

WOMEN'S SEXUAL SATISFACTION, COMMITMENT, AND ATTACHMENT:  
EXPLORING THE CONNECTIONS THROUGH THE USE OF  
PRO-RELATIONSHIP SEXUAL BEHAVIORS

A Dissertation by

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## DEDICATION

To my husband, my daughter, my parents, my grandparents, and my siblings

“What stimulates a person bears an intimate connection to the transactions of childhood.  
The way a parent handles emotional attachment and separation will affect what  
turns a person on and off later in life.”  
Avodah Offit, 1977

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## ABSTRACT

The goal of this dissertation was to examine the associations between commitment, sexual satisfaction, and attachment in women and to explore the mechanisms by which commitment is associated with sexual satisfaction. This study expanded on previous research to determine whether three pro-relationship sexual behaviors (disclosure of own needs, motivation to satisfy partner, and emotional bond experienced after sex) mediated the association between commitment and sexual satisfaction for securely and insecurely attached women. Based on the literature, it was expected that the three pro-sexual relationship behaviors would mediate the relationship between commitment and sexual satisfaction for the securely attached individuals, but not for the insecurely attached individuals.

A convenience sample was collected, consisting of 307 undergraduate students. All participants were heterosexual women who had been sexually involved with a primary partner for at least six months. Participants completed a survey that included the following measures: Rusbult et al's (1998) relationship satisfaction scale, The Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1992), Rusbult et al's (1998) commitment scale, Experiences in Close Relationships- Revised Adult Attachment Questionnaire (ECR-R; Fraley, Waller, & Brennan, 2000), and Pearson's (2007) Pro-Relationship Sexual Behaviors scales of disclosure, motivation for partner, and emotional bond.

There was a statistically significant correlation between sexual satisfaction and relationship satisfaction ( $r=.53$ ) and between sexual satisfaction and commitment ( $r=.32$ ). Commitment was significantly correlated with emotional bond ( $r(307) = .47$ ) and motivation ( $r(307) = .34$ ), but not with disclosure. The three pro-relationship sexual behavior scales were also correlated with one another. These results indicate that women who reported being more

committed in their relationship also reported an increased motivation to satisfy their partner and an emotional bond.

Although the correlation coefficients indicated a significant relationship between the variables tested, path analysis revealed that shared variance was accounting for these relationships. Commitment was not predicative of disclosure and motivation was not related to sexual satisfaction. Emotional connection did mediate the relationship between commitment and sexual satisfaction. Commitment predicted a significant amount of sexual satisfaction variance ( $r^2=.10$ ). When sexual satisfaction was regressed on emotional bond scores, 32% of the variance in sexual satisfaction was accounted for. When sexual satisfaction was regressed on total emotional bond score and total commitment score, the beta associated with emotional bond was .538 ( $p<.01$ ), while the beta associated with commitment was .066 ( $p= .220$ ). As the beta associated with commitment was not significant, the relationship between commitment and sexual satisfaction was mediated by emotional bond.

Sexual satisfaction was significantly negatively correlated with anxiety ( $r(307)=-.34$ ) and avoidance ( $r(307)=-.45$ ). Commitment was significantly negatively correlated with both attachment anxiety ( $r=-.30, p<.01$ ) and avoidance ( $r=-.60, p<.01$ ). These results indicate that if females report higher levels of anxious and/or avoidant attachment, they reported lower levels of commitment.

Path analysis was performed to contrast the path models for the secure and insecure attachment styles. Both models indicate that emotional connection mediates the relationship between commitment and sexual satisfaction, regardless of attachment style. Therefore, it appears that attachment does not mediate the relationship between sexual satisfaction and commitment.

This research is important in treatment of sexual difficulties. Commitment is important to sexual satisfaction; emotional connection is especially important for sexual functioning. Activities that increase emotional connection may enhance sexual satisfaction. This research provides support for examining emotional connection within a therapy context.

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## CHAPTER I

### INTRODUCTION

The goal of this study was to assess the extent to which the quality and nature of women's relationships are associated with the degree to which women experience sexual satisfaction. In this paper I have described the importance of relationship variables with regard to women's sexual satisfaction. The purpose of the proposed study was to test several hypotheses: 1) women's sexual satisfaction would be positively correlated with relationship satisfaction; 2) commitment would be positively correlated with sexual satisfaction; 3) the three pro-relationship sexual behaviors of disclosure of own needs, motivation to satisfy partner, and experience of emotional bond as a result of sex would mediate the relationship between commitment and sexual satisfaction; and d) attachment style would be associated with commitment and sexual satisfaction. It was hoped that this study would be of general interest to relationship researchers and individuals studying sexual satisfaction and to clinicians regarding the assessment and treatment of sexual concerns.

#### Sexual Satisfaction

Sexual satisfaction involves numerous components for women, and differs for each individual (Bancroft, Loftus, & Long, 2003). The components can even differ within an individual, depending on the circumstances and their partner (Peplau and Garnets, 2000). While the physical components of sexual satisfaction have long been examined, new research indicates that relationship variables can have a strong impact on sexual satisfaction for women (Bancroft, Loftus, & Long, 2003). The goal of this study was to provide empirical evidence that women's

sexual experiences in specific relationships are strongly associated with their feelings about those relationships.

Physiologically women experience an orgasm when the smooth muscles of the labia and clitoris relax. Blood flows to the vagina and the clitoris and muscle spasms occur. The vagina may also produce lubrication. The entire process is triggered by nerves in the brain that send messages to the vagina. So even though the evidence of an orgasm is often seen (and experienced) in the genital areas, the brain is also considered a sex organ (Bancroft, 2001). The degree of intensity differs for each woman and there are no specified requirements for an orgasm to occur. But orgasm is neither a necessary nor a sufficient condition of women's sexual satisfaction.

According to the 1999 National Health and Social Life Survey, forty-three percent of women have had problems in their sex lives at one time (Laumann, Paik, & Rosen, 1999). As many as four in 10 American women experience some sort of sexual dissatisfaction in their lifetime (Leland, 2000). Sexual difficulties occur in women of all age ranges and all ethnic backgrounds (Roosari, 2001). Women experience problems with sexual functioning more frequently than men (Roosari) and 4 out of 10 women experience a re-occurring sexual problem.

The DSM-IV-TR describes conditions in which a sexual problem or difficulty can be diagnosed. This classification system follows the triphasic model of sexual response originally developed by Masters and Johnson (1966) and continued by Kaplan (1979), which describes sexual response through the stages of arousal to desire to orgasm. The DSM-IV contains qualifications for various female sexual dysfunctions (FSD) that may occur at any point in the triphasic model. The four most commonly diagnosed dysfunctions are: (a) desire disorder, which occurs with reduced libido; (b) arousal disorder, which includes lack of lubrication and genital

sensation; (c) orgasmic disorder, signaled by a woman having difficulty achieving orgasm; and (d) pain disorder, which occurs when penetration is painful (American Psychiatric Association, 1994).

Professionals who oppose the DSM-IV model of diagnosing FSD point out that the diagnostic criteria do not include relational factors for sexual problems. The DSM-IV relies on measures of arousal, vaginal lubrication, and orgasm as symptoms of female sexual dysfunction. Tiefer (2001) suggests that these diagnoses are flawed since these techniques focus on biological concerns, ignoring crucial emotional information in the definitions of female sexual problems. “The DSM assumes that if the parts work, there is no problem,” (Peplau & Garnets, 2000, p. 332). But many women care less about physical than subjective arousal and women’s complaints frequently focus on difficulties that are not included in the DSM-IV classifications (Peplau & Garnets). Relational difficulties are not currently used as symptomatic criteria, yet many women have sexual difficulties due to relationship issues such as lack of intimacy and fear of losing or angering their partner (Peplau & Garnets, 2000). Doctors assume they can diagnose and treat sexual problems without regard to the relationships in which it occurs (Peplau & Garnets). Leiblum stated that the current classification is a “failure to identify or recognize the emotional and interpersonal aspects of sexual exchange, aspects that tend to be more important to women typically.” This subjective classification “includes behaviors that are usually felt rather than seen and are nonverbal rather than verbal,” (Leiblum, 2001, 160).

## Importance of Relational Components

There is now great disagreement within the field of sexuality about the relative importance of relational components when examining sexual satisfaction. Many women describe satisfaction in terms of the physical benefits, such as orgasm, while other women also describe intrapersonal and interpersonal benefits (Byers, 2001). Benefits such as self-exploration, experimentation, and spending time with a partner have been cited as reasons for engaging in sexual activity (Bancroft, 2001). Difficulties within the relationship, such as arguing, abuse, feelings of inadequacy, lack of trust, poor communication, and differences in sexual needs/desires and timing can contribute to sexual problems (Ducharem, 2004). Protective factors that enhance sexual functioning include adequate sexual education, positive self-esteem, positive sexual experiences, ability to communicate with partner regarding sexual desires and concerns, ability to relax, permission to sexually experiment, and confidentiality (Tiefer, 2001). While there are many factors that influence sexual functioning, this study will focus on the relational components.

In a study by Young, Raffy, Denny, & Young (2000), “overall satisfaction with the relationship” had the highest correlation with sexual satisfaction, followed by “satisfaction with non-sexual aspects of the relationship.” Couples who report high overall satisfaction with their relationship report more satisfying sexual relationships (Hulbert & Apt, 1994). In a 2001 study conducted by Byers (2001), results again show that relationship satisfaction is closely linked to sexual satisfaction. Sexual satisfaction also enhances relationship satisfaction and a circular feedback loop influences both components of satisfaction (Oggins, Leber, & Veroff, 1993). Frank, Anderson, & Rubenstein (1979) indicated that the level of sexual satisfaction was related to the overall quality of the relationship and to the existence of a close personal relationship with

one's sexual partner. Characteristics indicative of the quality of the relationship (intimacy, amount of physical affection, love, and relationship satisfaction) were related to level of sexual satisfaction. Sprecher (2002) indicated that the partners' sexual satisfaction was correlated positively and significantly with their relationship satisfaction, love for partner, and commitment to the relationship.

This new research on the importance of relationships in women's sexual functioning is changing the way many experts view sexuality. Bancroft, Loftus, and Long, (2003) reported that relationship and environmental factors influence sexual satisfaction for women more so than men and suggest that researchers take contextual factors into account when working with women. Researchers who were once examining the path of an orgasm from the brain to the genitalia are now examining the effects of love on the structure and corresponding chemicals of the brain. Pharmaceutical companies that have spent billions of dollars trying to create a female version of Viagra are now abandoning their hormone replacement trials in favor of patches that claim to make females "feel closer to their partner."

The importance of relationships is also applicable to those who treat female sexual concerns. Tiefer (2001) has suggested that the DMS-IV-TR diagnosis be revised to include the aspects of the environment and relationship on women's sexual functioning. A group of sexuality researchers and clinicians have also formed a new set of diagnosis criteria called The New View to treat female sexual concerns. So although the physical benefits of sexual activity are still important to female sexual satisfaction, we are discovering that sexual pleasure is made up of more than just blood flow.

### Rusbult's Interdependence Theory

Rusbult's investment and interdependence theory of relationships provides a conceptual framework for articulating and testing the association between relationship variables and women's sexual satisfaction. According to this model (Rusbult, 1983), level of satisfaction, quality of alternatives, and the amount of investment predicts the level of commitment in a relationship. Of primary interest here are the variables of satisfaction ("to what degree are you satisfied with your relationship"), and commitment ("how long do you want your relationship to last") as this model will be used to explain the link between sexual satisfaction and commitment. In summary, the level of commitment a person has to a relationship increases when he or she is satisfied with the relationship, available alternatives are less attractive than the current relationship, and he or she has invested in the relationship.

Rusbult went on to describe how commitment and relationship satisfaction are linked through the use of pro-social behaviors. Interdependence occurs when partners are in a close relationship and their outcomes are dependent on what both people do. Therefore, each person's outcome is influenced by the actions of his or her partner as well as his or her own actions. The closer the relationship, the more both people are affected by each other's actions. The structure of the relationship can transform from self-interest as the primary motivation to a state where both partners work together to achieve goals. Transformed motives involve a change from being self-interested and focused on short-term pay-offs to being more concerned for partner's needs and the long-term effect on the relationship. Behaviors in the transformed structure involve increased tendencies to engage in pro-social behaviors such as rejecting alternative temptations, willingness to sacrifice for the relationship, and accommodation instead of retaliation when the partner offends (Rusbult and Martz, 1995). These relationship maintenance acts strengthen the

relationship and provide an opportunity to demonstrate that individuals are committed and ready to sacrifice. This perceived trust leads to more dependence and the possibility for mutual cyclic growth as both partners maximize their joint outcomes when they cooperate with one another (Rusbult, Kumashiro, Coolsen, & Kirchner, 2004).

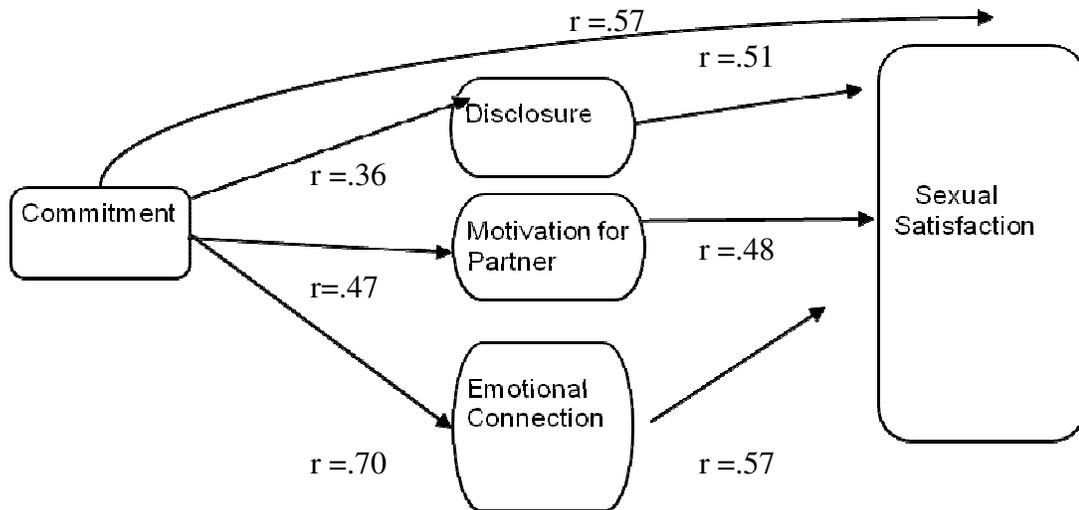
### Sexual Satisfaction and Rusbult's Investment Model

Rusbult's model can also be used to describe how commitment is associated with sexual satisfaction. Within the domain of sexuality, there are parallels to willingness to sacrifice and accommodation in terms of pro-relationship sexual behaviors. In my 2<sup>nd</sup> year project (Pearson, 2007), I identified and operationalized three pro-relationship sexual behaviors analogous to Rusbult's pro-social behaviors. These were the pro-relationship sexual behaviors of disclosure of own needs, motivation to satisfy partner, and emotional connection during sex. Pro-relationship sexual behaviors are an aspect of relationships that other researchers have speculated contribute to sexual satisfaction. However, pro-relationship sexual behaviors had not previously been operationalized and included in models of sexual satisfaction. Pearson's was the first study to measure pro-relationship sexual behaviors in an attempt to explain the link between commitment and sexual satisfaction.

As illustrated in Figure 1, there was a statistically significant correlation between sexual satisfaction and relationship satisfaction ( $r=.70$ ,  $p <.01$ ) and between sexual satisfaction and commitment ( $r=.57$ ,  $p <.01$ ). As expected, participants' relationship satisfaction and level of commitment to the relationship were significantly associated with their self-reported sexual satisfaction, replicating previous research (Byers, 1999). There was also a significant positive correlation between commitment and the three pro-relationship sexual behaviors, supporting the idea that commitment is linked to the three pro-relationship sexual behaviors. Commitment was

most highly correlated with emotional bond ( $r(100)=.70, p < .01$ ), followed by motivation to satisfy partner ( $r(100)=.47, p < .01$ ), and disclosure ( $r(100)=.36, p < .01$ ). The three pro-relationship sexual behavior scales were also significantly correlated with one another. These results indicate that women who reported being more committed in their relationship also reported an increased use of the three pro-relationship sexual behaviors.

Figure 1  
*Commitment, Pro-Relationship Sexual Behaviors, and Sexual Satisfaction*



Commitment accounted for a significant proportion of the variance in sexual satisfaction (34%). Additionally, when sexual satisfaction was first regressed onto the three pro-relationship variables, 44% of the variance in sexual satisfaction was accounted for. When commitment was entered as an additional explanatory variable, only an additional 4% of variance was explained. Thus, the three pro-relationship variables mediated almost all of the variance for which commitment accounted with regard to sexual satisfaction. The findings suggest that the three

pro-relationship sexual behaviors are the pathways through which commitment enhances sexual satisfaction. It is likely that as the pro-relationship sexual behaviors enhance sexual satisfaction, a feedback loop develops, reinforcing commitment.

One purpose of the current study was to replicate these earlier findings. A second purpose was to test whether there is an association between attachment variables and both commitment and sexual satisfaction. Through the lens of attachment, participants' use of pro-relationship sexual behaviors will be explored along with their association with sexual satisfaction. This study explored the associations between attachment anxiety and avoidance with relationship commitment and sexual satisfaction.

## Attachment

All individuals have a need for connection, comfort, and caring (Schachner, Shaver, & Mikulincer, 2003). Attachment is the emotional bond with caregivers and children develop an attachment to the primary caregiver by 8 to 9 months of age. Attachment bonds are the result of successful and unsuccessful bids for and response to bids for affection. Attachment relationships establish expectations of how reliably and sensitively another will respond to one's needs and how worthy the individual feels of such responses.

### Attachment Styles

Bowlby (1982, 1989) developed the major themes of attachment theory in his examination of how a child seeks a caregiver when distressed. Mary Ainsworth (1979) continued Bowlby's research and developed the concept of a "secure base." With a successful attachment relationship, the child uses the caregiver as a secure base, exploring new settings while maintaining contact with the caregiver (Bowlby, 1988). Ainsworth examined children's

proximity and contact seeking behaviors in the Strange Situation experiment. She identified four distinct types of attachment styles: secure, insecure avoidant (indifferent), insecure anxious-ambivalent (angry), and insecure disorganized (bizarre). Attachment security derives from appraisals of availability in current attachment relationships. If the individual perceives that their caregiver is accessible and responsive, then secure bonds are built. These secure bonds allow the individual to express feelings while keeping safe (Johnson, 2004). Secure attachment involves a sense of safety, as a secure connection with a caregiver offers a safe haven and a secure base (Johnson, 2004). Secure attachment contributes to positive expectations regarding trust, closeness, and dependency on relationships (Bowlby, 1982).

Insecure attachment involves the absence of safety and consistent, sensitive caregiver responses. As a result of the unavailability of the caregiver, insecure individuals may see others as undependable and rejecting. These individuals may also feel unworthy of such support. Insecurely attached individuals can react in three ways: anxious (clingy and consistently needing support), avoidant (distant and withdrawn), or disorganized (exhibiting both clingy and withdrawn behaviors).

### Working Models

Through the process of attachment, the infant develops an internal working model as he or she incorporates the attachment figure into their own self-identity (Bowlby, 1988). This cognitive component of attachment creates expectations about interactions with others, especially with individuals a person becomes attached to. Expectations include how reliably and sensitively another will respond to one's needs and how worthy the individual feels of such responses (Schachner, Shaver, & Mikulincer, 2003). The working model becomes a part of the child's personality and extends into their expectations of future interactions with others (Bowlby,

1988). “Working models become so deeply ingrained that they influence feelings, thought and behavior unconsciously and automatically” (Belsky & Cassidy, 1994, p. 379). These models include one’s view about a partner’s availability and one’s belief of how much love one deserves (Timm, 1999). These expectations affect an individual’s degree of comfort with intimacy and ability to depend on others and change with attachment relevant interactions (Johnson, 2004). Attachment security has been linked to a more positive working model of sexuality (Timm, 1999) and more sexual satisfaction.

### Hierarchies

Children develop connections with many individuals (i.e. parents, grandparents, day care providers); however, there is typically a single caregiver whom the child prefers. Ainsworth’s later research included an examination of multiple attachments and discovered that a child may connect differently with each of these caregivers and display a variety of attachment styles. The amount of time the child spends alone and the number of adults who care for the child may have an effect on the number of people to whom a child forms an attachment (Belsky & Cassidy, 1994). The child’s attachment to the primary figure is most predictive of the child’s development and becomes the child’s default attachment style. If the child has a well-established attachment to the primary figure, having multiple caregivers usually results in the child having multiple attachment figures. This hierarchy of attachment relationships continues into adulthood as individuals establish a general default attachment style, with a specific attachment for each relationship (Schachner, Shaver, & Mikulincer, 2003).

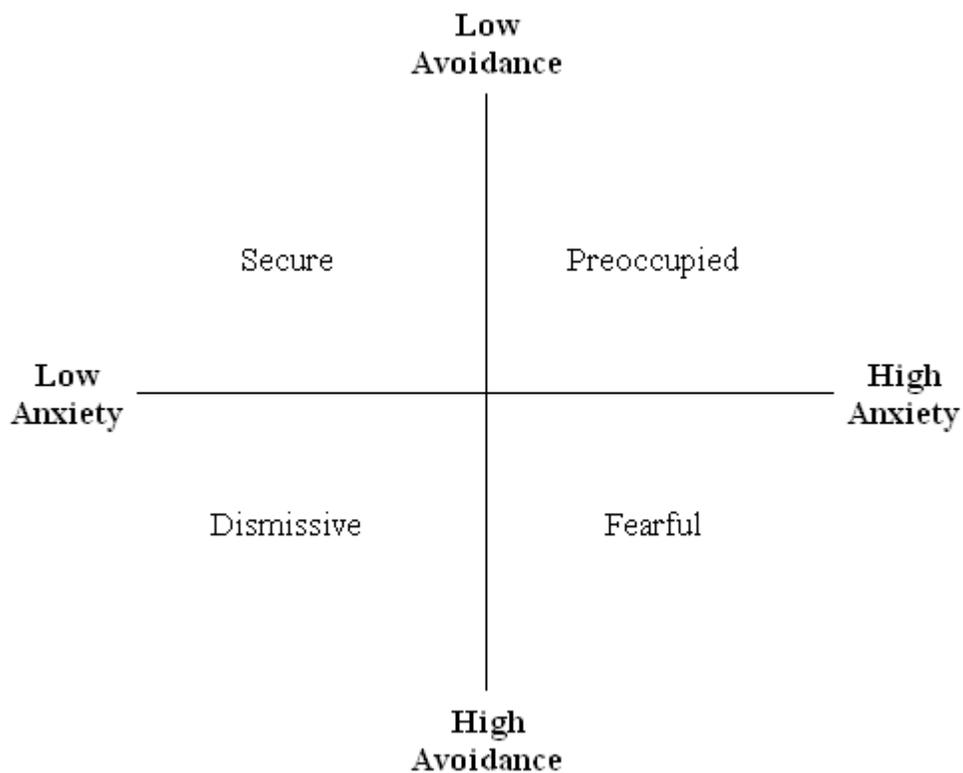
Early research on adult attachment styles measured Hazan and Shaver’s (1987) typologies of secure, anxious, and avoidant. Bartholomew and Horowitz (1991) added a fourth style of attachment that they labeled fearful attachment. Individuals with fearful attachment want

close relationships, yet find it difficult to depend on others. Another important advance in the development of attachment questionnaires was the development of questionnaire items that can be grouped into scales that measure two dimensions of attachment- anxiety and avoidance. Scores on the anxiety and avoidance scales are used to classify people into the four adult attachment styles (see Figure 2). Combinations of anxiety and avoidance can be used to define the four attachment styles: secure (low anxiety and avoidance), preoccupied (high anxiety and low avoidance), dismissive (low anxiety and high avoidance), and fearful (high anxiety and high avoidance) (Bartholomew, 1990).

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Figure 2  
*Translation of Attachment Anxiety and Avoidance Scales into Typologies*

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Fraley and Waller (1998) illustrated that the use of these dimensional scales result in a more accurate measure of adult attachment than the use of the typologies (Hazan and Shaver, 1987). The Experiences in Close Relationships- Revised (ECR-R) questionnaire (Fraley, Waller, and Brennan, 2000) will be used to measure Attachment Anxiety and Avoidant Attachment as this instrument is used to specifically assess intimate partner relationships. The instrument measures individuals' default attachment styles for romantic relationships as participants report how they *generally* experience emotionally intimate relationships. This measure yields scores on anxiety and avoidance that can also be used to classify participants into the four attachment styles.

### Sexuality and Attachment

Bowlby considered sexual activity one of the three inborn behavioral systems along with attachment and caregiving. Attachment affects sexuality in romantic relationships through support, intimacy, conflict resolution, and communication (Cobb et al., 2001). Cobb et al. examined the close connection between attachment styles and sexual systems and discovered that attachment may affect how individuals view their own sexual identity and their motivation to have sex. Studies indicate that secure individuals associate sex with trust, happiness, and friendship. These individuals are motivated to engage in sexual activity for mutual intimacy and pleasure. These studies suggest that individuals are confident during sexual experiences and experience positive emotion and passion (Shaver & Hazan, 1994). Avoidant individuals frequently report being uncomfortable with intimacy and trust, are often less affectionate and disclosing, and are more critical and mistrusting toward their partner. Avoidant individuals may avoid commitment and closeness in relationships and “inhibit acknowledgement and display of every emotional state that is incongruent with the goal of attachment system deactivation”

(Schacher, Shaver, & Mikulincer, 2005, pg. 157). They report relationships as less satisfying, with more dysfunctional conflict. Research indicates that many avoidant women have sex for their partners' sake, are dismissing of closeness, and have lower pleasure motivation during sex. Anxious individuals are often preoccupied with own needs and weaknesses. In attempt to calm their fears about abandonment, they may focus on their partner's approval and experience emotional dependence and lower self-esteem (Cobb, Davila, & Bradbury, 2001). Their fears about rejection may distract them from accurately perceiving their partner's behaviors (Schacher, Shaver, & Mikulincer, 2005).

A secure attachment style and positive internal working model may also enable individuals to have a higher level of comfort with intimacy (Schnarch, 1997). Intimacy is more than simply mutual "self-disclosure" to improve self-worth and seek validation. Real intimacy involves sharing in spite of anxiety, instead of to decrease anxiety. Intimacy at this level requires the capacity for self-awareness, self-reflection, and complex language. Healthy individuals are capable of real intimacy because they are comfortable in a relationship without needing it (Schnarch, 1997). If an individual feels safe, then he or she can be vulnerable, contributing to sexual satisfaction (Resnick, 2007). Avoidant attachment is often associated with lower levels of self disclosure while anxious attachment is correlated with inappropriately high levels of self disclosure, perhaps in attempt to quickly establish an intimate connection. Anxious individuals are often unresponsive to their partner's disclosures (Mikulincer & Nachshon, 1991).

Shaver and Hazan (1994) illustrated how sexual goals and strategies in romantic relationships mimic goals and strategies of attachment styles. Fear and uncertainty regarding sexuality activates attachment needs. There is data to indicate that a secure woman experiencing sexual difficulties would turn to her primary caregiver (her partner) for support. Secure

individuals are “open to sexual exploration in committed relationships”. Research suggests that a secure woman would be comfortable discussing sexual difficulties with her partner and together they could find ways to enhance her sexual pleasure (Schacher, Shaver, & Mikulincer, 2005). Sex can be a very threatening aspect of intimacy and vulnerability to an individual with an insecure attachment, as fear creates heightened accessibility of working models of attachment figures. Schacher, Shaver, & Mikulincer (2005) discuss how the defensive strategies of insecure individuals “interfere with the normal proximity seeking” behaviors. Women experiencing sexual difficulty might not seek support from their partner because of fear of rejection or abandonment or because they feel that their partner would not be able to soothe them. Studies indicate that an anxious woman might fear that her partner would leave her if she expressed dissatisfaction in the bedroom. The theory predicts that she might fake sexual pleasure in order to appease her partner. She might also convince herself that she cannot orgasm because her partner does not love her enough. Shaver and Hazan (1994) found that anxious women were actually more concerned with their partner’s satisfaction than their own. An anxious woman might experience greater distress if her sexual functioning were displeasing to her partner or was not soothing her need for approval. The theory suggests that an avoidant woman might avoid what little sex she was having before any sexual problems began! Unable to express her sexual difficulties, she might avoid intimacy completely or simply go through the motions during sex, convinced that her partner is incapable of pleasuring her. Pinney, Gerrard, & Denny (1987) suggest that some individuals actually experience greater satisfaction when less intimate, as the intensity of intimacy threatens boundaries.

## CHAPTER II

### PRESENT STUDY

In light of the connections between relationship satisfaction, sexual satisfaction, commitment, and attachment style, research is needed to determine if and how attachment style is associated with commitment and sexual satisfaction and the processes by which commitment contributes to sexual satisfaction. This study expanded upon previous research using Rusbult's theory of interdependence to examine the association between sexual satisfaction, commitment, and attachment in heterosexual women. Rusbult's model assumed that sexual satisfaction is a component of general relationship satisfaction. In this study, a specific measure of sexual satisfaction was added to Rusbult's model, along with the pro-relationship sexual behaviors and two measures of attachment.

#### Hypotheses

Considering the previous research, the following hypotheses are proposed:

- 1) There will be a positive association between sexual satisfaction and relationship satisfaction.
- 2) There will be a positive association between sexual satisfaction and commitment.
- 3) There will be a positive correlation between commitment and the following:
  - a) disclosure of personal sexual desires and frustrations to their partner.
  - b) motivation to accommodate the sexual desires of a partner.
  - c) experience of an emotional connection related to sexual activity.
- 4) These three pro-relationship sexual variables will mediate the association between commitment and sexual satisfaction.
- 5) There will be a negative association between Attachment Anxiety and sexual satisfaction.
- 6) There will be a negative association between Avoidant Attachment and sexual satisfaction.
- 7) There will be a positive association between commitment and Attachment Anxiety.
- 8) There will be a negative association between commitment and Avoidant Attachment.

## Exploratory Research Questions

This study also considered the association between attachment and the pro-relationship sexual behaviors. Just as commitment is associated with satisfaction, attachment style may promote or inhibit behaviors that enhance satisfaction within the relationship. Will the three pro-sexual relationship behaviors mediate the association between commitment and sexual satisfaction in the case of securely attached individuals as well as insecurely attached individuals? For exploratory purposes, the mediation hypothesis was tested separately in the case of securely attached versus insecurely attached. For securely attached individuals, it was expected that the three pro-relationship sexual behaviors would mediate the association between commitment and sexual satisfaction. Individuals who are more securely attached may be more sexually satisfied due to an increased use of pro-relationship sexual behaviors. Secure attachment may enable individuals to disclose their sexual needs, to act on their partners' needs and accommodate their partner's desires, and to experience an emotional connection through sexual activity. These pro-relationship sexual behaviors are likely to increase sexual satisfaction as both partners have their sexual needs met.

For insecurely attached individuals, it was expected that the pro-sexual relationship behaviors would not mediate the relationship between commitment and sexual satisfaction. This study proposed that high attachment anxiety would be linked to higher levels of commitment. However, this anxiety may paradoxically contribute to lower levels of sexual satisfaction. High attachment anxiety may promote commitment, yet this anxiety may prevent the use of pro-relationship sexual behaviors or prevent the mediation of the pro-relationship sexual behaviors

on sexual satisfaction. This study also proposed that high avoidant attachment would be negatively linked to commitment. High avoidance attachment may inhibit a connection to the relationship, and thus decrease the use of pro-relationship sexual behaviors.

## CHAPTER III

### METHODS

#### Participants

Participants were 307 undergraduate female students at Wichita State University. The requirement for participation was that individuals must be heterosexual women who had been sexually involved with a primary partner for at least six months. Although 331 students completed the survey, 24 surveys had to be eliminated because they were incomplete or because participants indicated that they had not been in a relationship for a minimum of six months. No participants were minors or members of vulnerable populations. The ages of participants ranged from 18 to 63 years-old ( $M=20$ ,  $SD=12.6$ ). The majority (68%) of the participants were Caucasian. The majority (49%) reported that they were dating their partner and 29% were married. When asked about the length of their relationship, 24% of the women surveyed reported they had been in their relationship 6 months ( $M=2.02$ ,  $SD=1.78$ ) and another 19% reported being in their relationship one year. More than one fourth (26%) reported they had been in the relationship 2-3 years. The demographic characteristics of the participants are presented in Table 1.

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Table 1  
*Demographics of Participants*

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Age (mean, SD)	(20, 12.6)
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Ethnicity (%)

Caucasian	68
Hispanic or Latino	15
Black or African American	8
Asian	6
American Indian	3

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Type of Relationship (%)

Dating	49
Married	29
Living with	20
Engaged	2

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Length of Relationship in years (%)

6 months	24
1	19
2-3	26
4-5	13
6-7	8
8-9	2
10+	8

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N=307

## Procedures

This study was submitted to and approved by the University's IRB. Participants were recruited from undergraduate classes and invited to participate in the study for extra credit in the course. Individuals who did not wish to participate or did not meet the study criteria were offered alternative studies to participate in for extra credit. Participants read and signed the consent form, then completed the survey. When they were finished with the survey, they placed the survey in a brown manila envelope to ensure confidentiality. Most of the questions in the

survey referred to participants' sexual relationship with their partner, their sexual communication, and their comfort in sexuality with their partner. Most of the questions could be answered by circling a number on a scale. Generally, it took 25 minutes to complete this questionnaire.

## Measures

The data were analyzed to examine possible errors in entry. There were no missing data and all values fell within possible ranges. The data was then checked for normality and revealed acceptable levels of skewness and kurtosis and means and standard deviations appeared plausible for each scale. Although there were few high outliers for the relationship satisfaction and sexual satisfaction scales, stem and leaf plots revealed that all data fell within the normal range. The commitment scale also contained several outliers that indicated that several of the participants reported low levels of commitment. These outliers were not deleted or replaced, as the purpose of the study was to examine the effects of varying levels of commitment on relationship satisfaction, sexual satisfaction, and attachment.

The survey included the following measures:

### Relationship Satisfaction

In order to test the hypothesis that there would be a positive association between sexual satisfaction and relationship satisfaction, Rusbult's Investment Model Scale (Rusbult et al., 1998) was used to measure how satisfied participants were with the relationship overall. Participants rated their level of relationship satisfaction using a 9-point scale (0= don't agree at all, 8=agree completely) to answer five questions. A sample question is, "Our relationship makes me very happy." Please see Appendix questions 39-43 for these items. Earlier data with this

scale reported  $\alpha=.93$  (Pearson, 2007). A reliability analysis was conducted on the Relationship Satisfaction Scale; Coefficient alpha for the scale was  $\alpha=.95$ .

### Sexual Satisfaction

The Global Measure of Sexual Satisfaction (GMSEX; Lawrance & Byers, 1992, 1995) measured sexual satisfaction. Using five 7-point bipolar scales, participants rated their sexual relationship as good/bad, pleasant/unpleasant, positive/negative, satisfying/unsatisfying, and valuable/worthless. Scores for each question were then be added together for a total score. Scores on this measure can range from 5 to 35. A lower scale score indicates less satisfaction. Lawrance and Byers (1992, 1995) showed a correlation of .78 over a three-month period. Lawrance and Byers also found ratings across the five bipolar scales to be internally consistent (.90). Please refer to Appendix questions 51-55 for these questions. Earlier data with this scale reported  $\alpha=.92$  (Pearson, 2007). Since lower scores on this scale indicated higher levels of sexual satisfaction, all of the items on the scale were reverse coded so that a higher number indicated a higher level of sexual satisfaction. The accurate scoring of this scale was reversed for easier comparison to the other scales on the survey. A reliability analysis was conducted on the Sexual Satisfaction Scale; Cronbach's coefficient alpha for the scale was  $\alpha=.92$ .

### Commitment

Rusbult et al's (1998) Commitment Scale was used to explore what the factors of commitment were and how they affected sexual satisfaction. This measure was used to test the hypotheses that commitment and sexual satisfaction would be correlated and that there would be a positive correlation between commitment and pro-social sexual behaviors. The scale consisted of seven questions using a 9-point scale (0= don't agree at all, 8=agree completely). A sample question is, "I want our relationship to last for a very long time." Please refer to Appendix

questions 44-50 for these items. Since some of the commitment items (46, 47) are reversed, these items were reverse coded so that a higher number indicated a higher level of commitment. Earlier data with this scale reported  $\alpha=.96$  (Pearson, 2007). A reliability analysis was conducted on the Commitment Scale and coefficient alpha for the scale was  $\alpha=.94$ .

### Pro-Relationship Sexual Behaviors

Pearson's (2007) Pro-relationship Sexual Behavior Scales was used to assess the three pro-relationship sexual behaviors of 1) disclosure, 2) motivation to accommodate partner, and 3) emotional bond hypothesized to mediate the association between commitment and sexual satisfaction. In order to measure these three variables, scales were created using questions from available related scales, along with additional questions developed by the researcher. What follows is a description of each of the three scales and how the scale items were generated.

The Disclosure Scale measured participants' discussion of personal sexual desires and frustrations to their partner. A Disclosure Scale was created, using questions from the Dyadic Sexual Communication Scale (DSC, Cantania, 1986). The Dyadic Sexual Communication Scale is a 13-item scale that measures how participants perceive the discussion of sexual matters with their partners. The Communication scale is relevant only to those with a primary partner. Questions were modified from the DSC based on content that addressed individual's comfort with discussing sexual matters. Using the DSC, four questions were developed to assess an individual's ability to communicate sexual matters with their partner and to assess relationship problems (to examine pro-social behavior one). Each of the four questions used a 9-point Likert scale from 0 to 8. Scores for each question were then added together for a total score. Scores on this measure can range from 0 to 24. A lower scale score indicates less disclosure of sexual needs. A sample question is, "It is easy for me to tell my relationship partner what I do or don't

like to do during sex.” Please refer to Appendix questions 56-59 for these items. Coefficient alpha for the scale was  $\alpha=.80$  (Pearson, 2007). Since one of the disclosure items (56) was reversed, this item was reverse coded so that a higher number indicated a higher level of disclosure. Item analysis was conducted on the Disclosure scale. Coefficient alpha for the scale was  $\alpha=.81$ .

The Motivation to Satisfy Partner Sexually Scale measured participants’ willingness to accommodate the sexual desires of a partner. The six questions for this scale were developed using the Hulbert Index of Sexual Compatibility (HISC, Hulbert, 1993) as a guide. The HISC is a 25-item inventory that asks questions to address sexual compatibility. Questions were modified from the HISC based on content that addressed individual’s ability to satisfy their partner. Questions from the HISC were modified to specifically assess the degree to which participants are willing to accommodate their partners’ needs. Each of the six questions uses a 5-point Likert scale from 0 to 4. Scores for each question are then added together for a total score. Scores on this measure can range from 0 to 24. A lower scale score indicates more motivation to satisfy a partner’s sexual needs. A sample question is, “I am happy when my partner is sexually satisfied.” Please refer to Appendix questions 60-65 for these items. Coefficient alpha for the scale was  $\alpha=.75$  (Pearson, 2007). Since lower scores on this scale indicated higher levels of motivation for partner, all of the items on the scale were reverse coded so that a higher number indicated a higher level of motivation. The accurate scoring of this scale was reversed for easier comparison to the other scales on the survey. Item analysis was conducted on the six items hypothesized to access Motivation to Satisfy Partner. All the correlations were greater than .30 except for one item: “I know my partner’s sexual likes and dislikes. This item differed in content from the other five items in that this question assessed knowledge as opposed to motivation.

This item was eliminated from the scale. Item-total correlations for the revised five-item Motivation to Satisfy Partner Scale resulted in all correlations greater than .30. Coefficient alpha for the revised scale was  $\alpha=.80$ .

The Emotional Bond Scale measured the emotional connection that is formed through sexual activity with a partner. The four questions for this scale were developed using the Age, Gender, and Sexual Motivation Inventory scale (AGSMI, Sprague & Quadagno, 1989). The AGSMI is a 25-item inventory that uses 23 multiple choice questions and 2 short answer questions. Questions for the scale that assess motivation for engaging in sexual activity were modified to specifically address the level of emotional connection obtained through sexual activity. Each of the four questions used a 7-point Likert scale from 1 to 7. Scores for each question are then added together for a total score. Scores on this measure can range from 4 to 28. A lower scale score indicates more of an emotional bond. A sample question is, "I feel connected to my partner during sexual activity." Please refer to Appendix questions 66-69 for these items. Since lower scores on this scale indicated higher levels of emotional bond, all of the items on the scale were reverse coded so that a higher number indicated a higher level of emotional bond. The accurate scoring of this scale was reversed for easier comparison to the other scales on the survey. The coefficient alpha for this scale was  $\alpha=.87$  (Pearson, 2007). All four items on the Emotional Connection Scale were correlated at the .48 level and the coefficient alpha for this scale was  $\alpha=.87$ .

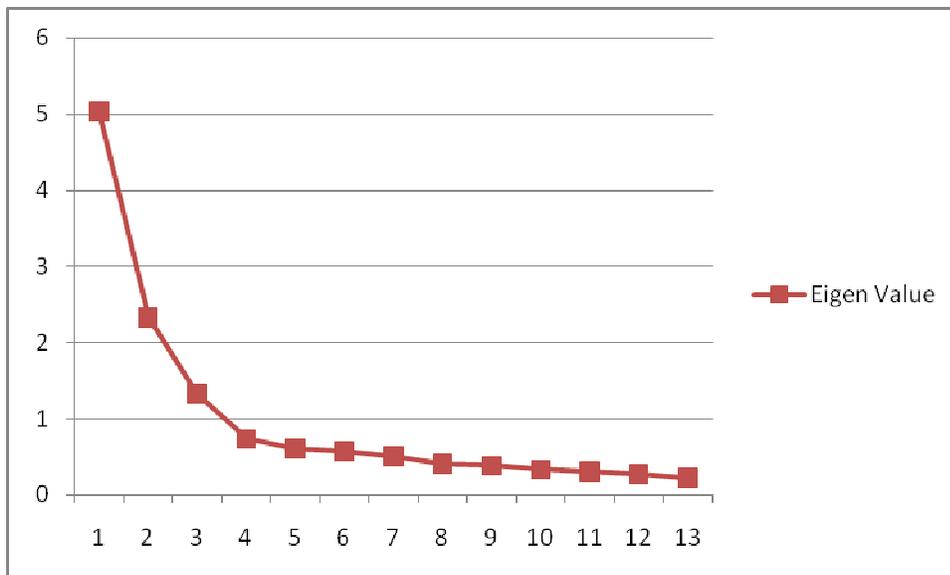
Factor analysis was conducted on the 13 items of the questionnaire that assessed pro-relationship sexual behaviors. Principal axis extraction with promax rotation was performed through SPSS on the 13 pro-relationship sexual behavior items. Principal components extraction was used prior to principal axis extraction to estimate the number of factors. Three factors were

extracted. Two criteria were used to determine the number of factors to extract: the Kaiser-Guttman rule and the scree plot developed in excel, as shown in Figure 3. The Kaiser Guttman rule indicated three factors with Eigen Values over 1 and the scree plot indicated three factors to extract. Based on this information, three factors were rotated using Promax rotation procedure. The rotated solution, as shown in Table 2, yielded three interpretable factors: 1) emotional bond, 2) motivation to satisfy partner, and 3) disclosure.

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Figure 3  
*Scree Plot to Determine Factors to Extract*

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Table 2  
*Factors and Eigen Values*

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Factor	Eigen Value
1 (Emotional Bond)	5.03
2 (Motivation)	2.32
3 (Disclosure)	1.32
4	0.73
5	0.61
6	0.57
7	0.51
8	0.41
9	0.38
10	0.33
11	0.31
12	0.27
13	0.22

---

The emotional bond factor accounted for 38.67%, the motivation for partner accounted for 17.83% of the variance, and the disclosure factor accounted for 10.17% of the variance.

Variance accounted for by each factor before rotation is shown in Table 3.

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Table 3  
*Variance accounted for by each factor*

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Factor	% of Variance
1 (Emotional Bond)	38.67
2 (Motivation)	17.83
3 (Disclosure)	10.17

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All factors were well defined by the variables. Loadings of variables on factors are shown in Table 4. This is a factor pattern. No items loaded on two factors at the .45 or above level and all variables loaded on a factor at the .45 level.

Table 4  
*Loadings of Variables on Factors*

Variable	Factor		
	Emotional Bond	Motivation	Disclosure
I find some sexual matters are too upsetting to talk about with my relationship partner	-.022	-.135	.447
It is easy for me to tell my relationship partner what I do or don't like to do during sex.	.100	-.053	.869
Talking about sex with my relationship partner is usually comfortable for the both of us.	-.055	.011	.822
I feel comfortable communicating with my partner when I'm sexually dissatisfied	-.002	.173	.791
I try to satisfy my partner sexually.	.117	.725	-.014
I engage in certain sexual activities because my partner enjoys them	-.207	.761	-.009
I find ways to make sex enjoyable for my partner	.093	.638	-.062
If I didn't meet my partner's sexual needs, I would be upset	-.090	.697	.118

The correlations of the factors with one another are illustrated in table 5. The emotional bond factor was correlated with the motivation factor ( $r=.60$ ) and the disclosure factor ( $r=.40$ ). The motivation factor was also correlated with the disclosure factor ( $r=.20$ ). In sum, the three factors extracted from the pro-relationship questions were labeled emotional bond, motivation for partner, and disclosure.

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Table 5  
*Factor Correlation Matrix*

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Factor	(1)	(2)	(3)
Emotional Bond (1)			
Motivation (2)	.60		
Disclosure (3)	.40	.20	

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Experiences in Close Relationships- Revised.

Fraley, Waller, & Brennan (2000) Experiences in Close Relationships- Revised Adult Attachment Questionnaire (ECR-R) was used to measure attachment style. This 38-item questionnaire asked participants to rate their feelings toward “emotionally intimate relationships” on a 7-point scale (1=strongly disagree, 7=strongly agree). It yields scores on avoidance and anxious-ambivalence. Results were then averaged to produce scores on the avoidant attachment scale and the anxious attachment scale. Higher scores reflect greater avoidance and anxiety on their respective scales. Since some of the attachment items (9, 11, 20, 22, 26, 27, 28, 29, 30, 31,

33, 34, 35, 36) are reversed, these items were reverse coded so that a higher number indicated a higher level of anxiety or avoidance. A sample question is, “*My partner really understands me and my needs.*” Please refer to Appendix questions 3-38 for these items. Coefficient alpha for the ECR-R was  $\alpha=.93$  for anxiety and  $\alpha=.94$  for avoidance.

## CHAPTER IV

### RESULTS

#### Hypothesis Testing

##### Sexual satisfaction, relationship satisfaction, and commitment

To examine the hypotheses that there would be a positive association between sexual satisfaction and relationship satisfaction and that there would be a positive association between sexual satisfaction and commitment (hypotheses 1 and 2), correlation coefficients were computed among the Total Relationship Satisfaction Score, Total Sexual Satisfaction Score, and the Total Commitment Score. The results of the correlational analyses presented in Table 6 show that the correlations between relationship satisfaction, sexual satisfaction, and commitment were statistically significant at the .01 level. These results indicate that if females were more committed, they reported higher levels of both relationship and sexual satisfaction. These results support past research that relationship and sexual satisfaction are associated, and that sexual satisfaction and commitment are also linked.

Table 6

*Correlations, Means, and Standard Deviations of Relationship Satisfaction, Sexual Satisfaction, Commitment, Disclosure, Motivation to Satisfy Partner, Emotional Bond, Anxiety, and Avoidance*

Scale	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Relationship Satisfaction (1)	.95							
Sexual Satisfaction (2)	.53*	.92						
Commitment (3)	.73*	.32*	.94					
Disclosure (4)	.28*	.43*	.08	.81				
Motivation to satisfy partner (5)	.28*	.31*	.34*	.16*	.80			
Emotional Bond (6)	.50*	.57*	.47*	.33*	.54*	.87		
Anxiety (7)	-.55 *	-.34 *	-.30 *	-.40 *	.01	-.30 *	.93	
Avoidance (8)	-.63 *	-.45 *	-.60 *	-.37 *	-.39 *	-.54 *	.44 *	.94
Mean	29.50 <sup>c</sup>	10.34 <sup>b</sup>	47.40 <sup>c</sup>	22.88 <sup>c</sup>	5.06 <sup>a</sup>	3.02 <sup>a</sup>	50.25 <sup>b</sup>	45.09 <sup>b</sup>
Standard Deviation	9.42	5.51	11.74	7.25	3.34	2.90	21.04	19.32

\*  $p < .01$ .

<sup>a</sup>Mean is on a 5 point scale; <sup>b</sup>Mean is on a 7 point scale, <sup>c</sup>Mean is on a 9 point scale

Note: Larger numbers indicate a greater value. Numbers on the diagonal represent Chronbach's alpha.

### Commitment and pro-relationship sexual behaviors

Correlational coefficients were computed among commitment and the three pro-relationship sexual behaviors (disclosure, motivation to satisfy partner, and emotional bond) to test the hypothesis that there would be a positive correlation between commitment and the three pro-relationship sexual behaviors (hypothesis 3). The results of the correlational analysis presented in Table 6 show that commitment was significantly correlated with emotional bond ( $r(307) = .47, r^2 = .22$ ) and motivation ( $r(307) = .34, r^2 = .12$ ), but not with disclosure. The three pro-relationship sexual behavior scales were also correlated with one another. These results indicate that women who reported being more committed in their relationship also reported an increased motivation to satisfy their partner and an emotional bond.

### Mediation Hypothesis

A path analysis was performed to test the hypothesis that the three pro-relationship sexual variables would mediate the association between commitment and sexual satisfaction. The path analysis was conducted through AMOS 16 to test the account for the overlap of shared variance between variables. Figure 4 presents the saturated model. Rectangles represent manifest variables while lines connecting variables represent standardized regression coefficients. The assumptions of multivariate normality and linearity were evaluated through SPSS and maximum likelihood estimation was used to estimate all models. The focus of this study was not in the fit indices for the model, but in interpreting the value and meaningfulness of the paths. Baseline fit indices revealed that the data were not a particularly good fit to the model ( $\chi^2 = 73.4(3), p < .01, CFI = .722, NFI = .721, RMSEA = .317$ ); this could be due to the high inter-correlations of the variables.

It was hypothesized that the three pro-relationship sexual behaviors of disclosure, motivation, and emotional connection would mediate the relationship between commitment and sexual satisfaction. However, commitment was not predicative of disclosure and motivation was not related to sexual satisfaction. Although the correlation coefficients indicated a significant relationship between the variables tested, the path analysis revealed the shared variance was accounting for these relationships. It does appear that emotional connection mediates the relationship between commitment and sexual satisfaction.

Figure 4  
*Path Analysis of Mediation Hypothesis*

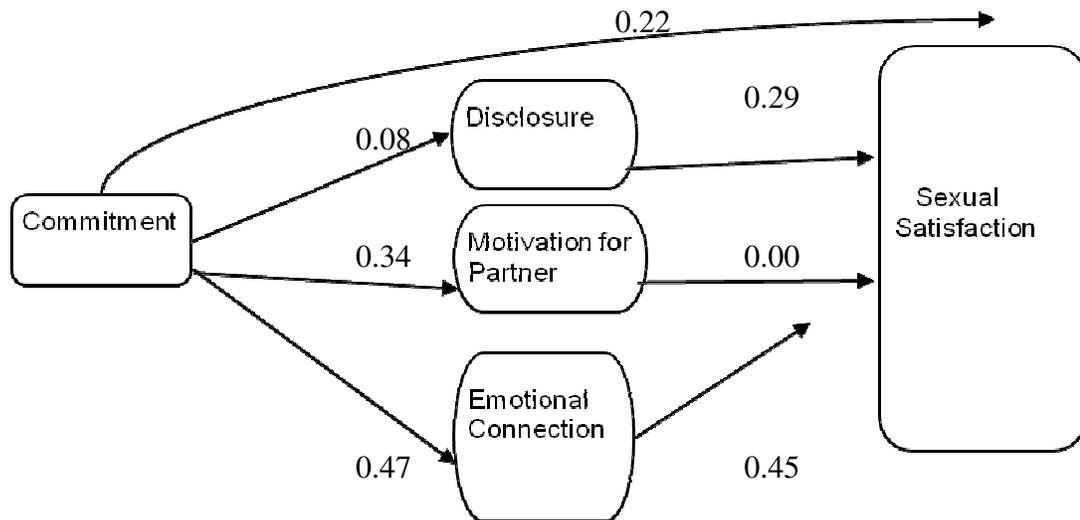


Table 7 shows that commitment predicted a significant amount of sexual satisfaction variance ( $r^2=.10$ ,  $p<.01$ ). Emotional bond predicted a significant amount of variance ( $r^2=.32$ ), and accounted for much of the association between commitment and sexual satisfaction. When sexual satisfaction was regressed on total emotional bond score and total commitment score, the

beta associated with emotional bond was larger and more significant than the beta associated with commitment. The beta associated with emotional bond was .538 ( $p < .01$ ), while the beta associated with commitment was .066 ( $p = .220$ ). As the beta associated with commitment was not significant, the relationship between commitment and sexual satisfaction was mediated by emotional bond. Overall the model accounted for 33% of the variance in participants' sexual satisfaction.

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Table 7  
*Hierarchical Regression Predicting Sexual Satisfaction from Commitment and Emotional Bond*

Equation	Variable Entered	B in final equation	Final R <sup>2</sup>
A	Commitment	.15*	.10
B	Emotional Bond	1.08*	.32
C	Emotional Bond	1.02*	.33
	Commitment	.031	

---

\* $p < .01$

#### Attachment and sexual satisfaction

The ECR-R was used to test the hypothesis that there would be a negative association between sexual satisfaction and both Avoidant Attachment and Attachment Anxiety. The mean for the ECR-R was 50.25 (SD= 21.04) for anxiety and 45.09 (SD=19.32) for avoidance, indicating that the sample was not all that anxious or avoidant. The results of the correlational analysis presented in Table 6 show that sexual satisfaction was significantly negatively correlated with anxiety ( $r(307) = -.34$ ) and avoidance ( $r(307) = -.45$ ). Fraley and Walter (1998)

suggest that attachment is best measured using dimensions rather than categories, as classifying participants into categories lowers statistical power. Fraley, Waller, and Brennan (2000) recommend using multiple regression to study the dimensions of attachment anxiety and avoidance in a manner that corresponds with Bartholomew's four attachment typologies. Using multiple regression, sexual satisfaction can be predicted from the ECR-R scores by examining the B weights of the multiple regression equation. The resulting regression coefficients correspond to the four attachment typologies as described in Table 8.

Table 8  
*ECR-R Multiple Regression Coefficients and Typologies*

Regression Coefficients		Relationship to Dependant Variable	Typology
Anxiety	Avoidance		
0	0	Attachment style is unrelated to sexual satisfaction	
0	Positive	Anxiety is unrelated to sexual satisfaction while Avoidance is positively related to sexual satisfaction	Dismissing individuals score higher on the dependant variable than secure and preoccupied people
0	Negative	Anxiety is unrelated to sexual satisfaction while Avoidance is negatively related to sexual satisfaction	Dismissing people score lower on the dependant variable than secure and preoccupied people
Positive	0	Anxiety is positively related to sexual satisfaction and Avoidance is unrelated to sexual satisfaction	Preoccupied individuals score higher on the dependant variable than secure and dismissing people
Positive	Positive	Both anxiety and avoidance are positively related to sexual satisfaction	Fearful people score higher on the dependant variable than secure people. Dismissing and preoccupied people are somewhere in-between. When both coefficients are positive, the effect is driven by both dimensions.
Positive	Negative	Anxiety is positively related to sexual satisfaction while Avoidance is negatively related to sexual satisfaction	Preoccupied people score higher on the dependant
Negative	0	Anxiety is negatively related to sexual satisfaction and Avoidance is unrelated to sexual satisfaction	Secure and dismissing people score lower on the dependant variable than fearful and preoccupied people.
Negative	Positive	Anxiety is negatively related to sexual satisfaction while Avoidance is positively related to sexual satisfaction	Dismissing people score higher on the dependant variable than preoccupied people. Secure and fearful people are somewhere in-between.
Negative	Negative	Both anxiety and avoidance are negatively related to sexual satisfaction	Secure people score higher on the dependant variable than fearful people. Dismissing and preoccupied people are somewhere in-between.

Using the ERC-R anxiety and avoidance attachment scores as the prediction criterion, a multiple regression analysis was conducted to evaluate how well the measures of attachment anxiety and avoidance predicted sexual satisfaction. The predictors were the two attachment scales (anxiety and avoidance) generated by the ECR-R, while the criterion variable was sexual satisfaction. The linear combination of attachment measures was significantly related to sexual satisfaction,  $F(2,303) = 44.17, p < .01$ . The sample multiple correlation coefficient was .48, indicating that approximately 23% of the variance of sexual satisfaction in the sample can be accounted for by the linear combination of attachment measures. According to the *B* weights, the regression equation is as follows:

$$\text{Predicted Sexual Satisfaction} = -.82 \text{ Anxiety} - 1.90 \text{ Avoidance} + 3.27$$

Since the resulting *B* weights for anxiety and avoidance were both negative, this pattern of coefficients indicates that anxiety and avoidance attachment are negatively related to sexual satisfaction (Fraley, Waller, & Brennan, 2000.) Therefore, the more anxious *and* avoidant participants were regarding attachment, the lower their scores on sexual satisfaction. This pattern of coefficients suggests that securely attached individuals score higher on sexual satisfaction than fearful people and that preoccupied and dismissing people fall somewhere in-between.

#### Attachment and commitment

The ECR-R was used to test the hypothesis that there would be a positive association between commitment and Attachment Anxiety; however, there will be a negative association between commitment and the Avoidant Attachment. Correlation coefficients were computed

between the Total Commitment Score and the Anxiety and Avoidance scores. The results of the correlational analyses presented in Table 6 indicate that commitment was significantly negatively correlated with both attachment anxiety ( $r=-.30, p<.01$ ) and avoidance ( $r=-.60, p<.01$ ). These results indicate that if females report higher levels of anxious and/or avoidant attachment, they reported lower levels of commitment. Contrary to the hypotheses, there was a negative correlation between anxiety and commitment and, as hypothesized, a negative correlation between avoidance and commitment.

### Exploratory Analyses

Exploratory analyses were conducted to contrast securely attached participants with insecurely attached participants to examine whether the mediation hypothesis would work the same for both groups. To further examine the relationship between commitment, sexual satisfaction, and the three pro-relationship sexual behaviors, the scores on the ECR-R were converted into Bartholomew's (1990) typologies of secure, preoccupied, dismissive, and fearful. The ECR-R is intended to be a continuous measure and putting groups into typologies may cut down on power (Fraley & Walter, 1998). Although this procedure is not normally done, it was performed in this study for exploratory hypothesis to examine whether the mediating relationship between commitment and sexual satisfaction varied between the secure and insecure groups. An absolute level median split (i.e. the numerical mid-point) of the ECR-R anxiety and avoidance scores was conducted to place each participant into either the secure or insecure category. As the scale median for both of the scales was four, individuals with an anxiety score higher than a four and/or an avoidant score higher than four ( $n=73$ ) were placed in the insecure attachment category. Individuals with scores lower than four on both scales ( $n=234$ ) were placed in the

secure category. I wanted to test for attachment status as a moderator, thus, multi-group comparison was run on attachment. All paths were constrained to be equal. Figure 5 presents the results of the path analysis for the secure individuals while Figure 6 illustrates the results of the model for the insecure individuals. Change in fit indices revealed that attachment status was not a significant moderator of the link between commitment and sexual satisfaction (10.6 (3),  $t= 2.5$ ). Both models indicate that emotional connection mediates the relationship between commitment and sexual satisfaction, regardless of attachment style. Therefore, it appears that attachment does not moderate the relationship between sexual satisfaction and commitment.

Figure 5  
*Path Analysis of Mediation Hypothesis with Secure Individuals*

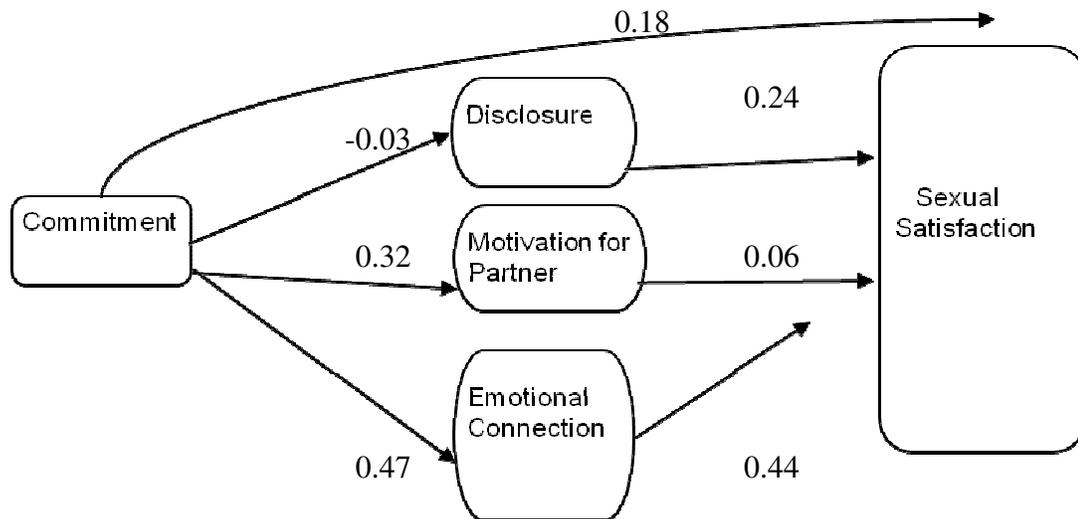
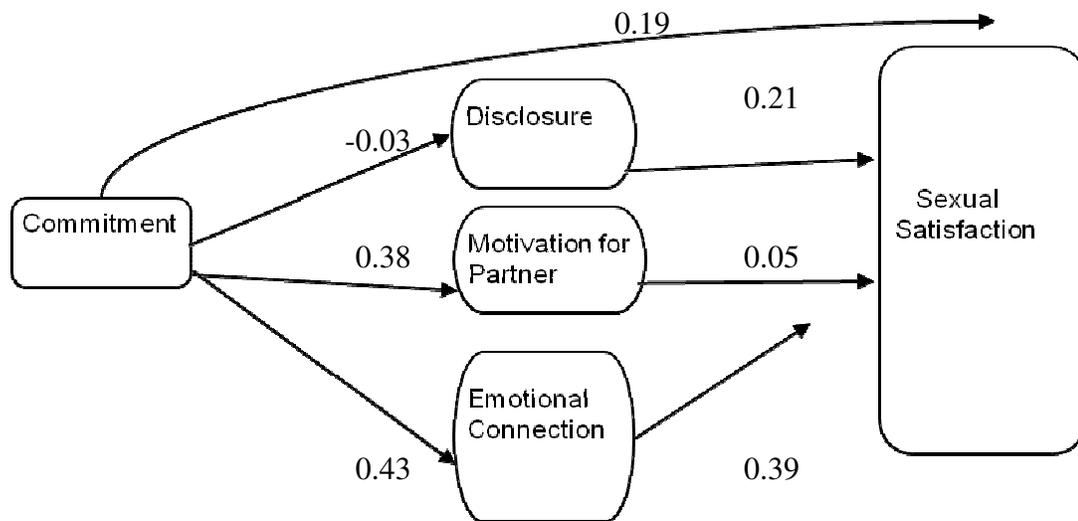


Figure 6  
*Path Analysis of Mediation Hypothesis with Insecure Individuals*



In summary, five of the eight hypotheses were supported. Two hypotheses were partially supported and one hypothesis was not supported. Table 9 provides a summary of the results in terms of which hypotheses were supported.

Table 9  
*Hypotheses and Results*

Hypothesis	Results
1) There will be a positive association between sexual satisfaction and relationship satisfaction.	Supported
2) There will be a positive association between sexual satisfaction and commitment.	Supported
3) There will be a positive correlation between commitment and the following:	
a) disclosure of personal sexual desires and frustrations to partner.	Not Supported
b) motivation to accommodate the sexual desires of a partner.	Supported
c) experience of an emotional connection related to sexual activity.	Supported
4) These three pro-relationship sexual variables will mediate the association between commitment and sexual satisfaction.	Partially Supported
5) There will be a negative association between Attachment Anxiety and sexual satisfaction.	Supported
6) There will be a negative association between Avoidant Attachment and sexual satisfaction.	Supported
7) There will be a positive association between commitment and Attachment Anxiety.	Not Supported
8) There will be a negative association between commitment and Avoidant Attachment.	Supported

## CHAPTER V

### DISCUSSION

The purpose of this study was to examine the association between commitment sexual satisfaction, and attachment. Previous research has shown that more committed women report more satisfying sex (Pinney, Gerrard, & Denney, 1987) and that sexual satisfaction is largely influenced by other aspects of the relationship (Sprecher, 2002). This study expanded on the previous research by examining the role of three pro-relationship sexual behaviors (disclosure, motivation to satisfy partner, and emotional bond) and their influence on sexual satisfaction. The purpose of this research was to determine whether the pro-relationship sexual behaviors of disclosure, motivation to satisfy partner, and emotional connection, would explain a significant amount of variance in participants' sexual satisfaction and whether these variables mediated the association between commitment and sexual satisfaction, replicating previous research (Pearson, 2007). This study also examined the role of attachment and its impact on the use of the pro-relationship sexual behaviors. Previous research (Hazan & Shaver, 1994; Mikulincer & Nachshon, 1991) has examined the relationship between attachment and sexual satisfaction. However, this was the first study to include the use of pro-relationship sexual behaviors as mediators in this model of attachment and sexual satisfaction.

#### Main Contributions

Commitment was significantly associated with sexual satisfaction. These results were consistent with past research (Byers et al., 1988; Lawrence & Byers, 1995, Peck et al., 2004) and lend validity to these findings and the hypotheses. However, these studies speculated but did not examine how variables associated with commitment account for the variance in sexual

satisfaction. Behaviors aimed at promoting the sexual relationship must be considered when predicting sexual satisfaction. I created three pro-relationship sexual variables (disclosure, motivation to satisfy partner, and emotional bond) based on what others have speculated contribute to sexual satisfaction. This dissertation took the literature a step further by identifying the variables associated with commitment that might mediate the link between commitment and sexual satisfaction. This study replicated previous research (Pearson, 2007) to test pro-relationship sexual behaviors in an attempt to explain the link between commitment and sexual satisfaction.

There was a statistically significant correlation between sexual satisfaction and relationship satisfaction and between sexual satisfaction and commitment. As expected, participants' relationship satisfaction and level of commitment to the relationship were significantly associated their self-reported sexual satisfaction, replicating previous research (Byers et al., 1998; Pearson, 2007) and supporting hypotheses 1 and 2. There was a significant positive correlation between commitment and two of the three pro-relationship sexual behaviors, partially supporting hypothesis 3. Factor analysis was performed on the three pro-relationship sexual behaviors to reveal three variables: disclosure, motivation for partner, and emotional connection. The rotated solution yielded three interpretable factors: emotional bond, motivation to satisfy partner, and disclosure. The emotional bond factor accounted for the highest level of variance at nearly 39%. All factors were well defined by the variables. No items loaded on two factors and all variables loaded on a factor, providing empirical support for three separate factors. The correlations of the factors with one another also warrant further attention. The emotional bond factor was correlated with the motivation factor ( $r=.60$ ) and the disclosure factor ( $r=.40$ ). Participants who reported more frequent use of emotional bond after sexual activity also

reported an increased level of motivation to please their partner sexually and increased comfort with discussing sexual matters with their partner.

Commitment was correlated with motivation and emotional bond, but not with disclosure. It appears that the extent to which women disclosed was not related to commitment. It is possible that motivation and emotional bond require a certain comfort within a relationship that commitment provides, a comfort that disclosure may not require. It is important to note that scores on the disclosure scale can range from 0 to 24. Participants reported a high level of disclosure ( $M=22.88$ ,  $SD= 7.25$ ), suggesting a possible ceiling effect. Participants may have reported high levels of disclosure, yet they may have been disclosing sexual matters superficially with their partner, as opposed to expressing true intimacy. Schnarch (1997) defines true intimacy is more than simply mutual “self-disclosure” to improve self-worth and seek validation. Authentic intimacy occurs when an individual maintains a sense of self when they are emotionally close to their partner, especially as their partner become increasingly important. Real intimacy involves sharing in spite of anxiety, instead of to decrease anxiety. Intimacy at this level requires the capacity for self-awareness, self-reflection, and comfort with vulnerability.

Hypothesis 4 stated that these three pro-relationship variables would mediate the association between commitment and sexual satisfaction. This hypothesis was partially supported, as emotional connection was the only pro-relationship sexual behavior that served as a mediator. Disclosure was not associated with commitment and motivation was not associated with sexual satisfaction. Commitment accounted for a significant proportion of the variance in sexual satisfaction (10%). When sexual satisfaction was regressed on total emotional bond score and total commitment score, the beta associated with emotional bond was  $.538$  ( $p<.01$ ), while the beta associated with commitment was  $.066$  ( $p= .220$ ). As the beta associated with commitment

was not significant, the relationship between commitment and sexual satisfaction was mediated by emotional bond. Thus, emotional connection accounted for the significant association between commitment and sexual satisfaction. Emotional connection is the pathway through which commitment enhances sexual satisfaction. As emotional connection enhances sexual satisfaction, a feedback loop develops, reinforcing commitment.

Sexual satisfaction has previously been linked to emotions, especially for women. “The association between sexual satisfaction and love and commitment indicate that sexual satisfaction also has implications for how partners feel about each other and how committed they are to staying in the relationship” (Sprecher, 2002, pg. 191). Happy couples reported that satisfactory sexual activities provide opportunities for relaxing, exciting your partner, and feeling cared for by your partner (Hulbert & Apt, 1994). Several studies report that women place more importance on the emotional aspects of the relationship than men (Hulbert & Apt, 1994). Women place greater importance on the emotional and relational qualities of the sexual relationship, such as how their partner treats them when they are having sex (Byers, 1999). For women, the closer the emotional relationship with one’s partner, the greater the chance of a satisfying sexual relationship (Darling, Davidson, & Cox 1991). In a 2004 study by Bridges, Lease, & Ellison, women described their feelings after their most satisfying sexual experience as being loved, passionate, happy, wonderful, aroused, and erotic (Bridges, Lease, & Ellison, 2004). Several of these feelings entail being connected to someone.

Haavio-Manila and Kontula (1997) found that reciprocal feelings of love were associated with sexual satisfaction. The authors reported a correlation ( $r=.29$ ,  $p<.001$ ) between emotional and physical sexual satisfaction and concluded that both emotional and physical benefits are equally important predictors of overall sexual satisfaction. Birnbaum and Gillath (2006)

examined a dimension of sexual activity they labeled “Maintaining the Bond” and concluded that a function of sexual activity is to keep partners attracted to each other for an extended period of time. The authors state that sexual activity promotes the creation and maintenance of an emotional bond between romantic partners. From an evolutionary perspective, sexual activity and an associated emotional bond keep partners together to care for existing children and provide opportunities to create additional children (Fisher, 2004). To strengthen this bond, men and women produce increased levels of serum oxytocin during sexual activity. This bonding hormone enhances the connection between partners while encouraging partners to have sex frequently (Birnbaum & Gillath, 2006).

#### Attachment

This study also included attachment theory and the connection between sexual satisfaction and commitment. There was a significantly negative association between sexual satisfaction and both anxiety and avoidance, providing support for hypotheses 5 and 6. The multiple regression illustrated a pattern of two negative B weights, indicating that securely attached individuals are the most sexually satisfied. These results were consistent with past research (Birnbaum & Gillath, 2006; Tracy et al., 2003) and lend validity to these findings.

Previous research has examined adult romantic love as a process of attachment (Collins & Read, 1990; Hazan & Shaver, 1987, 1994) and found that relationship satisfaction was associated with attachment style and related predictable differences in the way romantic relationships are experienced. Hazan and Shaver (1994) suggested that sexual behavior tendencies were rooted in early attachment experiences and that a positive and stable attachment system was the foundation for comfort with sexual intimacy. Secure individuals may use sexual

activity to express emotional intimacy; thus sexual activity enhances the emotional connection within their relationship. Negative emotions such as feelings of frustration, difficulties experiencing pleasure, indifference, and boredom were positively associated with avoidance and anxiety and negatively associated with relationship satisfaction (Birnbaum & Gillath, 2006).

Having had their attachment needs successfully met, secure individuals are better equipped to understand their own and other's emotions. Secure individuals are comfortable with vulnerability and emotional relations between romantic partners. They are more likely to develop long, stable relationships that involve trust and a desire for closeness without the need to "merge" with a partner (Hazan & Shaver, 1987). These individuals enjoy physical and emotional closeness with romantic partners and seek and share feelings with partners appropriately (Mikulincer & Nachshon, 1991). They also offer emotional support to comfort a distressed partner (Brennan & Shaver, 1995).

Avoidant individuals "deactivate" and avoid their attachment needs to reduce feelings of vulnerability and dependence (Mikulincer & Shaver, 2003). Avoidant individuals experience difficulty trusting and depending on others and experience discomfort with closeness. They fail to focus on emotions and have low levels of emotional expression (Mikulincer & Shaver, 2003). They avoid committed romantic relationships by engaging in avoidance behaviors such as participating in relatively emotionless sex, detaching from the sexual event, fantasizing about other lovers, having brief sexual encounters, and affairs (Brennan & Shaver, 1995). They avoid disclosure and are uncomfortable when partners disclose (Mikulincer & Nachshon, 1991). They do not seek comfort from partners and fail to provide appropriate support (Hazan & Shaver, 1987). Avoidant individuals report their relationships as involving less closeness and less satisfaction (Collins & Read, 1991).

Anxious individuals “hyperactivate” their attachment needs, obsessing over their unsatisfied needs and weaknesses (Mikulincer & Shaver, 2003). Anxious individuals may fall in love at first sight (Hazan & Shaver, 1987) and have a desire to merge with a partner to the point of being clingy, needy, and jealous (Hazan & Shaver, 1987). They may experience high levels of over involvement with partners’ problems and disclose too readily. They express fear and anger easily, worrying about rejection and abandonment (Mikulincer & Nachshon, 1991).

There was a negative association between commitment and anxiety, not providing support for hypothesis 7. This result was not consistent with past research (Mikulincer, & Shaver, 2003; Hazan & Shaver, 1994), as anxious individuals often have a strong desire for intimacy and commitment in attempt to fulfill their unmet attachment needs. It is possible that there is a difference between proximity seeking and commitment, as anxiously attached individuals may desire to have their partner physically accessible to relieve their attachment fears, yet these same individuals may fail to commit to the future of their relationship. A negative association was also found between commitment and avoidance, supporting hypothesis 8. This finding was consistent with previous research (Mikulincer, & Shaver, 2003; Hazan & Shaver, 1994) as avoidant individuals limit sexual intimacy by avoiding sexual activity with a committed partner.

Support seeking behaviors within a romantic relationship are analogous to proximity seeking behaviors in a child (Bowlby, 1989) and parallel Rusbult’s pro-social behaviors (Rusbult et al., 2004). This study provided additional support for a connection between sexual satisfaction, secure attachment, and the use of pro-relationship sexual behaviors. If an individual feels safe, then he or she can be vulnerable, contributing to sexual satisfaction (Pearson, 2007). Comfort with emotional closeness also contributes to a partner’s willingness to sacrifice (Fisher,

2004). For women, emotions are a key component to the link between commitment and sexual satisfaction. Emotional connection may provide the motivation to engage in behaviors that maintain the relationship. Secure individuals have a more positive perception of their partner, which is related to an increased use of positive support behaviors (validation, asking for help, mutual support, warmth, responsiveness) in the relationship and less negative behaviors (being inattentive or disengaging, demanding help, criticizing, blaming, complaining) (Cobb, Davila, & Bradbury, 2001). Secure individuals may be better able to work on problems and accept support from partners, contributing to both relationship and sexual satisfaction.

### Exploratory Hypotheses

This study also examined the role of attachment with regard to the mediation hypothesis. Fraley and Waller (1998) discourage the use of attachment typologies, preferring continuous measure to enhance statistical power. Social and developmental psychologists tend to measure attachment with continuous scales, examining attachment as a developmental paradigm rather than typology. Clinicians may prefer to use typologies. This study brought the two models together, measuring attachment avoidance and anxiety on continuous scales and then translating these scores into typologies in order to examine whether the mediating relationship between commitment and sexual satisfaction varied between the secure and insecure groups. The path models for the secure and insecure individuals were contrasted to determine whether the mediation hypothesis operated in the same manner for both groups. It was hypothesized that the three pro-relationship sexual behaviors would serve as mediators for the secure individuals, but not for the insecure group. As the two path models were very similar, it appears that emotional connection is the only pro-relationship sexual behavior that mediates the connection between

commitment and sexual satisfaction, and this variable serves as a mediator regardless of attachment style.

This study has examined the role that attachment plays in sexual relationships and emotions. Secure individuals appropriately express emotions in romantic relationships (Brennan & Shaver, 1995). They experience fewer negative emotions and more positive and passionate emotions during sexual activity (Tracy et al., 2003). Avoidant individuals inhibit emotional displays and maintain cognitive, emotional, and physical distance from a partner. They are less likely to have sex to express affection for their partner (Birnbaum et al., 2006). Anxious individuals have a desire for emotional closeness during sexual activity, yet their neediness and fear of rejection may prevent them from experiencing sexual pleasure (Birnbaum, 2006). This link between attachment and emotions may partially explain why anxious and avoidant attachments are associated with lower levels of sexual arousal, pleasure, and satisfaction (Tracy et al., 2003).

### Limitations of Study

There are several limitations to this study. This small sample may not generalize to other populations. A larger, more representative sample might provide different results. The study used a restricted sample as heterosexual females were selected to eliminate confounding variables that might be created with the inclusion of male participants or gay, lesbian, bisexual, or transgender individuals. All participants had to be in a sexually active relationship for at least six months, eliminating the novelty of a new relationship and enabling the assessment of commitment. A more ethnically diverse sample or a random sample might also produce different results. This study was conducted in Wichita, Kansas and the results may be quite

different in other areas of the country. Finally, there was also a large range of length of participants' relationships, from 1 year to over 10 years. Future studies might be strengthened by limiting participants' length of relationships.

The small sample may have also limited the ability to examine cohort effects. Participants varied in age from 18-63-years old, potentially allowing for cohort effects such as childbirth, menopause, retirement, use of medication, and other major health problems that potentially affect sexual satisfaction. However, there was no way to measure these potential effects. What constitutes sexuality and sexual satisfaction may change with age and with lifespan development. Larger sample sizes might better allow for the examination of such effects. The sample also contained a high proportion of securely attached individuals. The sample also did not contain a large amount of variance in commitment, limiting the mediation results. A larger sample size might allow for the collection of a more diverse and generalizable sample.

Selection bias may have occurred in that women chose to participate. It is possible that the women who chose to participate were more sexually liberal and not a proper reflection of the entire population. It is possible that the women in this study were much more comfortable with their sexuality and in discussing sexual matters, both with their partner and in a survey. This comfort with sexuality and sexual stimuli may contribute to participants' sexual satisfaction, regardless of their level of commitment and/or attachment style. Although this study included participants from various undergraduate departments (e.g. business school, fine arts department) the sample was mostly drawn from psychology classes and the students surveyed may not generalize to the entire population.

Self-report measures were taken to determine sexual satisfaction, relationship satisfaction, and commitment. Although participants' identity was kept anonymous, social desirability can make self-report unreliable. A measure of social desirability within the survey would have made it possible to estimate the extent to which social desirability was a factor.

### Future Research

This study provided support for the importance of relational and emotional components in women's sexual satisfaction. Future research is necessary to further examine the role of emotional connections within the sexual relationship, including qualitative research to interview women about their emotions during sexual activity. Additional research could be performed with this target sample, but with a larger sample size to explore attachment style differences. This study could also be replicated in other parts of the country. Sources of sexual satisfaction outside of the Midwest might be quite different from the population sampled, or perhaps the importance of an emotional bond applies in different contexts and cultures.

There was the potential for the previously mentioned cohort effects in this study. Perhaps these cohort effects are useful, in that they allow for examination of sexual satisfaction across all ages. Future research might test whether there are cohort effects on commitment, sexual satisfaction, and the three pro-relationship sexual behaviors. Future studies might be strengthened by examining cohort effects with different age groups, especially older women to see if commitment changes in regards to participants' age or relationship length.

Research is needed to explore the process of disclosure and how true intimacy (as opposed to self-disclosure) changes the dynamics of the sexual relationship. Future research could also examine how commitment impacts one's motivation to satisfy a partner and the ways

in which commitment promotes an emotional bond. Longitudinal designs that follow people over time might better examine sexual satisfaction within relationships and provide further insight regarding pro-relationship sexual behaviors and sexual satisfaction. Bi-directional data could also be collected to examine whether sexual satisfaction in fact drives emotional connection. Future research that included the collection of data from participants and their partners could more closely examine the relationship between the sexual relationship and emotional connection. Couples could be surveyed about their use of pro-relationship variables and their partner's response to determine whether the partner accommodates their needs. This research would account for partner effects. Finally, while this study included a measure of attachment, future studies could more closely examine the mechanisms by which attachment is related to commitment and sexual satisfaction by interviewing people with different attachment styles.

### Implications for Clinical

This research is important in treatment of sexual difficulties, as commitment accounted for 10% of sexual satisfaction. Commitment was significantly correlated with emotional bond ( $r(307) = .47, r^2 = .22$ ) and motivation ( $r(307) = .34, r^2 = .12$ ). While the statistical significance of these links may appear small, the clinical significance of the correlations in this study may be quite important in treating sexual difficulties. The current medical paradigm emphasizes blood flow and other behavioral measures to assess sexual satisfaction, ignoring behaviors that enhance or dampen the relationship, and thus the sexual relationship. Commitment is important to sexual satisfaction; the emotional component is especially important for sexual functioning. Activities that increase emotional connection may enhance sexual satisfaction and impact attachment

development. Birnbaum and Gillath (2006) suggest a more emotional orientation to sexuality, as women place a greater emphasis on relational aspects during sexual activity. Kaplan (1995) also emphasized a link between the sexual system and emotions, as sexual pleasure can be inhibited by negative feelings such as guilt, shame, and fear. Therapy that addresses sexual concerns must help people understand and address their unmet emotional needs (Offit, 1977). This research provides additional support for examining emotional connection within a therapy context instead of simply practicing sensate focus exercises.

This research lends support for the idea of a new paradigm, a feminist standard for female sexual dissatisfaction that Leonore Tiefer describes as “discontent with any emotional, physical, or relational aspect of sexual experience” (pg. 91). By combining biological and social influences, the New View emphasizes sociopolitical and relationship causes for women’s sexual problems. The New View of Women’s Sexual Problems outlines four diagnostic categories: (a) sexual problems that result from sociocultural, political, or economic factors; (b) those related to partner and relationship issues; (c) those created by individual psychology; and (d) those caused by medical or physical factors. According to Tiefer, this new paradigm focuses on prevention of female sexual problems through increased education, access to healthcare, and political equality. The New View also demands increased public and research attention to the complexity of female sexual problems. This study lends support to the importance of specific diagnostic criteria to account for difficulties within the relationship, specifically those that might inhibit emotional connection between partners.

## Conclusions

This study provides further support for the link between commitment and sexual satisfaction in heterosexual women and demonstrates that emotional connection is an important addition to this research, accounting for part of the significant association between commitment and sexual satisfaction. The findings were that women who reported more commitment to their relationship also reported more relationship satisfaction and sexual satisfaction. These women also reported more frequent use of the pro-relationship sexual behavior of emotional connection, as this behavior mediated the relationship between commitment and sexual satisfaction. The findings also indicated that women who reported more attachment anxiety and avoidance also reported less commitment and less sexual satisfaction. However, emotional connection mediated the relationship between commitment and sexual satisfaction, regardless of attachment style. These findings suggest that emotional ties are powerful, even in insecurely attached individuals.

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## APPENDIX

APPENDIX  
THE SURVEY

Sexual Relationships Study

*Women who have been in a heterosexual romantic relationship for at least six months and have been sexually active for most of that time are eligible to complete this survey.*

*Please think about your relationship partner while answering the following questions.*

*Please answer the questions in the order they are listed. There are no right or wrong answers.*

*All information you provide is confidential and anonymous.*

1. What type of relationship do you and your partner have?

- 1      married
- 2      living together
- 3      dating
- 4      other (please specify: \_\_\_\_\_)

2. How long have you and your partner been together? \_\_\_\_\_ years

***The statements below concern how you feel in emotionally intimate relationships. We are interested in how you generally experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number to indicate how much you agree or disagree with the statement.***

3. I'm afraid that I will lose my partner's love.

- |              |   |       |          |   |       |            |
|--------------|---|-------|----------|---|-------|------------|
| 1            | 2 | 3     | 4        | 5 | 6     | 7          |
| Do Not Agree |   | Agree |          |   | Agree |            |
| At All       |   |       | Somewhat |   |       | Completely |

4. I often worry that my partner will not want to stay with me.

- |              |   |       |          |   |       |            |
|--------------|---|-------|----------|---|-------|------------|
| 1            | 2 | 3     | 4        | 5 | 6     | 7          |
| Do Not Agree |   | Agree |          |   | Agree |            |
| At All       |   |       | Somewhat |   |       | Completely |

APPENDIX (continued)

5. I often worry that my partner doesn't really love me.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

6. I worry that romantic partners won't care about me as much as I care about them.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

7. I often wish that my partner's feelings for me were as strong as my feelings for him or her.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

8. I worry a lot about my relationships.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

9. When my partner is out of sight, I worry that he or she might become interested in someone else.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

10. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

11. I rarely worry about my partner leaving me.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

APPENDIX (continued)

12. My romantic partner makes me doubt myself.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

13. I do not often worry about being abandoned.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

14. I find that my partner(s) don't want to get as close as I would like.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

15. Sometimes romantic partners change their feelings about me for no apparent reason.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

16. My desire to be very close sometimes scares people away.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

17. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

18. It makes me mad that I don't get the affection and support I need from my partner.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

APPENDIX (continued)

19. I worry that I won't measure up to other people.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

20. My partner only seems to notice me when I'm angry.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

21. I prefer not to show a partner how I feel deep down.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

22. I feel comfortable sharing my private thoughts and feelings with my partner.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

23. I find it difficult to allow myself to depend on romantic partners.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

24. I am very comfortable being close to romantic partners.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

25. I don't feel comfortable opening up to romantic partners.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

APPENDIX (continued)

26. I prefer not to be too close to romantic partners.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

27. I get uncomfortable when a romantic partner wants to be very close.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

28. I find it relatively easy to get close to my partner.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

29. It's not difficult for me to get close to my partner.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

30. I usually discuss my problems and concerns with my partner.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

31. It helps to turn to my romantic partner in times of need.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

32. I tell my partner just about everything.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

APPENDIX (continued)

33. I talk things over with my partner.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

34. I am nervous when partners get too close to me.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

35. I feel comfortable depending on romantic partners.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

36. I find it easy to depend on romantic partners.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

37. It's easy for me to be affectionate with my partner.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

38. My partner really understands me and my needs.

1	2	3	4	5	6	7
Do Not Agree		Agree			Agree	
At All			Somewhat			Completely

APPENDIX (continued)

*Please indicate the degree to which you agree with each of the following statements regarding your current relationship (please circle a number).*

39. I feel satisfied with our relationship.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

40. My relationship is much better than others' relationships.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

41. My relationship is close to ideal.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

42. Our relationship makes me very happy.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

43. Our relationship does a good job of fulfilling my needs for intimacy, companionship, etc.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

44. I want our relationship to last for a very long time.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

APPENDIX (continued)

45. I am committed to maintaining my relationship with my partner.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

46. I would *not* feel very upset if our relationship were to end in the near future.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

47. It is likely that I will date someone other than my partner within the next year.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

48. I feel very attached to our relationship- very strongly linked to my partner.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

49. I want our relationship to last forever.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

50. I am oriented toward the long-term future of my relationship (for example, I imagine being with my partner several years from now).

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely



APPENDIX (continued)

58. Talking about sex with my relationship partner is usually comfortable for the both of us.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

59. I feel comfortable communicating with my partner when I'm sexually dissatisfied.

0	1	2	3	4	5	6	7	8
Do Not Agree			Agree					Agree
At All				Somewhat				Completely

***Overall, how would you describe your sexual relationship with your primary partner? Circle the number which best describes your sexual relationship.***

60. I know my partner's sexual likes and dislikes.

0	1	2	3	4
All of	Most of	Some of	Rarely	Never
the time	the time	the time		

61. I try to satisfy my partner sexually.

0	1	2	3	4
All of	Most of	Some of	Rarely	Never
the time	the time	the time		

62. I engage in certain sexual activities because my partner enjoys them.

0	1	2	3	4
All of	Most of	Some of	Rarely	Never
the time	the time	the time		

63. I find ways to make sex enjoyable for my partner.

0	1	2	3	4
All of	Most of	Some of	Rarely	Never
the time	the time	the time		

APPENDIX (continued)

64. If I didn't meet my partner's sexual needs, I would be upset.

0	1	2	3	4
All of the time	Most of the time	Some of the time	Rarely	Never

65. I am happy when my partner is sexually satisfied.

0	1	2	3	4
All of the time	Most of the time	Some of the time	Rarely	Never

66. Sexual activity enhances my bond with my partner.

0	1	2	3	4
All of the time	Most of the time	Some of the time	Rarely	Never

67. I feel connected to my partner during sexual activity.

0	1	2	3	4
All of the time	Most of the time	Some of the time	Rarely	Never

68. I feel loved during sex with my partner.

0	1	2	3	4
All of the time	Most of the time	Some of the time	Rarely	Never

69. I enjoy a feeling of being emotionally close to my partner during sex.

0	1	2	3	4
All of the time	Most of the time	Some of the time	Rarely	Never

APPENDIX (continued)

70. What year were you born? \_\_\_\_\_

71. How many times, if at all, have you been married?

- Never
- Once
- Twice
- More than twice

72. Which of the following best describes your race? You may select more than one option.

- Black or African American
- American Indian or Alaskan Native
- White or Caucasian
- Hispanic or Latino
- Asian
- Other (specify) \_\_\_\_\_

THANK YOU for completing the survey. The information you have provided will help us to better understand long-term, romantic relationships.