 2003).

Limitations to this study include the distribution of gender within the sample. Although there were a large number of respondents, there were many more women than men, which necessitated the need to control for gender with partial correlation analyses. Because the sample did not match the equal gender distribution of the general population and because it consisted of mostly college aged individuals, the results may not be generalizable to the general public. It is unclear whether or not youth and gender may have implications for certain perceptions of sexuality or condom use that do not reflect differences caused by attachment. Also, I only looked at responses to a one-time questionnaire, but analysis of attitudes and emotions reported directly after sexual acts could reveal many significant differences between avoidant and anxious individuals. Feelings of detachment from or connection to the partner or the act could be especially informative because anxious and avoidant individuals are preoccupied with either strengthening relationships or maintaining a distance from them, respectively. If safe sex or a lack thereof is seen to help them achieve these goals, it may definitively explain why the differences in safe sex exist. Lastly, the study done by Strachman and Impett (2009) focused on condom use in dating relationships, while this study looked at both single and dating participants, which could have possibly affected the results, as dating partners use condoms less frequently than casual sexual partners (Civic, 1999, Gebhardt, et al., 2003).

Further research could concentrate in measuring feelings of detachment in avoidant individuals after sexual activity, looking at the difference between those that used condoms and those that did not use condoms for any of their sexual acts. Also, an analysis of the sexual and emotional satisfaction of avoidant individuals after engaging in safe or unsafe sex might shed light on whether or not a condom increases emotional satisfaction for these individuals by decreasing feelings of emotional involvement. This study did not differentiate between sexual

activity with a stranger or with a romantic partner, and further research could analyze condom use within these two different contexts to look for differences in the perception or behavior regarding contraception between two very different situations. The differences that were found in the ways participants responded to the condom barriers scale and perceptions of sex and love should be correlated directly with condom use to determine if such beliefs do indeed predict actual safe sex behavior in a statistically significant way.

The present study was run in an attempt to explain the differences in condom use found by Strachman and Impett (2009), by focusing on the differences in perception of condom use and sexuality between anxious and avoidant. It appears that differences in safe sex behavior can begin to be explained by looking at the differences between attachment anxiety and avoidance in the way they perceive condom barriers. Anxious individuals perceive their partner's lack of desire for safe sex as a strong barrier to condom use, while their avoidant peers do not share this view. This may begin to explain why anxious individuals engage in safe sex less often than their avoidant counterparts. It has been found that such individuals constantly fear rejection from their attachment figures, and that those high in rejection sensitivity are more likely to comply with the desires of their partner regarding condom use (Edwards & Barber, 2010). Furthermore, if anxious individuals see condoms as a potential point of conflict, they are less likely to want to discuss the issue, and an inability to discuss condom use predicts less condom use despite any desire to practice safe sex (French & Holland, 2013). Also relevant to understanding safe sex behavior for anxiously attached people is these individuals' perception about the connection between love and sex. According to their responses to the Perceptions of Love and Sex Scale items, such participants see sexual activity as a demonstration of their love for the partner. Because of this, many anxious individuals may wait until they are in a long term romantic

relationship before having sex. This would also explain their lack of condom use because safe sex is less likely to occur in a romantic context than in a casual sexual relationship or a one night stand scenario (Grebhardt et al., 2003). With avoidant individuals more likely to engage in casual sexual relationships (Gentzler & Kerns, 2004), it is not surprising that they use condoms more often than individuals high in attachment anxiety (Strachman & Impett, 2009). By focusing on the differences in beliefs found in this study, safe sex behavior can begin to be understood. They should be looked at in the future to determine if any correlation exists between condom nonuse and partner oriented condom barriers or a strong belief that sex is an expression of love.

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Table 1 *Descriptive Statistics and Correlations for the ECR-R Subscales*

Subscales	Descriptives			Correlations	
	α	M	SD	1	2
1. Anxious Attachment	.93	3.14	1.32	1	.39
2. Avoidant Attachment	.92	2.66	1.17	.39	1

Note. * $p < .05$, ** $p < .01$

Table 2 *Descriptive Statistics and Correlations for the Sexual Motivation Subscales*

Subscales	Descriptives			Correlations					
	α	M	SD	1	2	3	4	5	6
1. Coping	.82	2.31	1.00	—	—	—	—	—	—
2. Affirmation	.87	2.56	1.13	.67**	—	—	—	—	—
3. Intimacy	.90	3.90	1.03	.29**	.31**	—	—	—	—
4. Peer Approval	.92	1.28	0.62	.35**	.41**	.00	—	—	—
5. Partner Approval	.88	1.52	0.85	.42**	.46**	.09	.62**	—	—
6. Enhancement	.89	4.10	0.97	.35**	.40**	.44**	-.02	.02	—

Note. * $p < .05$, ** $p < .01$

Table 3 *Descriptive Statistics and Correlations for the Condom Barriers Subscales*

Subscales	Descriptives						Correlations			
	Male			Female			1	2	3	4
	α	M	SD	α	M	SD				
1. Access/availability	.60	0.34	0.69	.65	0.98	0.80	—	—	—	—
2. Partner Barriers	.86	0.28	0.58	.89	0.87	0.80	.42**	—	—	—
3. Effect on Sexual Experience	.90	0.59	1.28	.92	1.60	1.53	.26**	.41**	—	—
4. Motivational Barriers	.81	0.42	0.91	.76	1.24	1.17	.39**	.48**	.62**	—

Note. * $p < .05$, ** $p < .01$

Table 4 *Partial Correlations Between Attachment and Condom Barrier Subscales*

Measure	1	2	3	4	5	6
1. Avoidance Attachment	—	—	—	—	—	—
2. Anxiety Attachment	.37**	—	—	—	—	—
3. Access/Availability Barriers	.11	.32**	—	—	—	—
4. Partner Barriers	.15	.22**	.44**	—	—	—
5. Motivational Barriers	.57	.14	.37**	.47**	—	—
6. Sexual Experience Barriers	.29	.15	.22**	.42**	.62**	—

Note. * $p < .05$, ** $p < .01$

Table 5 *Partial Correlations between Attachment and Sexual Motivation Subscales*

Measure	1	2	3	4	5	6	7
1. Avoidance Attachment	—	—	—	—	—	—	—
2. Anxiety Attachment	.41**	—	—	—	—	—	—
3. Coping Motives	.02	.31**	—	—	—	—	—
4. Affirmation Motives	.07	.36**	.68**	—	—	—	—
5. Intimacy Motives	-.25**	.14	.29**	.36**	—	—	—
6. Peer Motives	.21**	.26**	.35**	.37**	.05	—	—
7. Partner Motives	.35**	.44**	.41**	.45**	.11	.63**	—
8. Enhancement Motives	.01	.01	.36**	.43**	.45**	.05	—

Note. * $p < .05$, ** $p < .01$

Table 6 *Partial Correlations between Attachment and Perceptions of Love and Sex Scale*

Measure	1	2	3
1. Avoidance Attachment	—	—	—
2. Anxiety Attachment	.39**	—	—
3. Sex Demonstrates Love	-.07	.16*	—

Note. * $p < .05$, ** $p < .01$

Appendix A *Experiences in Close Relationships-Revised (Fraley, Waller, & Brennan, 2000)*

Below is a list of statements designed to ascertain how you feel in your relationships generally. For each statement, please write the number that most corresponds to how you feel for each of the 36 statements.

1	2	3	4	5	6	7
Strongly disagree						Strongly agree

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me.
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.
19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on romantic partners.
22. I am very comfortable being close to romantic partners.
23. I don't feel comfortable opening up to romantic partners.
24. I prefer not to be too close to romantic partners.
25. I get uncomfortable when a romantic partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my romantic partner in times of need.
30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on romantic partners.

Appendix A *Experiences in Close Relationships-Revised* (Fraley, Waller, & Brennan, 2000)
(continued)

- 34. I find it easy to depend on romantic partners.
- 35. It's easy for me to be affectionate with my partner.
- 36. My partner really understands me and my needs.

Appendix B *Sexual Motivation Scale (Cooper, Shapiro, & Powers, 1998)*

Listed below are different reasons why people engage in physically intimate or sexual activities. For each statement, select the response that best describes how often you personally have physical intimacy/sexual activity for each of these reasons.

1	2	3	4	5
Almost never/never				Almost always/always

1. To cope with being upset
2. To prove attractiveness
3. To deal with disappointment
4. To be more intimate with the partner
5. Because I worry people will talk about you if you don't have sex
6. To feel better when lonely
7. To express love
8. Because I fear partner won't love me if I don't
9. Because I feel horny
10. Because it makes me feel better when low
11. Because people will think less of you if you don't have sex
12. Because it feels good
13. Because my partner will be angry if I don't
14. For excitement
15. Because others will kid you if you don't
16. To make an emotional connection
17. Because my friends are doing it
18. For the thrill of it
19. To be closer to my partner
20. To feel better about myself
21. To feel more interesting
22. To feel emotionally closer
23. To feel more self-confident
24. To satisfy my sexual needs
25. To reassure myself of my desirability
26. Because I worry my partner won't want me if I don't
27. So others won't put me down
28. Because I am afraid my partner will leave if I don't
29. To cheer myself up
30. Because I like the way it feels
31. Because sex is a part of who I am
32. Because the experience is enjoyable
33. To avoid upsetting my partner
34. Because it is something that I think is important to who I am
35. Because I want to experience new things

Appendix C Condom Barriers Scale (St. Lawrence et al., 1999)

There are lots of reasons why people may not use condoms when they have sex. Please rate your agreement with the following reasons why you might not use condoms when having sex. There are no right or wrong answers - just indicate how much you agree or disagree with each statement.

1	2	3	4	5
Strongly agree				Strongly disagree

Access/Availability

1. I don't have transportation to buy or get condoms.
2. It is up to the man to provide a condom.
3. Condoms cost too much.
4. Condoms are against my religious values.
5. I would be embarrassed to buy condoms or ask for them.
6. I wouldn't know where to get a condom.
7. I would be afraid to ask my partner to use a condom.
8. I can never find a condom right before sexual intercourse.

Partner Barriers

9. If I suggested a partner use a condom, he would think that I don't trust him.
10. If I asked a partner to use a condom, he might get angry.
11. If I suggested a partner use a condom, he might think I am putting him down.
12. If I suggested a partner use a condom, he might be turned off/lose his erection.
13. If I suggested a partner use a condom, he would think I am accusing him of cheating.
14. My partner won't use a condom.
15. If I suggested a partner use a condom, he might end the relationship.
16. If I asked a partner to use a condom, he might think I am cheating on him.

Effect on Sexual Experience

17. Condoms feel unnatural.
18. Condoms interrupt the mood.
19. Condoms don't feel good.
20. Condoms change the climax or orgasm.
21. Condoms rub and cause irritation.
22. Condoms don't fit right.
23. I feel closer to my partner without a condom.

Motivational Barriers

24. I usually forget about using condoms.
25. I don't want to put a condom on my partner.
26. I don't need to use a condom. I never get anything.
27. I don't need to use a condom. I use another method.

Appendix C *Condom Barriers Scale (St. Lawrence et al., 1999) (continued)*

- 28. When I use a condom, I feel less involved or committed to the relationship.
- 29. Most of the time, neither of us has a condom available.