

ATTACHMENT AND PORNOGRAPHY USE: THE INFLUENCE OF ROMANTIC
ATTACHMENT STYLES, INTIMACY, AND PORNOGRAPHY USE ON
MARITAL SATISFACTION

by

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Liberty University

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ABSTRACT

ATTACHMENT AND PORNOGRAPHY USE: THE INFLUENCE OF ROMANTIC ATTACHMENT STYLES, INTIMACY, AND PORNOGRAPHY USE ON MARITAL SATISFACTION

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The current study sought to answer the following research questions: First, what is the relationship between attachment, intimacy, pornography use, and marital satisfaction? Second, in what ways does intimacy influence marital satisfaction among pornography users with insecure attachment? Finally, is pornography used to regulate attachment emotions among pornography users with insecure attachment?

The study revealed that Pornography Use caused an interaction in the relationship between Intimacy and Marital Satisfaction for those higher in Attachment Avoidance. Pornography Use accounted for 3% unique variance on Marital Satisfaction after controlling for Intimacy and Attachment Avoidance. Results also revealed Intimacy had a direct effect on Marital Satisfaction. However, Intimacy accounted for nearly 65% of

the variance on Marital Satisfaction. Limitations and recommendations for future research are discussed.

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CHAPTER ONE: INTRODUCTION

Healthy Marital Relationships

In a healthy marital relationship, both spouses believe they are understood, cared for, and validated by their partner (Duffey, Wooten, Lumadue, & Comstock, 2004; Laurenceau, Barrett, & Rovine, 2005). Such emotions promote close connection and enhance the relational bond between spouses (Dandurand & Lafontaine, 2013; Duffey et al., 2004; Durana, 1996; McCarthy & Maughan, 2010). During childhood, each person develops emotionally charged core beliefs (i.e., cognitive schemas) that lay the foundation for their most fundamental assumptions about how they view themselves and others, the reality and expression of feelings, and the validity and fulfillment of emotional needs; ultimately, this influences the manner in which they perceive, evaluate, and respond to experiences in their close relationships (Bowlby, 1973/1982; Clinton & Straub, 2010; Levesque, 2012; Ottu & Akpan, 2011). Based upon the cognitive schema and level of comfort with closeness, each individual within the relationship exhibits functional or dysfunctional connecting behaviors (Millwood & Waltz, 2008). Those who engage in effective, positive connecting behaviors demonstrate healthy emotional and relational skills and tend to experience higher levels of marital satisfaction (Phillips, Bischoff, Abbotte, & Xia, 2009; Raque-Bogdan, Ericson, Jackson, Martin, & Bryan, 2011). Disconnection and marital dissatisfaction occurs between spouses who exhibit negative connecting behaviors and possess relational and emotional skills deficits (Clinton & Sibcy, 2006; Phillips et al., 2009; Solomon, 2009). Spouses hindered by their ability to communicate their feelings effectively and those who experience continual

failed attempts to seek connectedness from their marital partners may seek to satisfy their intimacy needs in ways that threaten the marriage relationship (Clinton & Sibcy, 2006; Litzinger & Gordon, 2005).

Marriage serves as a primary source of affection and support where spouses turn to one another for comfort and closeness, demonstrating the human need for dependency and the maintenance of close connection (Clinton & Sibcy, 2006; Jones, Welton, Oliver, & Thorburn, 2011; Laurenceau et al., 2005; Millwood & Waltz, 2008; Reynolds, Remer, & Johnson, 1995; Solomon, 2009). The need for a safe haven for comfort and refuge becomes most important for a satisfying and lasting relationship (Levesque, 2012). Marital satisfaction aides mental and emotional health (Dandurand & Lafontaine, 2013; Laurenceau et al., 2005; Reynolds et al., 1995; Waite & Gallagher, 2000), buffers the impact of adverse life-events (Johnson, Zabriskie, & Hill, 2006), contributes to a better quality of life (Ottu & Akpan, 2011), and safeguards spouses against marital distress (Pielage, Lutejin, & Arrindell, 2005).

Intrapersonal and Interpersonal Processes

Counselors and social scientists have spent decades identifying variables that influence marital satisfaction. Two trajectories have surfaced: attachment (i.e., an intrapersonal process based from within the individual which acts as a blueprint for how to perceive, evaluate, and respond to experiences in close relationships) and intimacy (i.e., an interpersonal process that incorporates a between-individuals approach, which develops the infrastructure for how to build and maintain close relationships) (Ottu & Akpan, 2011). Both processes have an influence on one's interpretation of marital

satisfaction. Although all variables influence marital satisfaction, they do so from different vantage points. Attachment is an intermittent effort made by one spouse to *restore* closeness. Intimacy is a continuous joint effort that *builds and maintains* closeness (Dandurand & Lafontaine, 2013; Feldman, Gowan & Fisher, 1998).

Research has indicates that the interpersonal processes which strengthen the marital relationship include the love between partners (Hazan & Shaver, 1990), the sexual relationship (Hernandez, Mahoney, & Pargament, 2011), conflict and pressures (Joel, MacDonald, & Shimotomai, 2011; Simpson, Rholes, & Phillips, 1996), communication skills (Burlison & Denton, 1997), spousal friendship (Kantrowitz & Wingert, 1999), relationship skills (Gottman, 1999/1994; Lawrence, Pederson, Bunde, Barry, Brock, Fazio, Mulryan, Hunt, Madsen & Dzankovic, 2008), and emotion skills (Mirgain & Cordova, 2007). Studies that have concentrated on intrapersonal processes found to influence attitudes, perceptions, and attributions of the relationship include studies investigating partner disclosure (Finkenauer & Hazam, 2000), dream sharing (Duffey, Wooten & Comstock, 2004), spiritual behaviors (Fincham, Beach, Lambert, Stillman, & Braithwaite, 2008), and attachment beliefs (Ottu & Akpan, 2011).

Pornography Use as an Intrapersonal and Interpersonal Process

One variable shown to influence marital satisfaction and possess both intrapersonal and interpersonal processes is pornography use (Benjamin & Tlusten, 2010; Lambert, Negash, Stillman, Olmstead, & Fincham, 2012; Maddox, Rhoades, & Markman, Rhoades, Stanley, Ragan, & Whitton, 2010; Manning, 2006; Stewart & Szymanski, 2012). Research has shown the manner in which pornography use is

introduced in the marital relationship determines whether it is identified as an intrapersonal process (i.e., secretive pornography use) or interpersonal process (i.e., non-secretive pornography use). Due to the significant influence pornography use has on the individual as well as the marital relationship, research on the topic has experienced a surge in recent years. Pornography use can function as both a threat (intrapersonal process) and a boost (interpersonal process) to the relational bond between couples; however, the relational bond may be dependent upon an individual's strength or weakness in the exclusion or inclusion of their partner in regulating emotions and fulfilling intimacy needs. Non-secretive pornography use has been known to promote healthy functioning within the marital relationship because it enriches marital intimacy and is viewed by the couple as expending energy between partners augmenting closeness (Manning, 2006; Yucel & Gassanov, 2010). Due to the concealing nature of secretive pornography use, spouses become disconnected because the activity is an individual effort that excludes the partner and diminishes closeness (Maddox et al., 2011).

Non-Secretive Pornography Use

Non-secretive pornography use is recognized in one of two formats. Partners are aware of their partner's existing pornography use and either permit their spouse to engage in pornography or elect to participate together with their spouse. In the latter, pornography use is a shared activity, based in reciprocity, used to foster togetherness and benefit both spouses to promote healthy functioning within the marital relationship (Benjamin & Tlusten, 2010; Garlick, 2011; Maddox et al., 2011; Manning, 2006; Staley & Prause, 2013). It also has been used by marriage and sex therapists to function as an

educational tool for the purpose of enhancement of sexual and emotional intimacy and closeness, becoming more present with one another, broadening spouses' understanding of sexuality, and enhancing low desire or improving sexual difficulties within the relationship (Daneback, Traeen, & Axel Mansson, 2009; Lawrence et al., 2008; Maddox et al., 2011; Manning, 2006; Olmstead, Negash, Pasley, & Fincham, 2013; Poulsen, Busby, & Galovan, 2013; Staley & Prause, 2013; Yucel & Gassanov, 2010).

In their research centered upon identifying the effects of this form of pornography use, Staley and Prause (2013) evidenced better communication about sex and fewer sexual problems than couples in which only one or neither spouse viewed pornography. When female spouses are not coerced into co-viewing pornography, they experience an attitudinal shift to align with their partner's positive attitudes of the sexual experience (Garlick, 2011). Spouses who engage in mutual and consensual pornography use or who are made aware of their partner's pornography use (i.e., non-secretive) experience enriched marital intimacy because pornography use is viewed by the couple as expending energy *within* the relationship and acts as a reward, bringing partners closer together (Manning, 2006; Yussel & Gassanov, 2010). Benjamin and Tlusten (2010) have identified couples that use pornography in this manner to be a growing population. However, research efforts in this study focused on pornography use of a secretive nature in order to better understand its relational effects and motivation for use.

Secretive Pornography Use

Many pornography users adopt a secretive approach to their relationship. This secretive approach derives from the secrecy adopted in secluding oneself to engage in

pornography unbeknownst to the spouse. As a result, one of two formats develops. The pornography use is either unbeknownst to the spouse in its entirety or with regard to the amount of use. It is the discovery of the pornography use that is a threat to the stability of the relationship (Stewart & Szymanski, 2012). Therefore, a spouse's distress over his or her partner's viewing of pornography will in turn cause the partner distress – possibly increasing pornography viewing and leading to more pornography use, which leads to more distress, creating a negative cycle (Manning, 2006). Studies have linked pornography use to attachment beliefs (Lambert et al., 2012; Stulhofer, Busko, & Schmidt, 2012). Researchers acknowledge the significance of attachment beliefs and their ability to contribute to a person's perception of marital satisfaction (Benson, Sevier, & Christensen, 2013; Ottu & Akpan, 2011; Volling, Notaro, & Larsen, 1998). Spouses who engage in pornography use turn away from their spouses to regulate attachment emotions and to fulfill intimacy needs in a manner which threatens the relationship, ultimately impeding the connection between spouses (Benjamin & Tlusten, 2010; Bridges, Bergner, & Hesson-Mcinniss, 2003). Continual exposure to pornography has been shown to deteriorate closeness between spouses, accelerate the devaluation of partner significance, diminish the building of intimacy (causing partners to feel less understood and disconnected), and pose a threat to the stability and satisfaction of the marital relationship (Collins, 1999; Lambert et al., 2012; Olmstead, Negash, Pasley, & Fincham, 2013).

Attachment, Intimacy, and Pornography Use as Influencers on Marital Satisfaction

Closeness (i.e., intimacy) and pornography are highly relevant to marital satisfaction that are sometimes linked (Popovic, 2011). It has been recognized that

closeness helps in gratifying various needs and is a protective buffer against stressors, psychosomatic symptoms, depression, powerlessness and loneliness experiences via various intimacy exchanges to include privileged knowledge (i.e., intellectual intimacy), shared social networks (i.e., social intimacy), and emotional experiences (i.e., emotional intimacy), all realized through relationships with significant others (Popovic, 2011). In healthy functioning relationships, each spouse's need for intimacy and security is met by the other, yet this is not so in unhealthy or dysfunctional intimate relationships (McCarthy, Ginsberg, & Cintron, 2008). In their investigation of marital intimacy, Bachman and Bippus (2005) found that insecure attached adults engage in dysfunctional behaviors that cause them to seek support from outside the marital relationship (Fraley & Shaver, 2000). Pornography use is believed to offer that form of support and research has evidenced that some individuals engage in pornography as a way of coping with their stress (Benjamin & Tlusten, 2010). Attachment and intimacy depend on each other in attempts to meet individual needs. The two are interrelated, as attachment sets the foundation by which individuals learn to act and react and intimacy provides the structure by which the foundation survives. They each create meaningful and satisfactory bonds that, when left unfulfilled, lead to marital dissatisfaction (Dandurand & Lafontaine, 2013; Duffey et al., 2004; Gottman, Gottman, & DeClaire, 2006; McCabe, 1999; McCarthy et al., 2008; Ottu & Akpan, 2011).

Previous pornography research concentrates solely on the sexual relationship and its overall effects on the pornography user's attitude, behaviors, and prowess; however, more recent efforts have begun to explore the emotional and relational effects on the marital relationship (Brand et al., 2011; D'Orlando, 2011; Manning, 2006; Paul & Shim,

2008; Reinert, 2013; Stewart & Szymanski, 2012; Twohig, Crosby, & Cox, 2009; Wright, Bae & Funk, 2013; Wright & Randall, 2012; Zillman, 1988b. Due to the risks involved with being discovered by their spouse, it would seem that pornography users go to great lengths to conceal their activity. Yet despite the risk, pornography users continue to engage because of the reward they receive from engaging in pornography use. It seems plausible that pornography users are guided by their attachment beliefs (e.g., fear of closeness, rejection, or abandonment) or a desire to fulfill unmet intimacy needs, which is the reason for the secrecy and continued use. Popovic (2011) found that pornography users craved intimacy and closeness more than non-users; pornography was their attempt to obtain intimacy. To date, there has been no study that seeks to investigate possible motivations for pornography use. Investigating the impact of attachment, intimacy, and pornography use on marital satisfaction may hold the keys to understanding pornography's influence on its consumers.

The purpose of this study is to investigate whether pornography users' motivation to engage in pornography use is guided by their need to regulate attachment emotions and to fulfill intimacy needs in lieu of turning to their spouse. Still unknown are the ways pornography use is influenced by insecure attachment beliefs and the desire to fulfill intimacy needs, and pornography's effects on marital satisfaction. Do insecure attached individuals seek pornography to restore closeness? Do insecure attached individuals seek pornography to fulfill unmet intimacy needs? In what ways does the pornography use affect marital satisfaction? In cases where pornography users indulge in pornography use and spouses are either unaware of the pornography use, the amount of pornography

consumed, or both, how does the pornography use affect the intimacy between partners and the pornography user?

This study sought to investigate the extent to which the influence of attachment, intimacy, and pornography use affect marital satisfaction by examining romantic attachment and intimacy as antecedent factors in pornography use. Utilizing a hierarchical multiple regression, the four variables were employed using a cross-sectional research design in an online sample of married pornography users. This research study should further expand awareness of the influence attachment and intimacy have on pornography use and pornography's effect on perception of marital satisfaction as well as define the significance pornography use has on the relational functioning between couples.

Purpose of the Study

Previous pornography research has primarily examined pornography from the sexual relationship (Daneback et al., 2009; Stewart & Szymanski, 2012; Szymanski & Stewart-Richardson, 2014). However, research efforts are expanding to include other relationship dynamics affected by pornography use to include women's embracement of pornography (Benjamin & Tlusten, 2010), effects on commitment (Lambert et al., 2012), expectations for future committed relationships (Olmstead et al., 2013), and changes in perception of the partner/spouse (Bridges et al., 2003; Tarver, 2010). One major omission in present research is that studies have neglected to take a more in-depth approach to investigate the motivation for pornography use and the residual outcomes on the marital relationship. It would seem that the motivation for engaging in pornography use plays an integral role in the purpose it serves, possibly providing greater insight as to

the reasons for frequency of viewing, its importance to the consumer, and the lengths taken to access it. The purpose of this study was to investigate the motivation for pornography use. More specifically, this study identified the significance attachment and intimacy play in pornography consumption and pornography's effect on relationship functioning between spouses.

Importance of the Study

Older marital satisfaction studies searched for clues that provided researchers information as to traits, characteristics, and causes of the deterioration of a relationship. While a broad range of factors existed, it became more evident that more important to consider were the elements that contributed to satisfying and healthy relationships (McCabe, 2006). A central theme surfaced in that emotional skills were discovered to be a key determinant in building a healthy and satisfying marriage (Mirgain & Cordova, 2007). It was discovered that one's ability to experience one's own or one's partner's emotions and express them in romantic relationships is linked to childhood and social development where the individual was first introduced to momentous and meaningful ways to emote and relate to significant others (Mirgain & Cordova, 2007).

Adequate emotional skills are essential to healthy functioning in intimate relationships. Healthy functioning of a relationship is dependent upon the manner in which a person has learned to behave in the context of emotional challenge; this can deepen intimacy and lead to greater marital health or result in aggression, withdrawal, and polarization (Mirgain & Cordova, 2007). Due to the emotionally challenging nature of intimacy, the identification and expression of thoughts, ideas, emotions, goals, and

dreams can develop a unique sensitivity between spouses where openness generates a shared vulnerability, leaving each person to feel exposed. The strength in healthy relationships is that in spite of this nakedness and exposure in expressing one's innermost self, a spouse capable of appropriate emotional skills can and will share his or her own vulnerability, frailty, and needs while simultaneously being supportive of his or her spouse's wants, needs, and desires. The use of these skills is necessary for the establishment and building of "felt security" and intimacy with each other as well as for the development and maintenance of a healthy functioning relationship (Mirgain & Cordova, 2007). However, not everyone is capable of or comfortable with expressing their emotions and, in turn, divert from the relationship to seek outside resources which are damaging to the marital relationship; this dysfunction stifles the security and intimacy developed between spouses, leading to partner and relationship dissatisfaction.

Above any other human or adult relationship, marriage provides the platform for attachment to form and for one's intimacy needs to be fulfilled (Levesque, 2012; McCarthy et al., 2008). Intimacy is developed via various opportunities in which spouses make emotional bids for connection with one another. Bids for connection are either received or rejected (Gottman, 1994; Gottman, 1999). Emotional bids for connection allow for intimacy behaviors to be conveyed, consequently building opportunities for increased intimacy experiences to be shared via various avenues (recreational, intellectual, social, emotional, and sexual) within the marital relationship (Gottman, 1994; Gottman, 1999; Schaefer & Olson, 1981). Intimacy behaviors and experiences are dependent upon one another, sending messages to spouses on how to articulate and interpret feelings and needs while also identifying whether such behaviors and

experiences take place in a safe, open, and receptive environment. The compilation of these intimacy behaviors and experiences give birth to marital intimacy and its sustainment between spouses (Schaefer & Olson, 1981).

In healthy and functional marital relationships, spouses create an environment of safety, security, and connectedness in one another. In such relationships, spouses take pleasure in moving toward one another during times of communication and connecting behaviors and supporting one another, which helps the couple to become one in unity (Barnacle & Abbott, 2009; Gottman, 1994; Gottman, 1999). Conversely, in unhealthy and dysfunctional marital relationships this oneness is ruptured, causing spouses to function separately, as two individuals instead of together as one (Phillips et al., 2009). Disconnection leads spouses to feel unsafe, alone, and unsupported and in turn forces each person to hide their weaknesses, vulnerabilities, and feelings from one another. Intimacy needs previously met by the spouse become susceptible to being fulfilled by outside sources.

The Internet has been identified as a major contributor to the surge in pornography use and has played a key role in its impact on relationships and marriages (D'Orlando, 2011). Together, the use of the Internet and sexually explicit materials perform as a spouse substitute by aiding the pornography user in regulating emotions and fulfilling unmet needs. This intrusion can construct a divide between couples, possibly leading to irrevocable damaging effects on emotions and the manner in which spouses communicate, relate, engage, and connect with one another. Continual Internet pornography use threatens the emotional and relational stability of the marriage, lessens the value of marriage and monogamy, decreases intimacy, and distorts perceptions and

beliefs regarding one's spouse and the relationship (Manning, 2006; Yucel & Gassanov, 2010).

Any research which is able to identify variables, which act as antecedents that provoke pornography use can be key to identifying factors that cause some individuals to be more vulnerable than others to seek and engage in pornography use and the tenacity applied to its continuation. Although recent efforts have prompted researchers to investigate the impact of pornography use on relationship dynamics, no study has simultaneously investigated the influence of attachment, intimacy and pornography use on marital satisfaction. That is, spouses who have insecure attachment beliefs and engage in pornography use may lack the confidence in conveying their emotional and intimacy needs to their spouses and experience difficulty regulating their own emotions, therefore electing to engage in pornography use so that such needs can be fulfilled.

Background to the Problem

Functional and Healthy Relationships

When people are honest and become vulnerable enough to articulate their needs and emotions, they realize they yearn to be seen, known, understood, and valued (Clinton & Sibcy, 2006). When couples feel unrestricted and comfortable to be themselves without secrecy or fear of not being supported, validated or cared for, their innermost selves are solidified and they begin to bond with one another (Reis & Shaver, 1988). This freedom plays a dual and vital role in intimate relationships, allowing for the development and maintenance of affectional bonds while also enhancing the love and attachment between partners (Durana, 1996; Millwood & Waltz, 2008). The need to

establish and maintain close relationships and connections with others has been identified as being both central and fundamental to human motivation (Laurenceau et al, 2005).

Within an attachment relationship, individuals discover their own sense of security as a human being. The core of one's personal identity is predicated upon being relational with another (Clulow, 2007). The security of this healthy functioning relationship portrays three key factors: availability, responsiveness, and engagement of the significant other. These elements signal to a spouse that the partner will be responsive and concerned about the individual's needs, goals, and desires (Mikulincer, 1998). Support received from romantic partners positively affects mental and physiological wellbeing (Bachman & Bippus, 2005). Understanding, caring, and validation are also identified as core components important for promoting autonomy and growth (Shaver & Mikulincer, 2010). It seems that people find the energy and motivation to live autonomous, self-generating, and satisfying lives only through the presence of one or more mutually supportive and intimate dyadic relationships (Schaefer & Olson, 1981).

Attachment security facilitates sensitive and responsive caregiving, which protects spouses from undue stress, promotes their health and welfare, and contributes to the quality of the relationship (Shaver & Mikulincer, 2010). In such relationships, couples employ a sense of shared common interests, possess higher self-confidence, effective communication, and problem-solving approaches, are comfortable with intimacy and expression of emotion, and are more committed to the marriage, believing their partners to be available and responsive to their wants and needs (Carpenter & Kirkpatrick, 1998; Volling et al., 1998). When individuals are secure in themselves and

their relationship, they can function in a way that allows them to maintain a sense of self yet give and receive intimacy in a manner that is non-threatening to neither the person nor the relationship (Kerpelman et al., 2012).

The Internet

The Internet has been recognized as the reason for an increase in pornography consumption (Twohig et al., 2009). Due to its speed of delivery, privacy in viewing, and reduced costs, the Internet provides three key opportunities to its consumers: accessibility, availability, and anonymity – also known as the Triple-A effect (Beaver & Paul, 2011; Gardner, 2001; Green, Carnes, Carens, & Weinman, 2012; Hertlein & Stevenson, 2010; Jones & Hertlein, 2012; Kalman, 2008; Manning, 2006; Wetterneck, Burgess, Short, Smith, & Cervantes, 2012). Unlike its predecessor (e.g., pornography magazines and movies), Internet pornography is interactive, imposing, intoxicating, isolating, integral, and inexpensive, revolutionizing the distribution of pornography by providing a medium for consumers to post and engage in online sexual activity by way of erotic photos, videos, live sex acts, webcam strip sessions, and pornographic films (Manning, 2006; Philaretou, Mahfouz, & Allen, 2005).

Research has indicated the importance of studies that explore the purpose of Internet pornography, understanding antecedents and consequences of Internet pornography use in the context of a committed relationship, and preferences and behaviors for electing to view pornography alone (Maddox et al., 2011; Short, Black, Smith, Wetterneck, & Wells, 2012; Stewart & Szymanski, 2012). Pornography use has been identified as a viable outside source to which spouses turn to regulate emotion,

distract themselves, take a break, deal with stress, cope with antisocial personality characteristics, fulfill sexual fantasies, and cope with their fear of intimacy (Manning, 2006; Milner, 2008; Fisher & Barak, 2001; Popovic, 2011; Wetterneck et al., 2012). Problematic Internet pornography behavior has had extreme effects on the marital relationship, instigating division for many (Garlick, 2011; Manning, 2006; Twohig et al., 2009; Wetterneck et al., 2012). Szymanski and Stewart-Richardson (2014) have suggested the possibility of attachment as an antecedent to pornography use and proposed that future studies would benefit from simultaneously investigating pornography use, attachment, and relationship quality (Stewart & Szymanski, 2012). A person's attachment and capability for intimacy may prove to be motivators in pornography use.

Theoretical Considerations

Attachment

Attachment theory centers upon the social and emotional development of individuals (Kirkpatrick, 1998). Formed in childhood, attachment styles continue to guide individuals in their beliefs and behaviors in their adult romantic relationships (Hazan & Shaver, 1987). Attachment theory asserts that when a threat activates the attachment system (i.e., anything or anyone causing division between spouses), individuals are driven to seek security and close connection from the attachment figure (Bowlby, 1982; Hazan & Shaver, 1987). Based on the availability and responsiveness of the attachment figure, internal working models (IWM) develop internal cognitive grids which guide individuals: (a) in how they view self and others, (b) in how they identify relationship expectations of self and others, and (c) in how they approach and respond in

close relationships (Bowlby, 1982; Feldman, Gown, & Fisher, 1998; Hazan & Shaver, 1987; Levesque, 2012; Meyers, 1998; Ottu & Akpan, 2011). Extending Bowlby's discovery of the infant and caregiver relationship, Ainsworth identified and categorized this relationship; later, researchers Bartholomew and Horowitz (1991) constructed four attachment styles based on the IWM consisting of two sets of beliefs of self and other: (a) secure attachment, (b) anxious-avoidant attachment, (c) anxious-preoccupied attachment, and (d) anxious-fearful attachment. Hazan and Shaver further expanded the theory to include adult romantic attachment.

Romantic attachment. Attachment styles and behaviors are characterized as human interaction which follows individuals from the cradle to the grave (Bowlby, 1980; Dinero, Conger, Shaver, Widaman, & Larsen-Rife, 2008; Levesque, 2012; Volling et al., 1998). Factors such as reliability, caring, trust, and intimacy that played an important role in forming attachment in infancy also influence the formation of romantic attachment (Bowlby, 1982; Levesque, 2012). Hazan and Shaver (1987) built upon Ainsworth's classification system and classified tripartite attachment styles: secure attachment (I find it easy to get close to others), avoidant attachment (I am somewhat uncomfortable being close to others), and ambivalent attachment (I find that others are reluctant to get as close as I would like) (Dinero et al., 2008; Hazan & Shaver, 1987; Meyers, 1998).

Romantic attachment is one of the most important aspects of intimacy (Levesque, 2012). Human beings have a natural propensity to create strong affectional bonds to significant others, each individual desiring to have that special someone who allows them to feel safe in being themselves, negating shortcomings and flaws and supporting and encouraging them nonetheless (Cash, Therault, & Annis, 2004; Clinton & Sibcy, 2006;

Reis & Shaver, 1998). When spouses respond with sensitivity and care, they become safe havens to which their spouse can turn for comfort and love. However, in continued failed attempts, the partner is perceived to be unavailable, threatening the marital bond and activating the attachment system (Clinton & Sibcy, 2006). The fact remains that one's attachment beliefs not only affect the manner in which one seeks out partners when closeness is desired, but also evidences the individual's response to their partner's request for the same.

Internal Working Model. A term coined by Bowlby, internal working models (positive and negative views of self and other) develop into internalized organized expectations of relationships that persist throughout one's development and manifest as attachment beliefs. These beliefs guide expectations, perceptions, and behavior in romantic relationships developing into attachment styles (Carpenter & Kirkpatrick, 1996; Clinton & Straub, 2010; Morrison, Goodlin-Jones, & Urquiza, 1997; Simpson et al., 1996). Each attachment style differs in its view of self and other and its methods of obtaining felt security. During moments when the internal working model is at work, individuals recollect (a) autobiographical memories of social interactions, (b) expectations about self or others in interpersonal situations, (c) goals that guide their responses in social situations, and (d) strategies aimed at attaining these goals and at regulating the distress produced by the lack of goal attainment (Mikulincer, 1998). The IWM can be likened to a gate that opens when felt security is sought and closes to self-protect when security is not obtained. Such cognitive representations greatly influence affect and behaviors; they can either restrict or release one's ability to act on healthy or unhealthy intimacy behaviors within the relationship.

Intimacy

Research on couple relationships has reflected an increasing emphasis on couples' intimacy as a critical component in explaining relationship functioning (Herrington et al., 2008; McCabe, 1999). Intimacy is what counts most towards an enduring and satisfying marriage and cannot flourish outside of felt safety between partners (Hawkins, 1991; Waite & Gallagher, 2000); however, for some individuals, marriage may only provide the environment in which to build intimacy and not necessarily the means by which to obtain it (Cook & Jones, 2002). Identified as emotional closeness and affection (expressed verbally and physically), building and maintaining intimacy are dependent on both the *willingness* and *ability* to provide it to a significant other. Yet, this skill set varies in each individual. This level of mutual sharing is dependent upon the *willingness* and *ability* of spouses to modify their sense of self (identity). However, if there is a pre-existing fear or internal barricade which overshadows one's willingness and ability to give and receive intimacy, the relationship may decay. Barriers to intimacy stem from an imbalanced or dysfunctional self-image or a lack of trust of significant others (Hawkins, 1991; Lawrence et al., 2008).

Identity development and differentiation

Research has indicated that intimacy in a healthy relationship involves a delicate balance between closeness and autonomy (Feldman et al., 1998). In order for a person to successfully balance this interplay between closeness and autonomy, he must have already successfully achieved healthy self-awareness and identity development (Patrick, Sells, Giordano, & Tollerud, 2007). Developmental psychologist Erik Erikson, known

for his theory on psychosocial development, stated that before one can become intimate with another, he must first develop a defined and individuated self (Feldman et al., 1998). The fifth stage of Erikson's theory (identity versus confusion) states that those who received proper encouragement and reinforcement in personal exploration during childhood are able to emerge from the identity versus confusion stage with a strong sense of self, independence, and control. Those who do not successfully navigate this stage often emerge feeling insecure and confused about themselves and their future (Laurenceau et al., 2005).

If a person is limited in his understanding, display, acceptance, or experience of intimacy, he becomes deficient in his ability to balance autonomy and connectedness, ultimately affecting his ability to give and receive intimacy within adult attachment relationships (Greeff & Malherbe, 2001). An individual's ability to be aware of and monitor his or her emotional state, separate thought from feeling, and relate to others while being less reactive in stressful situations ultimately affects his or her ability to manage and balance separateness and closeness in relationships is known as differentiation (Bowlby, 1973; Bowlby, 1982; Gubbins, Perosa, & Bartle-Haring, 2010; Jankowski & Vaughn, 2009). Differentiation sets the tone for expectations, responses, and interaction between self and others (Jones et al., 2011). Each spouse's level of differentiation is fundamental to his or her capacity to achieve intimacy and mutuality in marriage (Gubbins et al., 2010).

Pornography Use

Background

Pornography research has dominated the literature from a sexual theme (e.g., sexual deviance, sexual perpetuation, rape myth acceptance, attitudes regarding intimate relationships, and behavioral and sexual aggression) (Manning, 2006). Zillman and Bryant (1988a, 1988b) contended that the primary reason for the focus on the aforementioned themes is the manner in which various sexual scenarios in pornographic videos encourage many of the behaviors under investigation in present analyses. Although this information has laid a solid foundation for the effects of pornography on its consumers, additional steps are being made to delve deeper to evidence effects from a relational perspective among committed couples.

Advent and significance of Internet pornography use. Reported as being the most common source of pornography exposure, approximately 20-33% of Americans use the Internet to view sexual content of some kind (Ayres & Haddock, 2009; Beaver & Paul, 2011; D'Orlando, 2011; Kalman, 2008; Luder et al., 2011; Paul & Shim, 2008; Poulsen et al., 2013). Likened to a sexual revolution holding power and attraction like no other pornographic distribution vehicle, the phenomenon of this medium lies within the pornographic images' representation once they are accessed via the Internet (Philaretou et al., 2005; Wright & Randall, 2012). Researchers have argued that pornography changes when it is viewed on a computer because the technology carries an affective charge that embodies new forms of pleasure, altering arousal for the user because of the rapid escalation of sexual activities, which only happens through the Internet, enabling faster

escalation paths leading to the potential for virulence for the pornography user (D'Orlando, 2011; Garlick, 2010). Internet pornography opens a plethora of options for the pornographic viewer. With over 100,000 websites featuring all kinds of sexual content, the Internet has increased its consumer base by piquing the interest of pubescent males as well as encouraging a new pornographic viewer who, prior to the Internet, may have never sought out an adult book store or sex shop or rented from a local video proprietor but with the stroke of a finger can easily join the ranks of this growing population of viewers (Philaretou et al., 2005).

Pornography is considered to have a male-dominated audience who tend to prefer to watch pornography alone (Staley & Prause, 2013; Traeen, Nilsen, & Stigum, 2006). Research suggests that Internet pornography consumption may be considered incompatible with the characteristics of stable and healthy marriages, as married pornography users report lower levels of happiness overall and within their marriage (Manning, 2006; Patterson & Price, 2012). This online sexual activity allows for unaccompanied sexual joy void of the value of attachment, commitment, or responsibility (Clark & Weideman, 2000; Staley & Prause, 2013; Stulhofer et al., 2012; Wright & Randall, 2012; Zillman & Bryant, 1988b). Coined by Alvin Cooper, the term "Triple-A engine" encapsulates the essential differences between standard, historically marketed sexual materials (general pornography) and Internet pornography (i.e., World Wide Web). Internet pornography grants seclusion to purchase material directly without interaction with or interruption from others, supporting secrecy and distance between partners (D'Orlando, 2011; Kalman, 2008). The unique traits of the Triple-A engine exacerbate the disregard for closeness between partners.

Secretive pornography use. Secretive pornography use holds a forbidden quality. It involves one partner engaging in pornography in a solitary, secretive fashion where the committed partner is unaware of either the pornographic activity or the amount of the pornography consumption. In attempts to keep the pornography use hidden, the user must lie to their spouse or omit the truth, breeding division between spouses due to the nature of the activity happening outside of a relational context (Manning, 2006; Mileham, 2007). Pornography users adopt the mindset that sex is for fun alone, ignoring the basic social and relational aspects of sexual activity (Manning, 2006; Wright et al., 2013). In qualitative studies, spouses made significant statements regarding their partner's pornography use evidencing distance and minimizing closeness: "I have been excluded, isolated, barred from intimacy with him." "He has a whole secret life from which I am completely excluded and about which he continually lies to me." (Manning, 2006; Stewart & Szymanski, 2012) Such statements give credence to spousal disapproval of the secrecy, the exclusion felt by spouses, and the effect on the psyche and value of relationship and bond between the couple.

Manning (2006) has theorized that those who view pornography alone may do so to construct a wall between themselves and their partners. Depending upon the purpose the pornography serves, in attempts to keep the secret hidden while at the same time making continued attempts to feed their desire(s), pornography users may cross over into overuse and overindulgence (Popovic, 2011). Pornography may dismantle the bond originally developed between spouses, creating relationship problems (Manning, 2006; Popovic, 2011). Spouses of pornography users develop an overall view of pornography as the cause for the divide within the relationship and defiling one of the most intimate

aspects of the relationship – sexuality, which they believe to be confined exclusively to the relationship to express spouses bond of love (Manning, 2006).

Positive relationship effects of pornography use. Pornography users continue to engage in their behavior in part due to the gains they receive from viewing the material. Studies have indicated that pornography use relieves stress, decreases boredom, increases sexual knowledge and causes the user to feel supported (Short et al., 2012). Additionally, research has found that pornography use does not seem to cause a decrease in all sexual relations between spouses. Yet, the drawback is that pornography users tend to engage in sexual advances that make their spouses feel objectified. This minimizes meaningful interaction between couples and combines an element of distance and emotional detachment in sexual relations where the pornography user's attentions are centered on their own sexual pleasure, negating their spouse (Manning, 2006).

Adverse relationship effects of pornography use. Previous research has identified numerous adverse relationship effects of pornography consumption. From a relational vantage point, pornography incites doubt about the value of marriage (Tarver, 2010) and lowers social integration (Reinert, 2013). The relationship experiences decreases in trust (Tarver, 2010), openness (Popovic, 2011), communication (Poulsen et al., 2013; Szymanski & Stewart-Richardson, 2014; Yoder, Virden, & Amin 2005), affection (Kalman, 2008; Poulsen et al., 2013; Staley & Prause, 2013; Tarver, 2010; Yucel & Gassanov, 2010), and intimacy (Bridges et al., 2003; Hosley, Canfield, O'Donnell, & Roid, 2008; Kerkhof, Finkenauer, & Muusses, 2011; Olmstead et al., 2013; Popovic, 2011). Additionally, the relationship experiences increases in dysfunction (Daneback et al., 2009), isolation and loneliness (Reinert, 2013; Yoder et al., 2005),

behavior problems (Reinert, 2013), fear of intimacy (Popovic, 2011), anxiety, low self-esteem, sexual dysfunction (Daneback et al., 2009), infidelity, and the desire for more deviant and bizarre sexual acts not of interest prior to the pornography use (D'Orlando, 2011).

Links to attachment and intimacy. The drive that propels some to turn to pornography has been linked to attachment and intimacy (Olmstead et al., 2013; Szymanski & Stewart-Richardson, 2014). Research has evidenced a negative correlation between pornography use and relationship quality (Szymanski & Stewart-Richardson, 2014). Relationships today are more strongly based on intimacy today as compared to marriages of 40 years ago (Voorpostel, van der Lippe, & Gershuny, 2009). Intimacy is an important aspect of the marital relationship, as its development and maintenance is dependent upon continued connection between spouses. For some, pornography use is an effective and efficient way to deal with unwanted emotion (Twohig et al., 2009). Regrettably, the sexual preoccupation with pornography causes the user to place increased importance toward sexual relations instead of emotional involvement (Clark & Weiderman, 2000; Philaretou et al., 2005; Staley & Prause, 2013; Stewart & Szymanski, 2012). Utilized as a primary coping strategy for the user, pornography threatens the stability of the relationship because it prompts the user to turn inward, away from their spouse, and over time decreases intimacy, weakens and threatens the stability of the marital bond, and leads to the deterioration of emotional attachment and relationship commitment (Benjamin & Tlusten, 2010; Kerkhof et al., 2011; Manning, 2006; Stulhofer et al., 2012).

Due to the seemingly damaging effects pornography has on the marital relationship, social scientists have begun to search for answers as to what propels pornography users to engage in its use. Perhaps the desire or need to engage in pornography use allows the user to engage in pornography as a safeguard by which to meet intimacy needs without judgment, rejection, or fear (Manning, 2006; Stulhofer et al., 2012). Studies have identified that pornography users actually crave intimacy to the point that their use of pornography is in reality an expression in the search for it; hence, the fear of intimacy was a major contributor to pornography use (Popovic, 2011). This suggests that deficiency in intimacy and the inability or incapability to effectively communicate healthy attachment behaviors drives individuals to seek extramarital resources such as pornography to have basic human needs satisfied.

One of the major gaps in existing research is the effect attachment, intimacy, and pornography use have on marital satisfaction. It would seem that the next direction in this line of research would be to investigate pornography from a relational perspective using a systemic lens. Each variable has evidenced a strong influence on spouses' perception of marital satisfaction. However, no research to date has examined the influence of attachment, intimacy, and pornography use on marital satisfaction. To close some of the gaps in the literature, it may prove to be beneficial to identify the effects each of the aforementioned variables has on relational functioning of the couple, which may aid in better understanding of why some individuals are more susceptible to seek or engage in pornography use.

Main Research Questions, Variables, and Measures

This research asked three questions. First, what is the relationship between attachment, intimacy, and pornography use on marital satisfaction? Second, in what ways does intimacy influence marital satisfaction among pornography users with insecure attachment? Third, is pornography used to regulate attachment emotions among pornography users with insecure attachment? The following variables are included within this study: romantic attachment, which encompasses anxious and avoidant (IV), which will be measured by the Emotionally Close Relationships – Revised Form (ECR-R) (Brennan et al., 1998); intimacy (IV), measured by the Personal Assessment of Intimacy in Relationships (PAIR) (Schaefer & Olson, 1981); pornography use (IV) measured by the Cyber-Pornography Use Inventory (CPUI; Grubbs et al., 2010); and marital satisfaction (DV), measured by the Burns Relationship Satisfaction Scale (RSAT) (Burns, 1983) and a demographic questionnaire.

Operational Definitions and Terms

Anxious Attachment – A type of attachment in which an individual lacks a sense of self-worthiness seeking love and acceptance yet views others positively (Bowlby, 1973).

Attachment – Behavior of seeking proximity to a primary attachment figure by specific stimuli (threat and stress). There are three central functions in all attachment relationships: proximity maintenance, safe haven, and a secure base. In childhood, the primary caregiver serves as a safe haven where the infant can turn for reassurance, support and comfort (Bowlby, 1973).

Avoidant Attachment – A type of attachment in which an individual feels worthy of love yet detaches from others whom the individual generally regards as untrustworthy. People who are avoidant are uncomfortable with closeness and tend to become overly self-reliant (Bowlby, 1973).

Fearful Attachment – A type of attachment in which an individual experiences a lack of a sense of lovability and avoids others in anticipation of rejection (Bowlby, 1973).

Internal Working Model (IWM) – A set of thoughts, emotions, beliefs, and expectations about the self and others. Beliefs about self center on two primary questions: am I worthy of love and am I capable of gaining love and support in times of emotional stress? Beliefs about other focus on two primary questions: are other people able and willing to help me when I am in need and are they reliable and trustworthy (Bowlby, 1973)?

Interpersonal Processes - A between-individuals approach which develops the infrastructure for how to build and maintain close relationships (Ottu & Akpan, 2011).

Intimacy – This term focuses on the process aspects of intimacy by distinguishing between intimate experiences and an intimate relationship where the latter is a feeling of closeness or sharing with another in one or more areas to include social, emotional, sexual, recreational, intellectual, spiritual, and aesthetic intimacy (Schaefer & Olson, 1981).

Intrapersonal Processes - Based from within the individual, this process acts as a blueprint for how to perceive, evaluate, and respond to experiences in close relationships (Ottu & Akpan, 2011).

Online Sexual Activity (OSA) and cybersex/cyber pornography - Viewing Internet pornography. Researchers use online sexual activity and cybersex/cyberporn

interchangeably as terminology for Internet pornography use (Grubbs et al., 2010; Popovic, 2011).

Pornography Use – The exhibition of sexual subjects or activity in pictures, writing, or other material whose primary purpose is to cause sexual arousal; also, the presentation or production of this material (Szymanski & Stewart-Richardson, 2014; Yoder et al., 2005).

Proximity Seeking – To acquire physical closeness to an attachment figure in times of distress. Infants typically need physical closeness and contact to feel secure. As people age, less physical closeness is needed and instead physical closeness becomes a need for the assurance that a person is emotionally available if/when needed. While physical contact is still an important part of attachment security, it now incorporates a felt security and this is what really matters as these security needs are the most fundamental part of attachment (Bowlby, 1973).

Romantic Attachment – Romantic attachment is affected by attachment theory and addresses the same three tenants of attachment: safe haven, secure base and proximity seeking. Just as in childhood, adults' intimacy with a romantic partner leads them to seek out their partners for comfort and closeness during times of stress. However, instead of solely needing physical closeness, in romantic relationships, in order to deactivate the attachment system, partners need to know their spouse is available, sensitive, caring, and responsive to their attachment needs. In so being, these spouses become safe havens where spouses turn for comfort and love, thus serving as a secure base and safe haven (Hazan & Shaver, 1987).

Safe Haven – A function of attachment and refers to the reliability of the attachment figure to provide protection, comfort, support, and relief in times of stress, illness, or threat of separation (Ainsworth, 1992; Bowlby, 1973).

Secretive Pornography Use – Solitary pornography use where one's spouse is unaware of the pornography use or the amount of consumption (Manning, 2006).

Secure Attachment – A sense of worthiness or lovability and comfort with intimacy and autonomy. Describes those who hold a positive view of self and others. They believe they are worthy of love and that others are capable and accessible when needed (Bowlby, 1973).

Secure Base – A function of attachment that refers to the real or perceived availability of the attachment figure by the individual. The secure base function allows for an individual to then explore other relationships and behaviors in a safe environment (Bowlby, 1973).

Limitations to the Study

Limitations to the study must be considered. This cross-sectional study hinders the ability to draw causal inferences. This study employed the use of self-report instruments for the measurement of the independent variables and dependent variable. Likewise, results depended on the openness and honesty of participants and due to the foci of the study being pornography consumption, social bias may be a possibility because participants may have chosen to endorse socially condoned behaviors (Warner, 2008). These issues raised concerns regarding statistical conclusion validity and were considered when reviewing results.

Another concern is the limited view of one partner when not enlisting responses from both spouses in the marital relationship. The benefit of future studies utilizing solely a married population is twofold. It would provide a clearer examination of the married population as well as allow data collection from both spouses. Additionally, participants in the study consisted of both cohabitating and married couples.

Cohabitation does not provide the stability and commitment that marriage offers (Waite & Gallagher, 2000). Cohabitation is an indication of a lessened degree of commitment to the relationship that affects the overall dedication and value to the relationship. Finally, according to Erikson, participants under the age of 25 have not yet completed the sixth stage of psychosocial development, categorized as young adulthood, known as the intimacy versus isolation stage. Such individuals may be unable to identify the complexity and value of relationships, thereby hindering their ability to recognize the importance of intimacy, identity formation, and autonomy as well as the influence of outside sources that sway a person's attention away from the marital partner (Feldman et al., 1998).

Organization of the Remaining Chapters

Chapter Two delves into a more extensive review of the literature, summarizing previous marital satisfaction research and further identifying factors that promote healthy and functional marital relationships. The first two independent variables, anxious and avoidant attachment, will be discussed, laying a theoretical foundation upon the development of core attachment beliefs, attachment behavioral systems, internal working models, and adult romantic attachment classifications. The third independent variable,

intimacy, will explore the individual and relational process of intimacy and clarify how it is established and maintained in the marital relationship through the exchange of various intimacy behaviors and intimacy experiences shared between couples. Lastly, the fourth independent variable, pornography use, will be discussed in order to determine antecedent factors that drive pornography use. The effect of pornography use on relationship outcomes will be discussed to include adverse, positive, and intimacy effects on the marital relationship. The chapter will conclude with the study, research questions, hypotheses, and a brief summary. Chapter Three will provide an overview of the method outlining the design, assessments utilized in the study (RSAT, PAIR, ECR-R, and CPUI), procedures, research design, data analysis, assumptions, and ethical considerations of the study.

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

Further expounding upon the relevance of examining the relationship between marital satisfaction, romantic attachment, and pornography use that was presented in Chapter One, this chapter provides a review of the literature and begins with an overview of marital satisfaction and healthy marital functioning. A link is made between research on each of the independent variables (i.e., romantic attachment beliefs, intimacy behaviors, and pornography use) and the dependent variable (i.e., marital satisfaction). Attachment theory and research are introduced to evidence how attachment beliefs are carried into adult romantic relationships and explain how they produce healthy and unhealthy relational outcomes in marital satisfaction. Next, intimacy is reviewed in two categories, individual and relational processes, and evidence of its functioning in intimacy behaviors and experiences within a committed relationship is discussed. Finally, pornography use is explored, outlining theoretical and empirical study on how motivations and triggers of its use have an effect on individual and relationship functioning. The chapter concludes with presenting the purpose of the study, research questions, and hypotheses.

Marital Satisfaction

Marriage is arguably the most intimate and important of all adult relationships, as it provides vast opportunities for satisfaction, security, intimacy, and growth in human

functioning (Clulow, 2007; Ottu & Akpan, 2011). A satisfying intimate relationship contributes greatly to a person's subjective wellbeing, offers social support, acts as a significant source of happiness, and contributes to a better quality of life (Ottu & Akpan, 2011; Pielage et al., 2005; Reynolds et al., 1995). It is within this relationship that spouses discover their own sense of security but also realize the core to their personal identity is dependent on being relational (Clulow, 2007; Joel et al., 2011). Each spouse's ability to meet this need of security, dependency and being relational colors their perceptions of the marriage. One factor which relates to marital satisfaction is the preconception partners hold of the relationship and whether that preconception fulfills their expectation (McCabe, 2006). Marital satisfaction is a global concept that identifies the quality of the marriage as seen in the eye of the beholder (Reynolds et al., 1995). Previous experiences and perceptions are conveyed to spouses as being acceptable or unacceptable; hence, the neglect or attention paid to preconceived perceptions and expectations influences views of marital satisfaction (Gordon & Baucom, 2009).

Determinants of Marital Satisfaction

Major contributors to marital satisfaction are marital adjustment and marital happiness (Plechaty et al., 1996). Happiness refers to a person's attitude toward the partner and the relationship; marital adjustment places the focus on individual accounts of spousal attitudes, behaviors, and feelings that must now be considered in addition to one's own, therefore providing greater insight into individual and relationship functioning (Sabatelli, 1988). Based on the extent to which needs, expectations, and desires have been met within the marriage, marital satisfaction is built on subjective

impressions of each person's feelings and attitudes regarding his spouse and the relationship (Rowan, Compton, & Rust, 1995; Sabetelli, 1988). Successful relationships are dependent upon how each partner perceives his status of happiness. Research has evidenced that a person's perception of his or her spouse as a satisfactory partner predicts relationship stability with 87% accuracy (Phillips et al., 2009). Satisfied couples understand and accept each other's views and needs while also being flexible enough to adapt to the partner's changing needs, effectively adjusting to one another and modifying the sense of self in order to share intimate relations (Cook & Jones, 2002; Rowan et al., 1995). Simply stated, marital satisfaction is a composite of general happiness and adjustment to another based on an evaluation of behavior, interaction, and intimacy (Ottu & Akpan, 2011).

Healthy Marital Functioning

In healthy functioning relationships, couples who value close connection are able to build an intimate and satisfying relationship knowing that the other acts as a platform by which he or she evidences care for the partner's individual needs, contributes to life, and safeguards the other from negative life events (Johnson et al., 2006). Well-known marital researcher John Gottman has spent over two decades researching couples to uncover what causes the success or demise of a marriage. After observing thousands of couples interact, Gottman, Gottman and DeClaire (2006) discovered healthy functioning couples had more positive day-to-day exchanges, allowing spouses to connect emotionally. In these relationships in which spouses connect, they turn toward one

another, evidencing openness, attentiveness, and active engagement with their partner (Gottman et al., 2006; Mikulincer, 1998).

When spouses consistently turn to their partner, they strengthen the marital friendship, romance, and emotional bonds (Gottman & DeClaire, 2001). Gottman (1994) identified such behavior as emotional bids for connection. These exchanges can be verbal, non-verbal, or physical behaviors that may be subtle at the onset of a relationship but evolve as the relationship grows and deepens. In healthy relationships, couples show interest, affection, care, concern, acceptance, appreciation, and enjoyment of each other's company (Gottman, 1994). Couples who perceive a strong sense of emotional connection believe they are loved, appreciated, and needed by their partner (Gottman & DeClaire, 2001). In these relationships, couples feel safe, believe their partner shares their feelings and needs, communicates and listens with an open mind, deals with problems and conflict effectively, and engages in more positive interactions with their spouse (Gottman, 1994; Gottman & DeClaire, 2001). These couples were evidenced to have five positive interactions for every one negative interaction. Frequently repeated small, positive behaviors have been shown to make a positive impact on the long-term success of the marriage (Gottman & DeClaire, 2001).

Not everyone has the ability to seek healthy emotional connection or to respond to others' bids, however. These incapacibilities can prevent the development of emotional connections or cause existing connections to deteriorate (Gottman & DeClaire, 2001). Gottman's research findings on the ability to emotionally connect are highly similar to that of attachment theory (1999). All people experience emotional needs in their own way, and in some cases, these experiences may not necessarily be equal or of importance

to their partner (e.g. quality time, display of affection, closeness, etc.). The manner in which couples interact with each other provides insight into their attachment style. Securely and attached individuals communicate and behave quite differently from those who are insecurely attached. Insecurely attached individuals have difficulty being in a satisfied relationship because of their propensity to consistently doubt their own love, struggle with commitment and support, and resist the high level of interdependence that a healthy functioning marital relationship typically requires (Charania & Ickes, 2007). Contrariwise, securely attached individuals are able to develop healthy functioning relationships because they allow their marriage to serve as a secure base from which they and their spouse can enter the world with assurance and confidence and return at the end of the day knowing they will be loved, understood, and cared for by their spouse (Clinton & Sibcy, 2006).

Attachment Theory

Attachment has become one of the most influential approaches to the psychology of close relationships (Carpenter & Kirkpatrick, 1996). Utilized as a framework for understanding the conduit to the continuity of close-relationship patterns over time, attachment has been the most widely researched intrapersonal variable which affects adult relationships and is viewed as an imperative means by which to create meaningful and satisfactory bonds between spouses and lead to positive relationship outcomes (Dandurand & Lafontaine, 2013; Duffey et al., 2004; Fraley, Waller, & Brennan, 2000). Attachment theorists believe safe emotional interaction (i.e., secure attachment) and dependence on a loved one or partner is the most basic human need (Jones et al., 2011).

Work on attachment theory has had a stronger impact on American psychology than any other theory of personality development and has been widely used by developmental psychologists in investigating social development in infancy, and later in childhood and adulthood (Ainsworth, 1992).

John Bowlby, the father of Attachment Theory and a trained child psychiatrist, spent much of his early training researching the effects of mother-child separation. As he witnessed the effects of children's separation from their parents during World War II, Bowlby became convinced that a disruption of the bonds with parents played a significant role in the etiology of emotional disorders (Ainsworth, 1992). He believed that the interaction of parents with their children played a significant role in the development of a child's personality. Even more importantly, he identified that the adverse effects of a disruption of this bond with parents had lasting effects on children (Bowlby, 1980). He identified three phases of response to separation: protest, despair, and detachment. However, his discovery could not be satisfactorily supported by existing theories. Drawing upon developmental psychology, psychoanalysis, cybernetics, cognitive information theory, systems theory, and gains from his clinical observations with James Robertson, Bowlby developed his attachment theory. This theory stresses that in order for children to grow up mentally healthy, they need to experience a warm, intimate, and continuous relationship with their primary mother figure (Ainsworth, 1992; Bretherton, 1992).

Bowlby identified the importance of the relationship between a primary caregiver and an infant or child and recognized the inbred awareness of a dependency need wherein a person grapples with internally balancing interdependence and individuation (Bowlby,

1980). Attachment behavior is conceived as any form of behavior that results in a person attaining or retaining proximity to some other differentiated and preferred individual – the primary caregiver. It is mediated by behavioral systems, which become goal-centered in early development. The goal of attachment behavior is to maintain certain degrees of proximity to or of communication with the attachment figure. This proximity maintains homeostasis. However, when homeostasis is not maintained or extends beyond the internally contrived boundary, the system becomes overstretched and eventually fails, causing the activation of the attachment system due to the onset of distress or anger (Bowlby, 1973).

Since the goal of attachment behavior is to maintain the affectional bond, any situation that seems to be endangering the bond elicits action designed to preserve it; the greater the danger of loss appears to be, the more intense and varied are the actions elicited to prevent it (Bowlby, 1980). When the proximity is strained or severed, the system is activated and attachment behaviors begin to take place. Bowlby (1980) believed that if the attachment figure is unattainable, or their presence is not felt by the child, then efforts are made toward the attachment figure in attempts to elicit caregiving. When these efforts to restore the bond are unsuccessful, efforts wane but never cease (Bowlby, 1980). This behavior shapes the mental representational models of both self's capabilities and the environment by asking two essential questions: am I worthy of love and are others capable of loving me? Answers to these questions, both cognitively and emotionally, have profound impact for the basis of core relational beliefs on how people view themselves and relate in the closest and most important relationships in their lives (Bowlby, 1980; Clinton & Straub, 2010). Although attachment is essential to survival

and wellbeing early in life, attachment behavior and the bonds which they create are present and active throughout the entire life span, displaying effects on the cognitive, affective, and behavioral interchanges within and between individuals (Bowlby, 1980).

Attachment and Childhood

Mary Ainsworth spent considerable time observing the development of infant-mother attachment patterns. She helped to further expand the development of attachment theory with the concept of maternal sensitivity to infant signals and its role in the development of infant-mother attachment patterns. Based on her observations, Ainsworth believed the attachment figure served as a secure base from which an infant can explore the world (Bretherton, 1992). In various observation studies, she noticed and identified various attachment patterns. Securely attached infants seemed to cry little and be content to explore in the presence of their mother; insecurely attached infants cried frequently, even when held by their mothers, and explored little, and not yet attached infants manifested no differential behavior to the mother (Bretherton, 1992). Based on findings from her Uganda observation study, Ainsworth (1992) noted that secure attachment was significantly correlated with maternal sensitivity. Babies of sensitive mothers tended to be securely attached, whereas babies of less sensitive mothers were more likely to be classified as insecure (Ainsworth, 1992). It was believed that deprivation of affection causes damage to a child's personality and a sense of insecurity (Strobe & Archer, 2013).

To test the theory, Ainsworth continued her work with colleagues Blehar, Waters and Wall and conducted the Strange Situation experiment. In this experiment, the

researchers observed the balance of attachment and exploratory behaviors in one-year old children under the conditions of low and high stress. The mother and infant were introduced to a laboratory playroom and later joined by a female stranger. While the stranger plays with the baby, the mother leaves briefly and then returns. In a second separation, the stranger then leaves and during this separation the baby is left completely alone, then the mother returns. The study demonstrated that mother's caregiving behaviors and differences in children evidenced in her laboratory setting were consistent to what Bowlby witnessed during home observations between the parent and child (Carpenter & Kirkpatrick, 1996). Findings from the experiment produced the classification of three basic attachment styles: secure attachment, anxious-ambivalent attachment, and anxious-avoidant attachment (Ainsworth, 1992; Bretherton, 1992; Clinton & Straub, 2010).

Ainsworth's findings confirmed that some infants explored the playroom and toys more vigorously in the presence of their mothers than after a stranger entered or while the mother was absent. These children were classified as being securely attached. Unexpected findings showed that some of the one-year-olds were angry when the mother returned. These children were classified as insecurely attached. Two categories of insecure attachment showed different responses from children. Children who cried and wanted contact but would not cuddle or take comfort after being picked up by their returning mother instead showed their ambivalence by kicking or fighting with her. These children were identified as anxious-ambivalent. Children who seemed to rebuff or avoid the mother upon her return, even though they had often searched for her while she was absent were classified as anxious-avoidant. These children had a less harmonious

relationship with their mothers at home than those who sought proximity, interaction or contact upon reunion (Bretherton, 1992). Main and Solomon later identified a fourth attachment type, anxious-fearful attachment (Solomon, 2009). Such children find that the source of comfort is also the source of their pain. These children become immobilized upon the return of the mother figure and evidenced behaviors that resembled both ambivalent and avoidant behaviors.

Attachment Behavioral Systems

Bowlby (1980) believed that humans are born with an innate behavior that contributes to their individual survival by keeping them in touch with their primary caregiver, thereby reducing the risk of coming to harm and aiding in the adaptation to the environment as well as the caregiver. He proposed that 12-month-olds' attachment behavior was made up of three stages of instinctual responses, in which the infant seeks the support of the mother figure, which act as safety devices to ensure that the separation will not be long (Bowlby, 1980; Mikulincer, Shaver & Berant, 2013). In stage one of this instinctual response, the child seeks to restore close proximity to the attachment figure by becoming physically close. Attachment behaviors are engaged to ensure this process takes place.

Two primary attachment behaviors exercised to restore closeness are proximity seeking and signaling. Proximity seeking refers to crawling, running, sucking, clinging, following, or reaching out to the primary caregiver (Bretherton, 1992; Clinton & Straub, 2010). Signaling refers to the method the child uses to alert the primary caregiver that a problem exists (e.g., smiling, whining, crying, screaming, or pleading). Such behaviors

mature independently during the first year of life and become increasingly integrated and focused on the mother figure during the second six months of the year (Bretherton, 1992). The way the mother perceives these messages of proximity seeking and signaling plays an important role in how sensitively and effectively she responds to the child's distress (Clinton & Straub, 2010).

In stage two of typical attachment behavior, the child sees the attachment figure as a safe haven which reduces threat and regulates his or her emotions by restoring peace and offering safety and love (Bowlby, 1980). In this stage, the threat is identified and overcome; the connection has been reestablished and love reinforced. In the final stage, the child interprets the attachment figure as a definitively secure base, a place to go to feel safe, secure, accepted, and free to explore and learn about the world while developing one's own capacities and personality (Clinton & Straub, 2010; Mikulincer et al., 2013; Stroebe & Archer, 2013).

Young children need to know that their caregiver is dependable, in the sense of being there when needed and providing a sense of secure attachment (Stroebe & Archer, 2013). Ainsworth found that parents of children with secure attachment had traits that aided them in developing a healthy-functioning self; evidencing confidence in pursuing new goals; exploring new environments, objects, and ideas; enjoying, learning, and developing new skills; and realizing one's potential and aspirations (Shaver & Mikulincer, 2010). The children of these parents believed they were worthy of being loved. Their caregivers were dependable, trustworthy, and supportive and provided comfort in times of need (Bachman & Bippus, 2005; Solomon, 2009). However, if one's key attachment figure has not been reliably available and supportive, this sense of

security is not obtained, doubts about one's lovability and worries about others' motive and intentions are raised, and affect-regulation strategies other than healthy proximity seeking behaviors are formed (i.e., secondary attachment strategies characterized by hyperactivation or deactivation of the attachment system (Mikulincer et al., 2013; Morrison et al., 1997).

Internal Working Models

Formed in childhood, attachment behavior leads to the development of affectional bonds or attachments where implicit emotionally charged core beliefs about the self take shape; the responses from the primary caregiver shape beliefs and expectations about the reliability and willingness of others to love, care and support them emotionally (Clinton & Straub, 2010; Holmes & Johnson, 2009; McCarthy & Maughan, 2010). As children age, they become primed to treat themselves and others in ways based on how they were treated as children (Raque-Bogdan et al., 2011). These mental representations contain information about how issues are to be handled in the relationship, such as how emotionally available and reliable the other person and the self are likely to be, what sorts of emotional experience and expression feel comfortable and useful, and how to assess and react to disappointment, emotional discomfort, communication, and problem solving (Holmes & Johnson, 2009; Morrison et al., 1997; Simpson et al., 1996). If the primary caregiver is reliable and available during times of stress by acknowledging the child's needs for comfort and protection while simultaneously respecting his or her need for independent exploration of the environment, the internal working model of self is viewed as being loved, accepted, valued, and self-reliant (Bretherton, 1992; Clinton & Straub, 2010). Yet, when the child's bids for connection or exploration are rebuffed, the child is

likely to construct an IWM of self that is viewed as the opposite of the aforementioned traits (Bretherton, 1992).

As cited in Holmes and Johnson (2009) Horowitz and Bartholomew people who have a positive model of self view themselves as being worthy of love and support. The model of self is *related to the extent to which one experiences anxiety about being rejected or abandoned*. Those who have a positive model of self experience little to no anxiety about being abandoned because they feel they are worthy of love and support. Individuals who have a positive model of others desire intimacy and closeness and tend to view partners as available and trustworthy. A model of others is related to *the extent to which individuals will seek out or avoid closeness in relationships*. Those who have a positive model of others will actively seek out intimacy, support, and closeness in relationships (Kachadourian, Fincham, & Davila, 2004).

These IWMs aid the child in predicting the attachment figure's likely responsive behavior and accordingly planning his or her own responses (Bretherton, 1992). These emotionally charged autobiographical memories, interactive behaviors, and feelings experienced during infant development become part of the wiring of the child's brain at an unconscious level. This wiring influences behavior long before language development (Bretherton, 1997; Clinton & Straub, 2010). Adapted over time, these affectively laden social schemas guide expectations about future relationships, teaching individuals which emotions are acceptable and which are not, ultimately guiding assumptions for how to respond to feelings and behaviors of self and others for all of life (McCarthy & Maughan, 2010; Clinton & Straub, 2010; Owen, Quirk, & Manthos, 2012).

Adult Attachment Beliefs

The study of attachment began with Bowlby's seminal theoretical work and has progressed along two fairly independent tracks: childhood and adult attachment (Dinero et al., 2008). Core relational beliefs are the product of various experiences and memories begat in childhood (Clinton & Straub, 2010). As children age, in terms of the mental representation of the child and primary caregiver, Bowlby recognized shifts from shorter to longer cycles of the secure base behavior. Specifically, unlike infants and toddlers, older children (including adolescents and adults) retained the internal working model or mental representation of the secure base in lieu of the physical return of the attachment figures for nurturance or support. This finding indicates that at all ages, the most critical factor in developing attachment is the person's confidence in the secure base's availability and preparedness to extend appropriate support if and when needed (Pittman, Keiley, Kerpelman, & Vaughn, 2011). While physical contact is still an important part of attachment security, what is most fundamental for adult attachment security is a felt security, or the sense that the attachment partner can be there if and when needed (Levesque, 2012). It was believed that daily routines and transactions that guide and ground the relationship between the child and caregiver during times of stress and need also predict and translate into how the adult perceives routines and transactions in their romantic relationships (Pittman et al., 2011).

Research evidence linking adult attachment to childhood attachment paved the way for the development of the Adult Attachment Interview (AAI). Main and colleagues identified attachment patterns in adults by measuring their internal working models (Bretherton, 1992). In an interview format, adult parents were asked open-ended

questions about their attachment relations in childhood and about the influence of these early relations on their own development. The interview identified three classifications which corresponded to Ainsworth's secure, ambivalent, and avoidant infant patterns (Bretherton, 1992). Autonomous-secure parents gave a clear and coherent account of early attachments (regardless if they were satisfying accounts or not); preoccupied parents spoke of many conflicted childhood memories about attachment but did not draw them together into an organized, consistent picture; dismissing parents were unable to remember much about the attachment relations in childhood (Bretherton, 1992). Findings of the AAI were empirically validated in prenatally administered interviews conducted by Fonagy, Steele and Steele (Bretherton, 1992).

Romantic Attachment Classifications

Building on the gains of the AAI, researchers Hazan and Shaver (1987) furthered adult attachment research with respect to adult romantic relationships. They conceptualized attachment style as a global working model, or schema, of self and others that guide functioning in intimate relationships (Benson et al., 2013; Hazan & Shaver, 1987; Kirkpatrick, 1998). Their adult attachment self-report measure was designed for the purposes of investigating the impact of attachment quality on romantic love and using Ainsworth's attachment styles, incorporating statements regarding adult relationship strategies (Hazan & Shaver, 1987; Sable, 2008). Their findings also classified respondents' attachment types as either secure, anxious/ambivalent or avoidant (Hazan & Shaver, 1987). Secure attachment was associated with happier love relationships and reports of a caring and attention-filled childhood possessing low anxiety and a high level

of comfort with closeness (Hazan & Shaver, 1987; Sable, 2008). These persons tend to rely on their partner's love and support and experience few interpersonal problems (Hazan & Shaver, 1987). Possessing low levels of comfort and anxiety, avoidant/dismissing individuals tend to have difficulty trusting their partners (Hazan & Shaver, 1987; Sable 2008). Those with anxious/ambivalent attachment experienced high levels of comfort with closeness and anxiety due to the belief that they were unworthy of their partner's love, yet constantly sought their approval (Hazan & Shaver, 1987; Sable, 2008; Clinton & Straub, 2010).

Many researchers have tested Hazan and Shaver's theory on adult romantic attachment and confirmed its importance in contributing to the development and maintenance of romantic relationships (Bartholomew & Horowitz, 1991; Belsky & Cassidy, 2002; Brennan, Clark, & Shaver, 1998; Clulow, 2007; Crowell & Waters, 2002; Dinero et al., 2008; Eastwick & Finkel, 2008; Hazan & Shaver, 1990; Holmes & Johnson, 2009; Levesque, 2012; McCarthy & Maughn, 2010; Mikulincer, 1998; Monin, Feeney, & Schultz, 2012; Morrison et al., 1997; Shaver & Mikulincer, 2010; Simpson, Collins, Tran, & Haydon, 2007; Simpson et al., 1996; Simpson, 1990; Solomon, 2009; Volling et al., 1998). Improving upon their work, researchers Brennan et al. (1998) developed the Experience in Close Relationships (ECR-R) measure, which conceptualizes attachment orientations along two orthogonal dimensions: attachment-related anxiety and attachment-related avoidance. Today, the ECR-R is the most widely used measure in attachment studies.

Bartholomew model

Bartholomew constructed a two-dimensional (square) model of self and other along the avoidance and anxiety trajectories using Ainsworth's and Hazan and Shaver's assessment classifications (Bartholomew & Horowitz, 1991). The two dimensions of anxiety and avoidance yielded four working groups (See Figure 2.1). The working models of adults are cognitive-affective structures that regulate the attachment system by monitoring and managing cognition, feelings, and behavior in response to attachment-related situations (Bartholomew & Horowitz, 1991; Cash et al., 2004; Holmes & Johnson, 2009; Ottu & Akpan, 2011; Sable, 2008). Findings consistent with the original three-category model found by Hazan and Shaver showed that the secure group has positive representations of self and other and report low anxiety and avoidance; the preoccupied group has a negative model of self but a positive model of other, evidencing high anxiety and low avoidance; the dismissing group has a positive model of self and a negative model of other, evidencing low anxiety and high avoidance; the fearful group possesses both negative models of self and other, revealing high anxiety and avoidance (Bartholomew & Horowitz, 1991).

		SELF	
		Positive View Low Anxiety	Negative View High Anxiety
OTHER	Positive View Low Anxiety	SECURE <i>Comfortable with intimacy and autonomy</i>	PREOCCUPIED <i>Preoccupied with relationships and abandonment</i>
	Negative View High Anxiety	DISMISSING <i>Uncomfortable with intimacy, overly self-reliant</i>	FEARFUL <i>Fearful of intimacy, socially avoidant</i>

Figure 2.1. Internal Working Model

Romantic Attachment Outcomes on Marital Satisfaction

Research supports the importance and significance of attachment and its strength in predicting relationship satisfaction (Millwood & Waltz, 2008; Ottu & Akpan, 2011). Attachment beliefs have been shown to be associated with changes in relationship satisfaction and are an important aspect in the establishment and maintenance of intimacy (Benson et al., 2013; Levesque, 2012). Numerous studies have demonstrated that similarities and differences in attachment style, beliefs, and behaviors are connected with satisfaction in romantic relationships (Butzer & Campbell, 2008; Charania & Ickes, 2007;

Dandurand & Lafontaine, 2013; Feeney, 2002a, 2002b; Halford, Lizzio, Wilson, & Occhipinti, 2007; Jones et al., 2011; Kachadourian et al., 2004; Kobak & Hazan, 1991; Millwood & Waltz, 2008; Morrison et al., 1997; Ottu & Akpan, 2011; Volling et al., 1998; Whitsett & Land, 1992). Each person is created and programmed to long for deep, lasting and satisfying relationships; however, the manner in which they seek to obtain them varies (Clinton & Straub, 2010). At the same time, the extent to which people are successful in achieving this goal is also partially dependent upon their partner's attachment beliefs and associated behavior (Holmes & Johnson, 2009). Varying attachment styles cause individuals to employ different methods to undertake preventative and repair work in order to sustain a satisfying relationship (Ottu & Akpan, 2011). This systematic pattern of relational expectations, emotions, and behaviors conceptualizes the psychological residue of each person's attachment history and is fundamental in the approach used to seek and preserve emotional contact with significant others (Mikulincer et al., 2013; Solomon, 2009).

Healthy Relational Outcomes on Marital Satisfaction

Healthy patterns of relating to attachment figures are dependent upon open emotional communication and facilitate sensitive and responsive caregiving, which protects recipients from undue stress, promotes health and welfare, and contributes to the quality of the relationship (Bretherton, 1992; Shaver & Mikulincer, 2010). According to the research on adult attachment styles, the only group able to facilitate healthy relationship functioning is securely attached individuals. Positive models of self and of

romantic partners are strong predictors of the way people perceive and describe their romantic relationships (Kachadourian et al., 2004; Millwood & Waltz, 2008).

Characterized by a positive working model of self and other and feelings of worthiness of love and care, secure individuals tend to focus on building greater intimacy with their attachment figures by a healthy balance of closeness and interdependence (Bachman & Bippus, 2005; Feldman et al., 1998; Mikulincer, 1998; Ottu & Akpan, 2011; Simpson et al., 2007; Solomon, 2009). Research suggests that two secure individuals in a relationship are likely to desire a similar level of emotional closeness (Kirby, Baucom, & Peterman, 2005; Millwood & Waltz, 2008). Their behavior and mental thought processes are associated with happiness, intimacy, and friendly love relationships (Mikulincer, 1998). These couples report more love for their partner, experience more intimacy, possess less ambivalence about their relationships, are more integrated into their social networks, and experience less withdrawal and verbal aggression than couples in marriages of two insecure spouses (Volling et al., 1998). Such couples report higher levels of self-esteem and lower levels of depressed affect and hold models of relationships that are supportive and nurturing and offer assistance when needed (Volling et al., 1998).

Unhealthy Relational Outcomes on Marital Satisfaction

Couples consisting of a secure individual in a relationship with an insecure individual or two insecure attached persons are likely to differ in their preference of closeness (Kirby et al., 2005; Millwood & Waltz, 2008). Closeness actualized between partners is dependent upon each person's attachment style, and this dyadic process must

satisfactorily accommodate both partners (Dandurand & Lafontaine, 2013). Insecure individuals differ in intimacy preferences as compared to their secure counterparts. Insecurely attached individuals believe their partners are not available or responsive to their needs (Ottu & Akpan, 2011). Each mode of coping with stress or unmet need(s) is associated with unique interpersonal goals and a variety of negative romantic relationship behaviors.

Avoidant Attachment Outcomes on Relationship Satisfaction

Those with an anxious-avoidant attachment style were constantly rebuffed by their parents, which eventually deactivated their emotional system and shut down their emotions because they found when they reached out to their attachment figure when distressed, the primary caregiver rejected their signals for connection (Clinton & Straub, 2010). Avoidant individuals are distant, fear intimacy, have difficulty depending on others, overemphasize autonomy, and minimize closeness because they feel they do not need others to survive and succeed (Clinton & Straub, 2010; Feldman et al., 1998). They have learned to protect themselves by deactivating their attachment systems to become emotionally withdrawn and more intellectually focused while searching for autonomy and control. This emotional disconnection allows them to deal with stress by suppressing bad thoughts and memories, inhibiting displays of distress, escaping from any confrontation of problems, and withdrawing from those who express emotional needs (Dinero et al., 2008; Mikulincer, 1998). They find safety in rarely or never expressing any relational needs. They seldom trust others, are self-reliant, confident in their abilities and often seek to prove their worth by their successes (Clinton & Straub, 2010).

Research has shown that in interactions with romantic partners, individuals who scored highly on attachment avoidance made less eye contact and exhibited less overall pleasantness, and were rated as being less interested in and attentive to their romantic partners (Dinero et al., 2008). They exhibited lesser levels of positive non-verbal behavior such as laughing, smiling, physical contact, and eye contact (Dinero et al., 2008). These individuals were less inclined to use touch, kissing, cuddling, and hugging to express affection or to seek care from their partner. These tendencies caused them to experience lower levels of emotional and sexual intimacy and satisfaction in their relationships (Dandurand & Lafontaine, 2013). Individuals with an avoidant attachment style elect to avoid intimacy because they do not see it as being particularly important to the relationship (Clinton & Straub, 2010; Dandurand & Lafontaine, 2013). Conversely, they are reported as being too cold, competitive, and introverted and displaying negative affect at partner's attempts to draw closer (Bartholomew & Horowitz, 1991; Dandurand & Lafontaine, 2013; Holmes & Johnson, 2009; Mayseless & Scharf, 2007). It seems that avoidant attachment causes individuals to turn away from spouses to solely rely upon themselves to obtain the love, support, affection, and intimacy that all humans seem to need.

Anxious Attachment Outcomes on Relationship Satisfaction

Those with anxious attachment had parents that were reliable in being inconsistent and unreliable to their need when distressed. Therefore, they hyper-activate the attachment system in attempts to establish felt security (Clinton & Straub, 2010). Characterized by an overemphasis on closeness and a de-emphasis of the autonomous self, they believe they are unworthy of love and often find themselves seeking to obtain

others' affection and attention only to experience distance and rejection (Feldman et al., 1998). They trust others too quickly and have difficulty with separation, often finding themselves fused with their partner due to their lack of confidence in being autonomous (Bartholomew & Horowitz, 1991; Holmes & Johnson, 2009).

Anxious individuals show lower levels of enjoyment in interactions with romantic partners and evidence fewer proximity-seeking behaviors during these interactions (Dinero et al., 2008). Due to their fear of rejection and abandonment, anxious individuals appear to be hypersensitive to signs of affection withdrawal from a romantic partner and tend to interpret disagreement and conflict as a threat to the relationship (Weger, 2006). Their fear of abandonment and intense desires for intimacy and commitment cause them to be dependent on their partners unhealthily (Carpenter & Kirkpatrick, 1996). In relationships, they are too expressive, display an addiction to love, and possess a fear of being unloved (Bartholomew & Horowitz, 1991; Mayseless & Scharf, 2007; Mikulincer, 1998). They use sex as a means by which to attain love and acceptance and to avoid abandonment while electing to enjoy the intimate aspects of sex rather than the intercourse (Dandurand & Lafontaine, 2013). Because they do not believe they are worthy of love and yearn to achieve greater felt security, spouses seem to never be able to love them enough (Clinton & Straub, 2010; Simpson et al., 2007); their continual attempts to attain higher levels of intimacy paradoxically undermine the level of intimacy they have acquired (Dandurand & Lafontaine, 2013).

Intimacy

The clinical value of building and maintaining intimacy within a marriage has been heavily researched (Duffey et al., 2004). Intimacy has been found to be a primary psychological need and an important contributor to individual wellbeing (Manne et al., 2004). The ability to establish and maintain intimacy in the marriage significantly aids coping with marital problems and maintaining a satisfying relationship (Basco, Prager, Pita, Tamir, & Stephens, 1992). Research studies have shown a direct relationship between intimacy fulfillment and marital satisfaction and an increase of marital intimacy has been shown to have a positive effect on marital satisfaction over time (Duffey et al., 2004; Feldman et al., 1998; Greeff & Malherbe, 2001; Kirby et al., 2005; Patrick et al., 2007; Schaefer & Olson, 1981).

In spite of the many positive effects intimacy has shown with regard to relationships, researchers grapple with understanding the process by which intimacy is established and whether intimacy should be studied as a property of the individual or the relationship (Laurenceau et al., 2005; Manne et al., 2004; Patrick et al., 2007). Intimacy is necessary for normal human development and adaptation (Greeff & Malherbe, 2001). It should be considered both an individual and relational process because it involves a relationship with oneself as well as a relationship with others. Knowledge of and security with oneself (identity) is a necessary consolidation prior to development and maintenance of intimacy with another. Both forms are critical for successful intimacy building within a romantic relationship (Franz & White, 1985). The healthy function or dysfunction of the individual guides the ability or inability to provide or receive intimacy in a relationship.

Intimacy as an Individual Process

Researchers have assessed that intimacy in a healthy relationship involves a unique but delicate balance of closeness and autonomy. Yet, before one is able to determine the amount of autonomy preferred for satisfactory living, a healthy degree of self-awareness and identity development must occur. Identity development requires intimacy to take place as an individual process in which one is able to hold on to self while simultaneously being able to relate to others (Patrick et al., 2007).

Identity development and differentiation. An individual must first obtain the necessary skills during young adulthood to develop a strong sense of self (Feldman, 1998). If an accurate sense of self does not take shape, the individual will not be able to successfully manage a balanced relationship with another. Identity development involves being able to know and understand self, so when fused with the identity of a partner, the self does not become lost or confused about who the individual is as a person, or what is expected of them in a relationship. Instead, one is able to effectively and sufficiently organize the relationship around a central, unified, and healthy core identity that when established aids in the individual's ability to successfully create and manage an intimate relationship (Feldman, 1998).

While identity is most frequently studied in adolescents and young adults, theorist Erik Erikson believed that it remains important for psychosocial adjustment well into adulthood (Sneed et al., 2012). Identity, along with intimacy, is recognized as important in developing long-term interpersonal relationships. Like attachment, identity and intimacy development in formative years is crucial psychosocial issues in emerging

adulthood and foreshadows later development. Sneed, Whitbourne, Schwartz, and Huang (2012) examined members of three cohorts of alumni of an east coast university to assess the relationship between identity and intimacy to determine the quality of identity formation and intimacy in the college years and throughout early and middle adulthood to predict midlife well-being. The study supported Erikson's belief that identity and intimacy remain important throughout the lifespan. The study concluded that intimacy and identity development continued through from ages 20 to 54, evidencing identity and intimacy as working together throughout adulthood years and critical to the success or demise of interpersonal relationships (Sneed et al., 2012).

In addition to requiring a healthy sense of self, healthy relationship functioning also needs a certain level of differentiation. Differentiation refers to the ability to effectively manage and balance individuality (separateness) and togetherness (connectedness) in relationships. Both individuality and togetherness are core competencies involved with intimacy (Gubbins et al., 2010). The strength of a person's individuality determines his or her level of comfort with separateness and togetherness, ultimately determining to what degree the individual is able to successfully and healthily join with a significant other. Ultimately, a person's level of differentiation of self and self-identity is fundamental to one's capacity to achieve intimacy in marriage (Gubbins et al., 2010).

Intimacy as a Relational Process

Theorists who observe intimacy as a relational process define intimacy as a feeling of closeness and connectedness that develops through dyadic communication

between partners (Laurenceau et al., 2005). Such dyadic transactions occurring between partners allow for the building of closeness and connection through various experiences shared with one's partner. The exchange of intimacy that takes place when partners communicate elicits sharing and bonding, which affects the partners' overall perception of satisfaction within the relationship.

Intimacy Process Model. The Intimacy Process Model (IPM) was originally introduced by Reis and Shaver (1988) and was later expounded upon by Reis and Patrick (1996). This model identifies intimacy as a dyadic process, distinguishing the communication process as the central tenet which weakens or strengthens the intimate bond between partners and contributes to the experiences of closeness and connectedness (Laurenceau et al., 2005). More importantly, intimacy is the reciprocal process in which the behaviors and feelings of one partner influences the other and subsequently the quality of the relationship (Weinberger, Hofstein, & Whitbourne, 2008).

This experiential outcome of an interpersonal, transactional nature reflects two principal components: disclosure and partner responsiveness. In particular, self-revealing disclosure, consisting of emotions and partner responsiveness evidencing understanding and validation, is characteristic of spouses in healthy, secure, and adaptive marriages (Laurenceau et al., 2005). Repeated interactions whereby partners interpret responses from their spouse as being understanding, validating, and caring demonstrate the three core components of partner responsiveness and intimacy (Laurenceau, Barrett, & Pietromonaco, 1998; Laurenceau et al, 2005; Shaver & Mikulincer, 2010). As individuals interpret and assimilate their experiences during these interactions, they form general

perceptions that reflect the degree to which the relationship is intimate and meaningful (Laureneau et al., 1998).

Self-disclosure. Self-disclosure is a core component of the intimacy process and has been indirectly implicated in the development of close, satisfying, and adaptive marital relationships (Schaefer & Olson, 1981). The depth of the disclosure of the core self to the relational partner determines the partner's perception of intimacy. Self-disclosures that involve emotions are an important predictor of intimacy because such disclosure opens the door for the listener to validate and support the core aspects of the disclosure's view of self (Laurenceau et al., 1998; Laurenceau et al., 2005). In unhealthy and insecurely attached relationships, disclosed feelings about relationship problems or issues are invalidated, which erodes the impact of positive exchanges, eventually leading to marital dissatisfaction (Laurenceau et al., 2005). The inability of one partner to engage in intimate interaction such as listening and responding in an empathic manner tears away at the intimacy between couples, causing marital distress and dissatisfaction (Weinberger et al., 2008). However, secure individuals show more reciprocity in discussing topics raised by their partners and more flexibility in the range of self-disclosure to their partner across various situations (Burlison & Denton, 1997).

Partner responsiveness. Partner responsiveness has been found to be a more important predictor of intimacy ratings than self-disclosure (Laurenceau et al., 2005). Self-disclosure facilitates the environment for creating intimacy but alone neither fosters nor predicts it (Duffey, et al., 2004; McCabe, 2006). In the IPM model, intimacy between two partners takes place when the listening partner exhibits appropriate partner responsiveness with communication and behaviors that address and accurately captures

the speaker's needs, feelings, and the situation (Laurenceau et al., 1998; Laurenceau et al., 2005; Manne et al., 2004); in return, the listener reciprocates with personal self-disclosure and behaviors that are responsive to the content conveyed by the speaker (Laurenceau et al., 2005). Laurenceau et al. (2005) conducted a study to investigate the sense of connection and support couples experience in their everyday lives. They found that the mediating link between a speaker's self-disclosure and corresponding experience of intimacy is the degree of partner responsiveness perceived by the originating speaker (see Figures 2.2 and 2.3). Self-disclosure and partner responsiveness were identified as core components of the intimacy process and indirectly associated in the development of close, satisfying, and adaptive marriages (Laurenceau et al., 2005). Partner responsiveness acts as the mediating variable between self-disclosure and partner disclosure and communicates to the speaker that the speaker is valued. In healthy functioning relationships, during this dyadic process, each partner becomes fueled to continue the intimacy process in becoming more known by the other and allowing positive communication responses to aid in satisfying important needs (Kirby et al., 2005; Laurenceau et al., 2005).

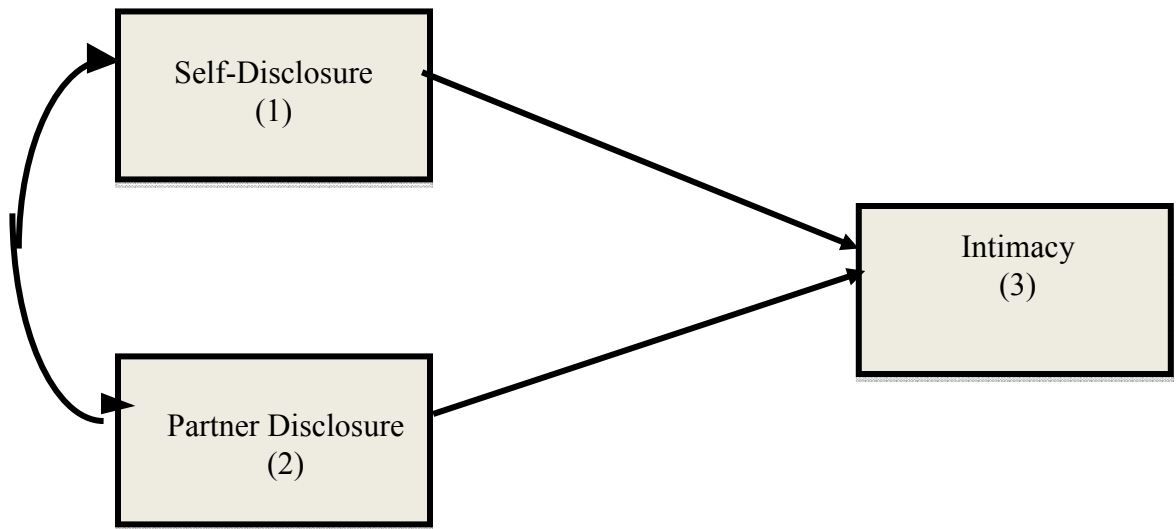


Figure 2.2. Husband and Wife Within-Couples Relationships of Self-Disclosure

(Laurenceau et al., 2005)

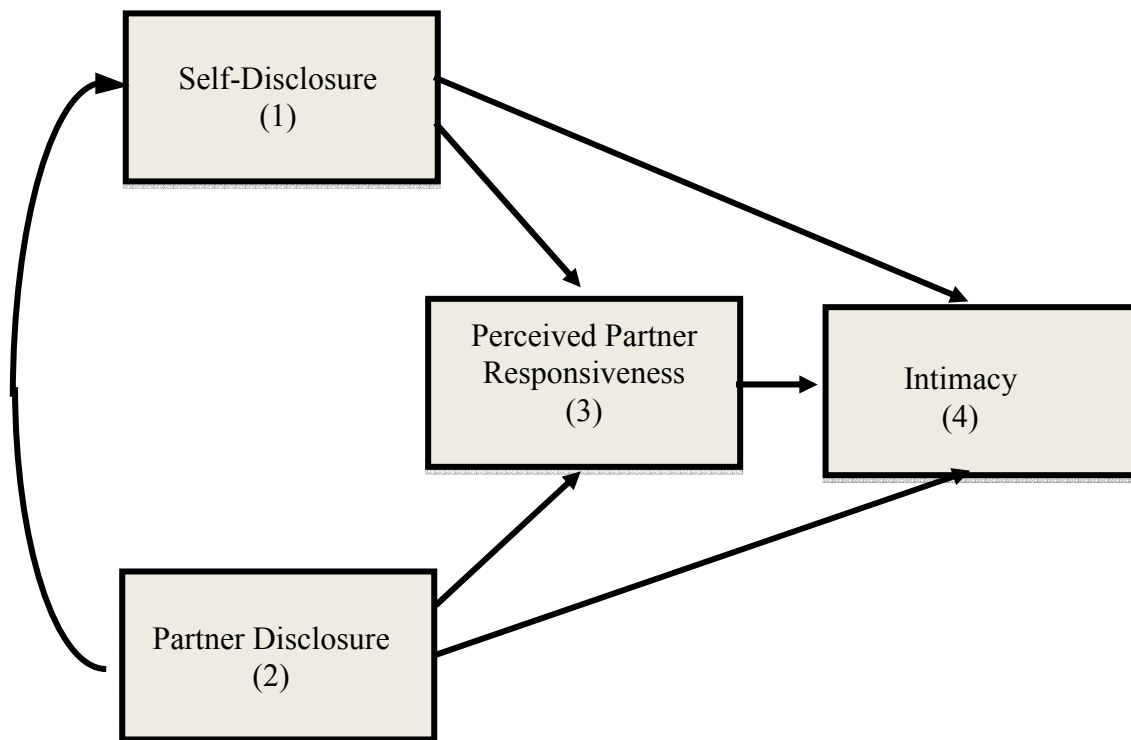


Figure 2.3. Partner Disclosure to Feelings of Intimacy with Partner Responsiveness as a Mediator (Laurenceau et al., 2005)

Intimacy Behaviors

Emotional sharing and skills. The experience of emotions in a relationship is best understood from an attachment perspective (Simpson et al., 2007). Expression of emotions in romantic relationships appears to be tied to significant and meaningful experiences which occurred in earlier relationships and stages of social development (Simpson et al., 2007). Attachment theorists believe that the ability to feel comfortable enough to share one’s inner self, desires, and dreams shapes a person’s decisions and future direction (Mirgain & Cordova, 2007). Research has shown that adequate

emotional skills and the manner in which emotions are shared are essential to the healthy functioning of intimate relationships and key factors to satisfactory marital health (Mirgain & Cordova, 2007). Due to the emotionally challenging nature of intimacy, not every person will be comfortable acknowledging or even expressing their emotions to his or her spouse. Expressing emotions within a relationship can be a considerable challenge for some due to a lack of ability, experience, or felt sense of security.

Communication skills and behaviors. Communication holds a paramount position in intimacy and relationship quality (Weinberger et al., 2008). Couples' communication skills influence relationship satisfaction but are not the major determinants of marital happiness (Litzinger & Gordon, 2005). Research shows that while communication is important between couples, little evidence exists to indicate that improvement in communication skills between couples helps to sustain relationship satisfaction (Litzinger & Gordon, 2005). Even when couples receive communication skills training during couple's therapy, the desired effect has been minimal, suggesting that the true issue resides within the level of comfort in addressing and admitting vulnerabilities concerning their needs (Burlison & Denton, 1997). Positive communication behaviors have been correlated with attachment and predict sustained couple satisfaction and greater intimacy satisfaction (Halford et al., 2007; Kachadourian et al., 2004; Kirby et al., 2005; Litzinger & Gordon, 2005).

One of the reasons it may appear that communication skills predict relationship satisfaction is the manner of the exchange that takes place between couples when they communicate. Couples differ in their communication styles, demonstration of affection, and positive behavior, all of which reflect differences in attachment styles (Litzinger &

Gordon, 2005). However, it is during critical times of conversation and conflict that spouses pay great attention to the communication behaviors of their spouse. Research has shown that couples' communication behavior during conflict is predictive of a wide range of outcomes, including overall relationship satisfaction (Sanford, 2003). Therefore, the manner in which a partner responds affects intimacy and overall relationship satisfaction.

Connectedness. The degree of couple connectedness determines the depth of intimacy that exists between couples (Duffey et al., 2004). Connectedness helps to increase the attachment bond between partners (Durana, 1996). When referring to attachment styles, it has been suggested that the barrier to the couple's connection is their difficulty or inability to address and admit their vulnerabilities (Burleson & Denton, 1997). It seems that if connectedness is contingent upon one's attachment style, those with insecure attachment may struggle in achieving this important element of intimacy due to their inability to effectively connect (during positive interactions) or reconnect (during negative interactions). Connectedness is contingent upon individuals' ability and not necessarily their willingness to bond with their partner. Bonding, or being physically close and emotionally open with another, transpires as a result of connectedness between partners, facilitates change, and enhances attachment and love (Durana, 1996).

Trust. Another central factor of intimacy is trust. A core component of secure persons' working models of others, trust refers to the dependability spouses show one another and the confidence one has that a partner in a close relationship will make himself available, respond appropriately, and become emotionally engaged with his partner's needs, goals and desires (Hazan & Shaver, 1987; Mikulincer, 1998). While

examining the association between adult attachment style and the sense of trust in close relationships, Kachadourian et al. (2004) discovered that secure partners felt more trust towards one another, possessed higher accessibility of trust related memories, and had better coping strategies when trust was violated than compared to insecure individuals. In healthy functioning relationships, vulnerabilities are shared, causing nakedness and exposure between partners. Since intimacy development involves increasing levels of personal vulnerability, intimate partners become sensitive to being hurt by each other (Mirgain & Cordova, 2007). Prior sensitivity and vulnerability that has been disregarded breed insecurity and caution in trusting others in the future; however, intimacy cannot grow where barriers exist (Hawkins, 1991).

Interaction behaviors. Research consistently finds that marital satisfaction is reflected to a large extent in the ratio of positive to negative behaviors in the relationship (Gottman, 1999; Phillips et al., 2009). Gottman (1999) explains that happy spouses are more likely to see positive, relationship-building behaviors from their spouse. Happy spouses influence one another through the expression of positive behaviors such as kissing, hugging, and talking with their spouse about events of the day. Such connecting behaviors increase marital satisfaction and elicit a snowball effect of continual connecting behaviors (Phillips et al., 2009).

It is also argued that relationship satisfaction is also influenced by differences in demonstration of affection and positive interaction behaviors (Halford et al., 2007; Phillips et al. 2009). Base (2004) as cited by Millwood & Waltz (2008) discovered that spousal interaction behaviors affect attachment style. Likewise, in a similar research study by Johnson and O'Leary (1996), logs containing a daily checklist of marital

activities and spousal behaviors discriminated distressed from non-distressed couples. These logs were found to reflect attachment style, as results showed that behavioral interactions between spouses significantly related to global and daily measures of marital satisfaction (Johnson & O'Leary, 1996).

Shared time and interaction frequency. Changes in society have led to changes in the nature of marriage, increasing the emphasis on shared time between couples. The amount of face-to-face spousal interaction is considered critical for marital quality (Glorieux, Minnen, & Pieter van Tienoven, 2011; Voorpostel et al., 2009). Gottman found that a successful marriage is predicated upon frequency and type of interaction, both which foster the ability to establish a solid marital friendship in which couples continue to spend time together (Barnacle & Abbott, 2009; Gottman, 1999). Regular engagement between spouses leads to feelings of togetherness and connection, which contribute to shared meaning and relationship satisfaction (Phillips et al., 2009).

Today, couples spend more time together than they did decades ago. Partnerships have become more strongly based on intimacy, implying that couples are more focused on each other and the maintenance of their relationship (Patrick et al, 2007; Voorpostel et al., 2009). Quality of shared time has been evaluated on three levels. Level one is defined as parallel leisure, such as watching a movie together. Level two consists of support of leisure, such as when one partner watches another play basketball without participating. Level three, joint leisure, consists of activities such as walking together. Couples' leisure involvement and shared free time have been positively related to overall marital satisfaction (Johnson et al., 2006; Voorpostel et al., 2009). When couples engage in the third level of shared time and experiences, the communication fosters bonding and

increases intimacy and relationship satisfaction (Patrick et al, 2007). It is not enough for couples to merely support or silently engage one another in the same activity because these activities do not outweigh the results received from shared time and activity. The more couples engage in shared activities, the stronger the bond and the more intimacy that ensues.

Intimacy Experiences

Recognized as the ultimate goal to achieve in marriage, intimacy occurs through various experiences between couples (Weinberger et al., 2008). The frequency and intensity of daily emotions experienced in relationships acts as a barometer of how connected individuals feel to their partners (Simpson et al., 2007). In an intimate relationship, an individual shares varying intimate experiences in many different settings and environments. Schaefer and Olson (1981) identified several facets of intimacy between couples, including recreational, intellectual, sexual, emotional, and social. Recreational intimacy allows for couples to engage in joint participation of shared interests or hobbies; intellectual intimacy allows for couples to interweave thought with the inclusion of their spouse prior to determining the final outcome of a decision (Hawkins, 1991). Sexual intimacy expresses the bond of love between partners and emotional intimacy involves the sharing of thought and emotion while remaining emotionally present so that partners feel comfortable in expressing their personal needs. Finally, social intimacy is developed when couples are able to share mutual friends and similarities in social networks (Schaefer, 1981). When couples incorporate the various

facets of intimacy into their relationship, they have the potential to increase their bond and create higher degrees of intimacy and marital satisfaction (Durana, 1996).

Research has shown that the inclusion of one's partner in various aspects of life is important to individuals' healthy functioning and intimacy development (Greeff & Malherbe, 2001). It is in the mutual sharing between couples that intimacy is built, enhanced, reinforced, and substantiated. Laurenceau et al. (2005) investigated daily interactions in marriages in order to examine predictions of intimacy. Findings evidenced that global marital satisfaction is positively correlated with daily levels of intimacy experienced between couples. The success of this dyadic process must be regulated in a way that accommodates both partners (Dandurand & Lafontaine, 2013). Intimacy is a process that is never completely actualized because it takes continual effort and maintenance from both partners who learn to accept and understand each other as they grow both individually and relationally (Greeff & Malherbe, 2001; Schaefer & Olson, 1981).

Men and women differ in their perception of marital satisfaction. Greeff and Malherbe (2001) investigated the relationships between intimacy and marital satisfaction of 57 couples in different stages of the life cycle. They found a positive correlation for both sexes between all the components of the PAIR measurement of experienced intimacy and marital satisfaction. However, gender differences were discovered, as men carry the effect of an intimate relationship into other areas of functioning. They use sexual interaction to increase emotional intimacy whereas women need emotional intimacy to become sexually intimate (Greeff & Malherbe, 2001). Additionally, men tend to be less satisfied with their sexual and recreational intimacy than women. In

contrast, women's experience of social intimacy and the degree to which they desire greater social intimacy are different than men's (Simpson, 2002). It seems that the importance of sexual satisfaction early in the marital relationship over time becomes overshadowed by emotional intimacy, the quality of communication, and the quality of caregiving (Simpson, 2002). Gradually, the importance of intimacy in other areas of relationship functioning become as significant as sexual intimacy in determining marital satisfaction. Therefore, intimacy beyond the bedroom is also important in explaining the broad parameters of relationship functioning (Dandurand & Lafontaine, 2013; McCabe, 1999).

Pornography Use

Research has demonstrated that couples in healthy functioning relationships experience closeness and take comfort in one another; conversely, decreasing levels of closeness occur in couples where one spouse engages in pornography use, thereby increasing the risk of experiencing difficulty in the relationship by 20% (Finkenbauer & Hazam, 2000; Johnson & O'Leary, 1996; Manning, 2006). Happily married people are 61% less likely to report using Internet pornography compared to those who report being unhappy in their marriage (Poulsen et al., 2013). This data suggest that the presence of pornography in the marital dyad weakens the bond between couples and negatively influences marital satisfaction. Presently, little information exists to identify what triggers pornography use and, more specifically, what types of changes takes place within the relationship as a result (Dew, Brubaker, & Hays, 2006; Manning, 2006; Short et al., 2012). It has been suggested that pornography use is influenced by preexisting factors

unable to remain hidden in the awakening of a committed romantic relationship (Feeney, 2002a, 2002b; Manning, 2006).

Motivation of Pornography Use

Few studies have attempted to understand the motivation driving Internet pornography use, and those that do exist address the topic from only a sexual vantage (Brand et al., 2011; Paul & Shim, 2008). Traditional motivational theorists posit that all behavior is in some way purposeful, seeking a desired end (Paul & Shim, 2008). Motivation expresses an individual's inferred need, desire, or impulse that initiates, directs, and sustains behavior (Paul & Shim, 2008). Pornography epitomizes such purposeful action, yet there is no direct conclusive evidence identifying its purpose from the pornographer's frame of reference addressed in the literature.

Internet pornography use is problematic in either the psychological, behavioral (i.e., relationship problems), or social domain (Paul & Shim, 2008). Some people experience chronic difficulties accessing and communicating emotions and personal needs that would enable them to initiate and maintain meaningful interpersonal relationships and rely upon pornography as a substitute to have such needs met (Philaretou et al., 2005; Reinert, 2013). While pornography has previously been known as purposeful, goal-directed behavior, it has also recently been linked with attachment theory, where the behavior identifies and substantiates one's attachment beliefs (Paul & Shim, 2008). It could be argued that pornography users are motivated to engage in this purposeful action to effectively express or satisfy unmet intimacy needs (Paul & Shim, 2008; Popovic, 2011; Reinert, 2013; Yoder et al., 2005). Various studies corroborate this

theory. Researchers examined why people engage in pornography use and found that 60% of participants identified distraction as their primary reason as an escape from intimacy (Short et al., 2012). However, distraction is not clearly defined. In an online survey, the Kinsey Institute and the Public Broadcasting Service surveyed 10,453 respondents on their reasons for pornography use. Results implied pornography use was related to emotional purposes (Paul & Shim, 2008). Yoder et al. (2005) have proposed that loneliness and frustration of personal needs predispose susceptible individuals to utilize pornography as an expression of such vulnerability. Factors such as loneliness, anxiety, low self-esteem and interpersonal stress, may cause an individual to utilize pornography as a strategy to avoid unpleasant thoughts or emotions, and alter negative moods (Paul & Shim, 2008; Popovic, 2011; Wetterneck et al., 2012). Such repeated experiences may involve regulation of thoughts, feelings, or urges, thereby affecting one's overall experience of intimacy and the mutual exchange of thoughts and feelings with one's spouse (Millner, 2008).

Antecedent Factors to Pornography

Secure attachment. Secure attachment is the basis from which researchers can begin to understand the dynamics involved in healthy relational functioning. This mental representation of how to relate in relationships prepares individuals to contribute to the development of healthy functioning relationships in effective and satisfactory ways that cultivate the growth of the relationship, partner and individual. These individuals are primed to turn to and rely upon their spouse for comfort and reassurance, permitting their spouse to function as a mediator in coping with internal and external pressures (Clulow,

2007; Ottu & Akpan, 2011). These persons are better at adapting to the complexities of relationships because they have greater willingness to self-disclose, rely on partners and engage in physical intimacy. They also possess the ability to express emotion and affection, provide effective communication, integrate a problem solving approach to disagreement, and honor the value and the incorporation of shared common interests in the relationship (Ottu & Akpan, 2011; Volling et al., 1998).

Securely attached individuals use more integrative tactics, feel less threatened by conflict, compromise more, avoid or withdraw from conflict less, and consider themselves to be more effective arguers than insecure people do (Weger, 2006). Securely attached individuals' relationships last longer and are more satisfying (Carpenter & Kirkpatrick, 1996). They are more committed to their relationships, believe their partners to be available and responsive to their wants and needs, and show higher self-confidence and comfort with intimacy (Carpenter & Kirkpatrick, 1996). Contrariwise, pornography users' negative emotional experiences (e.g., interpersonal difficulties, stress, and loneliness) cause them to lack comfort in spousal reassurance and support, which in turn leads them to seek mood-altering experiences to fulfill their innate need of dependency on another individual (Clinton & Straub, 2010; Reinert, 2013; Solomon, 2009).

Insecure attachment. Pornography use is disruptive, destructive, and an impediment to secure attachment (Tarver, 2010). Pornography use requires individuals to disengage with their partner, thereby concealing their needs and pornography use. Szymanski and Stewart-Richardson (2014) have posited that insecurely attached individuals' pornography use allows them to experience some level of emotional and sexual gratification without the risk of intimacy or interpersonal rejection. Their research

has shown that men who have more avoidant or anxious attachment beliefs will use *more* pornography because it provides a medium by which they can become emotionally disengaged from their partner yet focus energy and emotion into activities that are not part of their ongoing reality or relationship. These men may be uncomfortable with relying on their mate because the support sought from one's spouse can demand physical and psychological closeness, which they view as being uncomfortable and unprofitable. Unlike a spouse, the pornography responds positively, provides the support they seek, and alters mood by regulating undesirable thoughts, feelings, and emotions (Szymanski & Stewart-Richardson, 2014).

Avoidant attachment. Concerned about avoiding excessive intimacy and commitment in relationships, avoidant individuals perceive that their partners exacerbate their stress. They are not comforted by the presence of their partner once the attachment system is activated (Carpenter & Kirkpatrick, 1996; Hazan & Shaver, 1987). They inhibit the transmission of distress signals by increasing their sense of control, cutting off their emotions, and seeking physical and psychological distance and space from their romantic partners (Simpson et al., 1996; Tolmacz, 2004). Szymanski and Stewart-Richardson (2014) examined the psychological, relational, and sexual correlates of pornography use on young adult heterosexual men in romantic relationships. Findings revealed that men's pornography use was positively associated with their gender role conflict (i.e., traditional gender role socialization that leaves many men with relational and sexual deficits due to the prescription of overly restricted gender roles) and was negatively associated with their relationship quality and sexual satisfaction. By distancing themselves from their partners, these men deactivate their attachment system,

disconnect emotionally, and use pornography to experience some level of emotional or sexual gratification without the risk of intimacy (Szymanski & Stewart-Richardson, 2014). It may be that pornography use permits avoidant-attached individuals to express untapped emotion by satisfactorily, safely, and effectively experiencing a form of intimacy without being rebuffed.

Anxious attachment. Also known as desperate love, anxiously attached individuals hyper-activate their attachment system by seeking close psychological and emotional proximity to their attachment figure. However, they have learned that their partners cannot be depended upon and are not source of comfort (Hazan & Shaver, 1987; Simpson et al., 1996; Tolmacz, 2004). Individuals who have anxious attachment styles may have tendencies to substitute pornography for real intimacy because it allows them to avoid the risk, threat, vulnerability, or anxiety of romantic or sexual rejection experienced with their partner (Szymanski & Stewart-Richardson, 2014). Their negative self-view contains themes of emotional deprivation; ruminating negative thoughts cause them to question the meaning of their partner's words and behavior. The mental representation of individuals with an anxious attachment style supports their belief in their inability to obtain support from and achieve deep intimacy with their romantic attachment figure (Carpenter & Kirkpatrick, 1996; Mayseless & Scharf, 2007; Mikulincer, 1998; Simpson et al., 1996). Due to their strong and easily triggered need for comfort and reassurance, it could also be argued that anxious individuals do not want more intimacy from their partners per se, but instead, they simply want more reassurance and support (Belsky & Cassidy, 1993; Millwood & Waltz, 2008). It seems probable that anxiously attached people seek attention, affection, sharing of feelings, exclusive time

with their partner, and other forms of contact not for the intimacy itself but for their reassuring properties, which were never actualized during childhood. These individuals become unappeasable in their adult romantic relationship (Millwood & Waltz, 2008). It is probable that use of pornography by anxiously attached individuals provides the additional comfort and reassurance needed without limit or restriction.

Secretive Pornography Use

Couples who have shared meaning in their marriage do not see themselves as two individuals but instead as one unit. Shared meaning leads to a sense of oneness, or a feeling of spousal connection or belonging, in the marital relationship (Gottman, 1999). Oneness encourages spouses to turn toward one another and is a strong predictor to relationship stability (Phillips et al., 2009). Couples without it turn outside their marriage for this sense of closeness, causing secrecy and division (Gottman et al., 2006). Pornography negatively impacts the romantic relationship and is detrimental to the connection built between partners (Ayers & Haddock, 2009; Bergner & Bridges, 2002; Landau et al., 2008; Popovic, 2011). Pornography use may strip the uninformed spouse of the mutual sharing of a significant dynamic of the relationship: intimacy. The physical separation experienced in relationships where long-term Internet pornography use occurs leads spouses to turn inward to fulfill needs that should be trusted to a romantic attachment figure. This lack of trust decreases intimacy, resulting in the deconstructing of the oneness established in the relationship. Eventually, partners become less aware of each other's general behaviors and patterns (Kerkhof et al., 2011; Manning, 2006; Stewart & Szymanski, 2012).

Clark and Wiederman (2000) revealed that men and women generally did not react negatively to their partner's solitary sexual behavior, indicating that a partner's masturbation or pornography use would not be disturbing. However, this study investigated single participants imagining a hypothetical partner, therefore negating the investment that spouses place in their relationship to one another. Marital commitment seems to change entitlement to complain, suggesting that commitment is an important determinant of how pornography use affects the non-using partner (Benjamin & Tlusten, 2010; Tarver, 2010). Attachment bonds form within two years of being romantically involved in a clear and committed relationship, including marriage (Dinero et al., 2008; Levesque, 2012). The more involved romantic partners are in each other's lives, the stronger the attachment becomes (Levesque, 2012). As people enter serious romantic or marital relationships, their interactions begin to influence their attachment beliefs and influence how they interpret the quality of the relationship (Dinero et al., 2008). For this reason, it seems the more significant the title the partner holds, the greater the level of distress upon discovery of pornography use. The pornography is viewed as a threat to the relationship and activates the attachment system for the spouse discovering the pornography use *as well as* for the pornography user (Manning, 2006). Attachment styles represent real, perceptible needs that can and do become manifested in dyadic interactions (Millwood & Waltz, 2008). Since marriage includes a certain level of attachment security, pornography and the discovery of a spouse's pornography use can be damaging to both parties and the relationship (Stewart & Szymanski, 2012; Tarver, 2010).

Adverse effects of pornography on the marital relationship. Internet pornography consumption may be considered incompatible with the characteristics of stable, healthy marriages (Manning, 2006). In pornographic media, men and women are depicted engaging in varied sexual behaviors devoid of intimacy, love, emotional involvement, and human connection (Wetterneck et al., 2012). Pornography users place less value on the relationship, experience less love and trust, perceive the marriage as a constraint, and engage in infidelity (Olmstead et al., 2013). Such views on relationships and love minimize the value and strength portrayed in healthy functioning relationships, jeopardize the relationship commitment and the oneness previously valued, and may even escalate to infidelity. Lambert et al. (2012) conducted a study investigating whether pornography consumption led to weakened commitment to one's romantic partner. Results indicated that participants who continued to engage in pornography experienced negative effect on commitment as compared to those who refrained from pornography use and experienced higher levels of commitment. Pornography users reported lower levels of overall happiness or happiness with their marriages (Patterson & Price, 2012). Three studies explored the links between pornography use and relationship outcomes. In a general population survey of 531 U.S. male and female Internet users, individuals who reported being in a happy marriage were 61% less likely to have visited a sexually explicit website during the past month than those who were unhappy in marriage (Manning, 2006). In another U.S. study, 1,291 unmarried individuals in romantic relationships who reported viewing erotic websites, magazines, and movies alone also reported less relationship quality and less sexual satisfaction than those who never viewed sexually explicit materials (Manning, 2006). The value placed on pornography by

the consumer may be worth sacrificing due to the individual reward these individuals receive.

Positive effects. Pornography has been found to influence individuals' positive attitude toward sexuality, serve as a safe platform through which to engage in sexual exploration, and increase sexual knowledge (Lambert et al., 2012; Short et al., 2012). In one study, 688 young adult male and female participants reported how pornography influenced various dimensions of their lives. Thirty-five percent of respondents reported pornography consumption influenced their sexual behavior and 65% reported having positive attitudes as a result (Lambert et al., 2012). Pornography consumption was found to also improve attitudes towards the consumer's sex life, the opposite sex, and general quality of life (Lambert et al., 2012). While the discussion on pornography appears to be directed back to its sexual influence on the couple dyad, this study sought to investigate a less traveled path by examining additional areas in which pornography use affects the marital dyad.

In a review of Internet pornography research spanning the past decade focusing on methodology and content, researchers Short et al.(2012) found evidence that feelings of support are received from pornography consumption. However, the researchers also noted in this review that results were conflicting and inconsistent regarding Internet pornography prevalence. Additionally, the feelings of support were not identified in the research. Lastly, the study recognized the paucity of research on specific content areas, suggesting that future studies seek to understand antecedents and consequences of Internet pornography use (Short et al., 2012). Once again, research gives credence to the possibility that there are antecedent factors influencing pornography users.

Effects on intimacy. Unlike men, women tend to derive intimacy and reassurance from their relationships and associate sex, love, and marriage as belonging together (Clark & Wiederman, 2000; Tarver, 2010). This idea is threatened when pornography is involved because pornography has been known to erode sexual and emotional intimacy (Benjamin & Tlusten, 2010; Kalman, 2008). Married women view their partner's pornography use as a sexual pursuit outside of the partnership, therefore classifying the pornography use as a form of emotional infidelity exciting feelings and beliefs of misunderstanding, hurt, rejection, abandonment, loneliness, shame, isolation, diminished self-esteem, humiliation, jealousy, mistrust, betrayal, loss, devastation, anger, less love and decreased intimacy (Benjamin & Tlusten, 2010; Bridges et al., 2003; D'Orlando, 2011; Kalman, 2008; Olmstead et al., 2013; Poulsen et al., 2013; Stewart & Szymanski, 2012; Tarver, 2010; Yucel & Gassonov, 2013). A major cause of these women's distress is the continual lying by their spouse to keep the pornography use hidden (Kalman, 2008). It is the incessant lying that triggers negative emotions and perceptions of the partner and the relationship by the spouse who discovers the pornography use. Lying (which is synonymous with secretive pornography use) causes some female spouses to feel their partners live an entirely secret life, separate and barred from them (Bergner & Bridges, 2002).

Bergner and Bridges (2002), discovered the majority of wives of pornography users perceived their partner's viewing of pornography as a betrayal and an affair, and expressed the love between couples should only be shared in the context of marital exclusivity, not countless fantasy women (Manning, 2006). Therefore, if exclusivity of the marriage is compromised, a threat is felt towards the stability of the marital unit

(Benjamin & Tlusten, 2010; Lambert et al., 2012; Olmstead et al., 2012). Under the right context and with the right person, sex becomes an emotional and physical fusion of selves (Collins, 1999). Therefore, wives who hold this view of sexual intimacy believe their partner's use of pornography violates the sexual and emotional intimacy in the relationship. This violation decreases openness and intimacy between spouses while building fidelity to the threatening outside partnership created between the pornography and its consumer (Popovic, 2011).

Changes in intimacy behaviors and experiences between spouses. At this time, there is a shortage in the research aimed at simultaneously investigating pornography and intimacy. Despite the absence of literature in existence, one can still understand the influence pornography may have on changes in intimacy behaviors and experiences between couples. The Internet has proven to be an accessible and powerful medium of information distribution, even when removing the pornography variable. One longitudinal research study investigated relationship consequences of compulsive Internet use among newlyweds. This study demonstrated that frequent Internet use *for private reasons* compromises relationship quality and decreases partner-specific feelings and behaviors (e.g., thoughts, feelings, goals, behavior, and well-being) (Kerkof et al., 2011). Compulsive Internet users reported lower marital adjustment and commitment, greater frequency of conflict, more feelings of exclusion and concealment, and less disclosure than those considered to be less compulsive Internet users (Kerkof et al., 2011). More specifically, in terms of intimacy behaviors experienced between partners, over time compulsive Internet users reported less intimacy and passion and more partner-specific exclusion. In other words, compulsive Internet users preferred to spend time on the

Internet rather than with their partner. Since compulsive Internet users mostly use the Internet independently of their partner, they can be assumed to gradually experience less interdependence with their partners (Kerkof et al., 2011). These results suggest that compulsive Internet use has deleterious effects on relationship quality. When considering the effect that the Internet has had on pornography consumption, it would seem that Internet pornography use would produce similar changes in intimacy behaviors and experiences between spouses.

Study, Research Question, Hypotheses

Research question 1

The first question of this study examined the relationship between attachment, intimacy, pornography use, and marital satisfaction.

Hypotheses 1, 2 and 3. Research has evidenced that marital satisfaction is influenced by various factors, including attachment, intimacy, and pornography use. Attachment styles predispose individuals to have the kinds of relationships that maintain the models, associated beliefs, and expectations by which the styles are based. These factors work together to influence individuals' perception of relationship satisfaction (Carpenter, 1996; Kirkpatrick & Hazan, 1994). Research has evidenced a direct link between attachment and intimacy (Pielage et al., 2005) as well as a direct link between intimacy and marital satisfaction, in that greater levels of intimacy and fulfillment of intimacy needs have been highly correlated with relationship satisfaction (Greefe & Malherbe, 2001; Patrick et al., 2007; Kirby et al., 2005). In addition, studies have shown that frequent habitual pornography use produces increased relationship damage and

adverse relationship outcomes (Phillips et al., 2009; Popovic, 2011; Twohig et al., 2009). Based on research, it is hypothesized that attachment, intimacy, and pornography each predict marital satisfaction. Anxious attachment predicts marital satisfaction (H_{1a}). Avoidant attachment predicts marital satisfaction (H_{1b}) (See Figure 2.4). It is hypothesized attachment predicts intimacy. Anxious attachment predicts intimacy (H_{2a}). Avoidant attachment predicts intimacy (H_{2b}) (See Figure 2.4). It is also hypothesized that pornography use predicts marital satisfaction. Pornography use predicts marital satisfaction for those with anxious attachment (H_{3a}). Pornography use predicts marital satisfaction for those with avoidant attachment (H_{3b}) (See Figure 2.5).

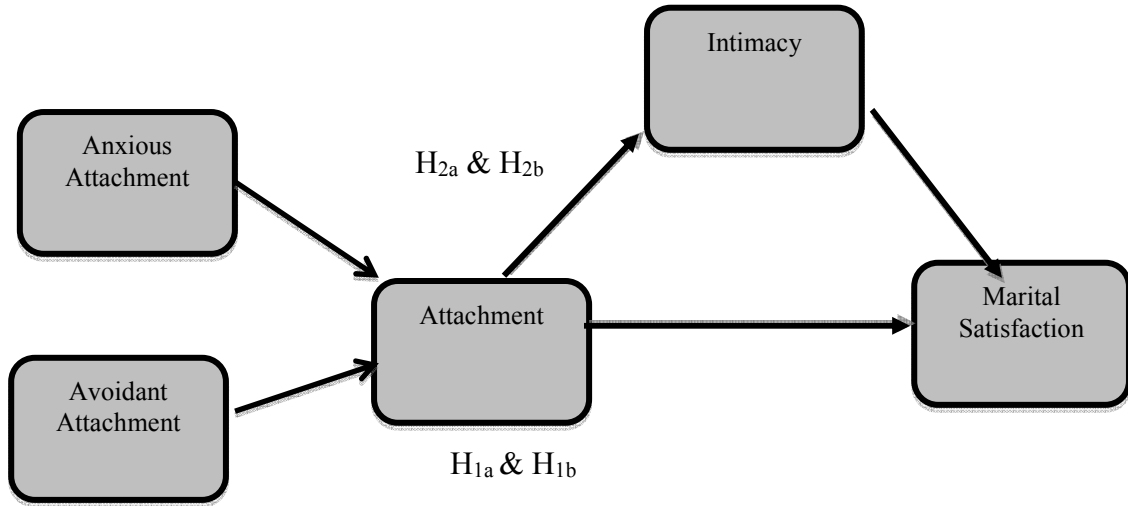


Figure 2.4. Attachment, Intimacy and Pornography Use Research Model

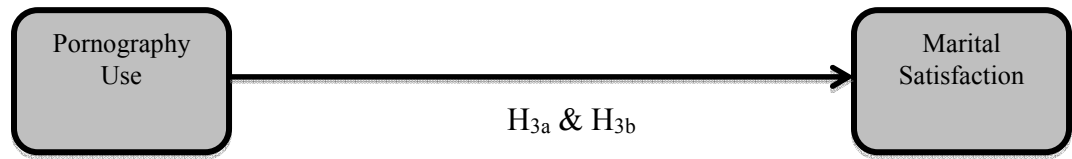


Figure 2.5. Pornography Use and Marital Satisfaction

Research question 2

The second research question determined the ways in which intimacy influences marital satisfaction among pornography users with insecure attachment.

Hypotheses 4. Due to varying intimacy preferences and the abilities to communicate one's intimacy needs, negotiating intimacy within a marriage poses as a challenge for some individuals (Kirby et al., 2005); yet, intimacy is crucial for individual well-being and relationship satisfaction as it acts as the bridge by which attachment behaviors and intimacy needs are communicated and perception of relationship satisfaction is experienced (Kirby et al., 2005). Therefore, it was hypothesized intimacy mediates the relationship between attachment and marital satisfaction. It was predicted intimacy mediates the relationship between anxious attachment and marital satisfaction (H_{4a}) (See Figure 2.6). It was predicted intimacy mediates the relationship between avoidant attachment and marital satisfaction (H_{4b}) (See Figure 2.7).

Research question 3

The third research question sought to determine whether pornography is used to regulate attachment emotions among pornography users with insecure attachment.

Hypotheses 5 and 6. Pornography use has been found to be an escape from intimacy but also an expression of the search for intimacy (Popovic, 2011). Fear of intimacy and/or rejection has been found to be a significant factor for engaging in pornography use, producing a negative effect on intimacy with one's partner (Popovic, 2011). Because anxious attached individuals' fear rejection and abandonment and avoidant individuals experience fear of closeness and intimacy, their consumption of pornography allows them to experience some level of emotional or sexual gratification minus the risk of intimacy or interpersonal rejection (Szymanski & Stewart-Richardson, 2014). Therefore, it was hypothesized that those who possess stronger insecure attachment styles may have tendencies to view pornography in attempts to regulate attachment emotions without experiencing the risk, threat, or anxiety that can come with romantic or sexual rejection. It was hypothesized that a hyper-activation of attachment emotions leads those with anxious attachment to desire greater intimacy with their spouse but, due to the anxiety they experience over the relationship and a fear of rejection or abandonment, they will alternatively engage in pornography use to regulate their attachment emotions. It was predicted pornography use moderates the relationship between attachment and intimacy for those with anxious attachment (H_{5a}) (See Figure 2.6). It was hypothesized that avoidant attachment individual's deactivation of attachment emotions leads them to desire less intimacy with their spouse, but due to their fear of intimacy, they will alternatively engage in pornography use to regulate attachment their emotions. It was predicted pornography use moderates the relationship between intimacy and marital satisfaction for those with avoidant attachment (H_{5b}) (See Figure 2.6 and 2.7). It was also predicted pornography use would account for a more significant

variance in marital satisfaction than attachment. It was hypothesized pornography use would account for significant variance to marital satisfaction above that of anxious attachment (H_{6a}) (See Figure 2.6). It was hypothesized pornography use would account for significant variance to marital satisfaction above that of avoidant attachment (H_{6b}) (See Figure 2.7).

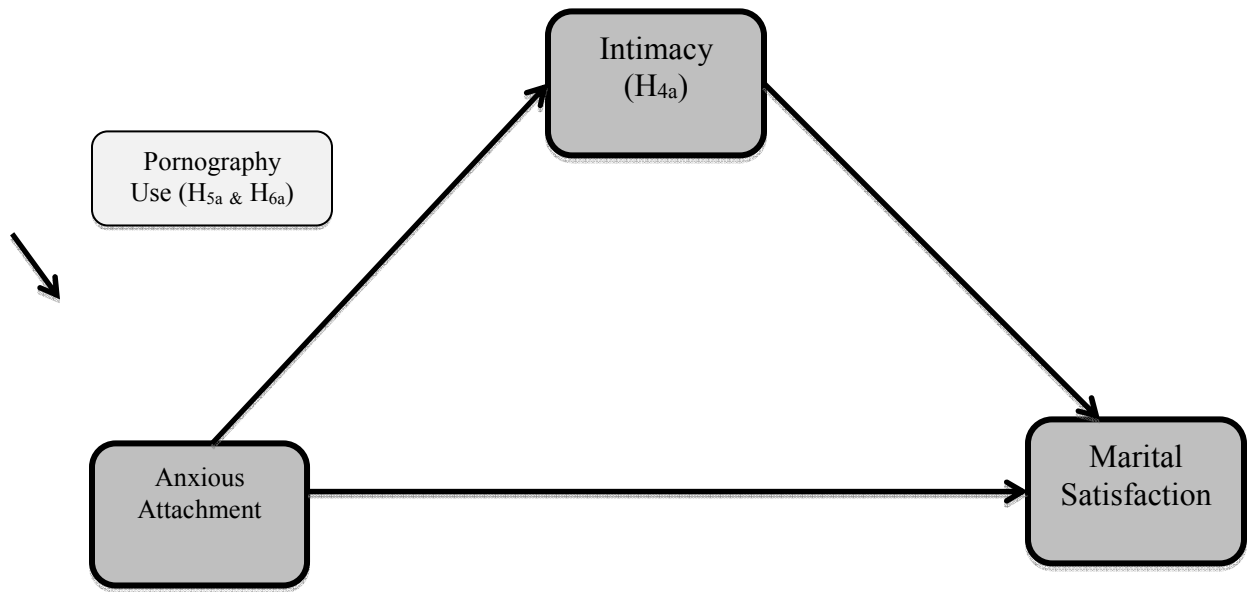


Figure 2.6. Anxious Attachment Model and Pornography Use

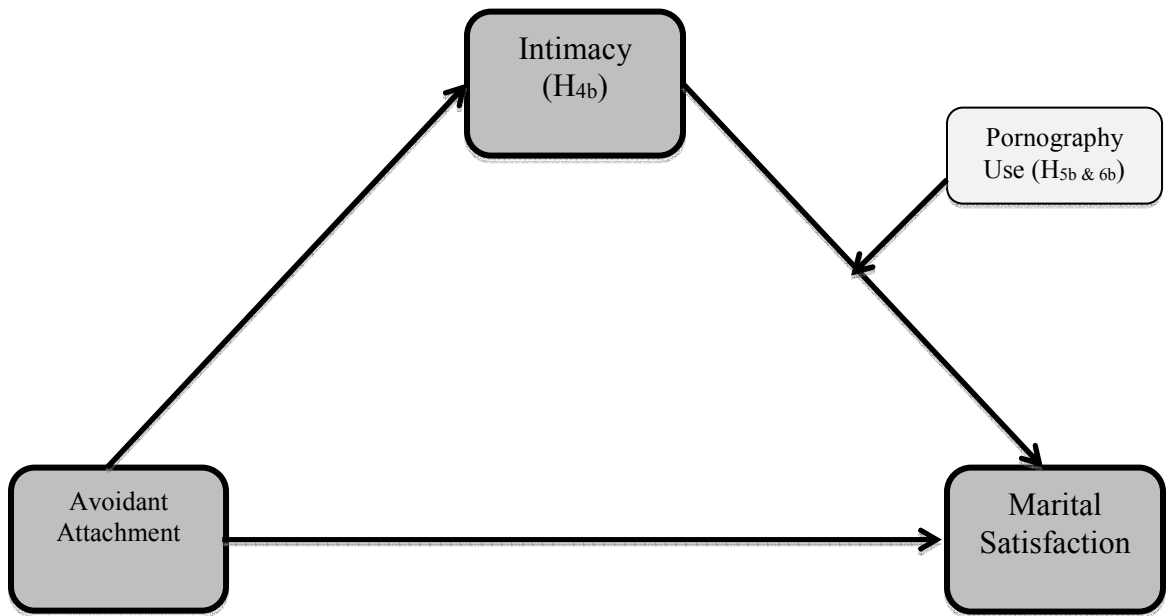


Figure 2.7. Avoidant Attachment Model and Pornography Use

CHAPTER THREE: METHODS

This chapter will present the methods employed to study the relationship between romantic attachment, intimacy, pornography use, and marital satisfaction. This chapter will delineate (a) the selection of participants and recruitment for the study, (b) instruments used to measure the independent and dependent variables and assess the sample, (c) procedures which detail how the study was conducted and the data analyzed and examined, and (d) ethical considerations which outline the issues which may be of importance regarding the protection of participants involved in the study.

Research Design

This quantitative study employed a between-group, correlational research design which investigated the relationship between attachment (anxious and avoidant), intimacy, pornography use, and marital satisfaction. The study of the relationship between the four constructs employed a cross sectional, non-experimental research design utilizing hierarchical and multiple regression analyses in an online sample of married couples. This design provided a better understanding of the influence of attachment, intimacy, and pornography use on marital satisfaction and whether pornography use regulates attachment emotions.

Participants

The investigator recruited participants from the online data collection service Amazon Mechanical Turk. The sample originally consisted of 550 U.S. residents who were heterosexual male and female pornography users and who volunteered to participate

in the study. Participants ranged in age from 20-66, and 43.3% of the participants ranged in age from 30-39. The minimum age was important because Erikson noted the age at which an adult's personality is formed lies somewhere between 21-24 (Franz & White, 1985; Graves & Larkin, 2006; Hamachk, 1990). Eighty-six percent of the participants had only been married once, to their current spouse, and over half of the participants had been married between 0-5 years, while 20% had been married between 5-10 years. Nearly 85% of the participants identified themselves as Caucasian (84.6%), while 5% identified themselves as African-American/Black, 3.2% as Asian, 4.6% as Hispanic/Latino or of Spanish Origin, and 2.1% as Other (see Table 3.11). Participants who met the criteria for frequent and/or compulsive Internet pornography use but were not addicted to pornography were asked to participate in the study.

Table 3.11*Demographic Frequencies of the Participants*

Age	Freq	%
20 to 29	92	32.9
30 to 39	121	43.3
40 to 49	47	16.9
50 to 59	11	4.2
60 to 66	9	3.4

Race	Freq	%
Caucasian/White	237	84.6
African American/Black	14	5.0
Asian	9	3.2
Hispanic, Latino, or of Spanish Origin	13	4.6
Other	6	2.1
Did Not Answer	1	0.4

How Many Times Have You Been Married?	Freq	%
Once	242	86.4
Twice	33	11.8
Three	5	1.8

How Long Have You Been Married to Your Current Spouse?	Freq	%
0 to 5 Years	158	56.4
5 to 10 Years	57	20.4
10 to 15 Years	28	10.0
15 to 20 Years	11	3.9
20 Years or More	24	8.6
Did Not Answer	2	.7

Assessments. In addition to a demographics questionnaire (see Appendix B), four instruments were used to measure romantic attachment (ECR-R; Brennan et al., 1998), intimacy (PAIR; Schaefer & Olson, 1981), pornography use (CPUI; Grubbs, Sessoms, Wheeler, & Volk, 2010; and KISS; Kyle, 2013), and marital satisfaction (RSAT; Burns, 1983). Each of the four instruments has been used in numerous other studies. Reliability and validity evidence show the instruments are structurally sound. The CPUI is the newest of all the aforementioned assessments. Although it has not been used in a great number of studies, it is becoming widely known and accepted as a preferred tool in pornography use studies.

Experience in Close Relationships (ECR-R) (Appendix C). Respect for the ECR is found throughout the literature. The ECR is confirmed across various independent peer reviewed studies (Shaver & Mikulincer 2002); it is also the suggested attachment measurement in the handbook of attachment research (Crowell, Fraley, & Shaver, 1999). This 36-item self-report instrument is designed to measure romantic attachment beliefs in adult relationships. The ECR has high internal consistency of .94 and .91 for the Avoidance and Anxiety scales respectively (Brennan et al., 1998). The instrument measures individuals on two dimensions that underlie adult attachment organization: avoidance and anxiety. The scale was revised in 2000 without compromising internal consistency by reporting Cronbach alphas reliability of .90 or higher for the two ECR-R scales (Sibley & Liu, 2004).

Personal Assessment of Intimacy in Relationships (PAIR). The PAIR is a 36-item self-report questionnaire that identified the degree to which each partner presently feels intimate in the various areas of the marriage (realized). The five areas of intimacy

are: emotional intimacy, defined as the ability to feel close to someone; social intimacy, or the ability to share mutual friends and similarities in social networks; sexual intimacy, which is the ability to share general affection and/or sexual activities; intellectual intimacy, or the experience of shared ideas; and recreational intimacy, defined as shared interest in hobbies or joint participation in sport (Greeff & Malherbe, 2001). The alpha coefficient for the scale was strong at .77 when originally established by Schaefer and Olson (1981). The internal reliability coefficients of the subscales are as follows: emotional, 0.75; social, 0.71; sexual, 0.77; intellectual, 0.70; and recreational, 0.70 (Greeff & Malherbe, 2001).

Cyber-Pornography Use Inventory (CPUI) (Appendix D). The CPUI scale assessed cybersex behavior among participants. Designed to address Internet pornography use and addiction within a religious population, the inventory is patterned after the Internet Sex Screening Test (Grubbs et al., 2010). The measure is designed with attention to addictive behaviors characterized by one's inability to stop the behavior, significant negative effects resulting from the problematic behavior, and a general obsession with the behavior (Grubbs et al., 2010). This 40-item scale assesses three factors: addictive patterns, guilt regarding online pornography use, and online sexual behavior-social. The CPUI self-report inventory reported strong reliability with alpha reporting: addictive patterns (.89), guilt regarding online pornography use (.83) and online sexual behavior-social (.84) (Grubbs et al., 2010).

Burns Relationship Satisfaction Scale (RSAT). Relationship satisfaction was assessed using the RSAT scale. This highly reliable and internally consistent scale consists of seven items and has a Cronbach coefficient alpha of 0.94. This brief

alternative to the original 13-item scale is faster and easier to complete. It is fitting for a variety of romantic relationships, but for the purpose of this study was given solely to heterosexual married couples. Score on the RSAT are highly correlated with scores on the Lock-Wallace Marital Adjustment Test ($r = .80$) (Burns & Sayers, 1988). The scale reliably measures satisfaction and dissatisfaction in close romantic relationships, differentiates very dissatisfied couples from very satisfied couples, has excellent internal consistency, and strongly correlates with other instruments that measure relationship satisfaction.

Procedures

The investigator submitted all required material to the Institutional Review Board (IRB) for approval to conduct the study. Once approval was received, a request for the online sample was sent to Amazon Mechanical Turk for anonymous voluntary participation in the study. Participants were told they were participating in a study intended to investigate the effects of Internet pornography use on marital satisfaction. To help acquire a high response rate and to provide incentive to complete the surveys, participants were offered monetary compensation (\$1) for completion of all survey materials. Participants were informed the data was confidential and they had the right to withdraw from the study at any time without penalty. Participants were informed of the study's anonymity and that the information obtained was used solely for research purposes. Participants were also informed that a summary of the results and research findings would be available if desired. Each participant received a survey packet outlining the purpose and details of the study and were instructed to complete the informed consent form prior to receiving the survey packet materials.

The survey packet consisted of a description of the experiment, four (4) instruments and one (1) demographics questionnaire. The survey packet included a brief non-specific description of the experiment, description of what the participants were asked to do as inclusion in the study, information on the time required to complete the surveys, and notification of any potential risks and/or benefits of completing the surveys. Survey assessments included: Experience in Close Relationships (ECR-R; Brennan et al., 1998), Personal Assessment in Intimate Relationships (PAIR; Schaefer & Olson, 1981), the Cyber-Pornography Use Inventory (CPUI; Grubbs et al., 2010), the Relationship Satisfaction Scale (RSAT; Burns, 1983), and a background information questionnaire. The background questionnaire gathered basic background information and facts about the participants' sexuality, relationship history, current marital relationship, intimacy, and current pornography use. Data collection took place in March 2015.

Data Processing and Analysis

Pearson's coefficients were used to test the hypotheses of research question 1. This was how H₁, H₂ and H₃ were tested. To test the hypotheses of research questions 2 and 3, hierarchical regression analyses was conducted. This was how H₄, H₅ and H₆ were tested.

Assumptions

Assumptions for the multiple regression was screened to assess (a) absence of multicollinearity, (b) normal distribution of the quantitative Y outcome variable (marital satisfaction), (c) linear relationship between all pairs of variables with no extreme bivariate outliers, (d) homogeneous regressions across all levels, (e) homogeneity in

variance in Y scores across levels of X_i , and (f) the Y outcome variable is quantitative and interval data.

Ethical Considerations

Although the nature of the study's design was anonymous, the researcher employed every effort to reduce risk and potential harm to the participants in the study by adhering to all regulations and guidelines as instructed by the Institutional Review Board. Once approval was received from the IRB, research for the study began. Due to the anonymity of the study's design and data collection, risks were minimal and overshadowed by the benefits of findings from the study. Without divulging the full intent of the purpose of the experiment, researchers provided participants with a brief description of the study. Concealment of the true nature of the study was necessary and justifiable for the purposes of eliminating response shift and reducing mindfulness towards social mores, expectations, and practices that could have changed how participants elected to interpret and answer survey questions (Kazdin, 2003). To ensure the best practice of safety and to reduce potential risk to participants while upholding ethical standards, the research study upheld IRB requirements and recommendations. The primary investigator required all participants to be informed of the study's intent and required each participant to complete the informed consent form which notified participants of the study's intent and design and elicited permission to utilize information obtained from the study only for research purposes (See Appendix A). Benefits of the study's anonymous design included (a) aid in reducing effects of social stigma and judgment by society, (b) further awareness for researchers of factors that make some

individuals more susceptible to engage in pornography use, and (c) aid for therapists and counselors in providing appropriate psychotherapy treatment for pornography use, which speaks to addressing and strengthening antecedent factors (attachment and intimacy) as opposed to solely disengaging pornography use. Additionally, each participant was offered a chance to obtain a summary of the research findings. In the event any discrepancies or undesirable consequences had arisen as a risk to participants, the IRB would have been immediately notified for further evaluation and resolution.

Summary

This chapter has provided an in-depth explanation of the research design and step-by-step directions to evidence the procedural process in conducting this study. Information was provided to define the research's design and methods for recruiting and selecting participants. A discussion on the assessments employed in the study provided a description of each measure and its adherence to being structurally sound. Procedures addressed the actual steps taken to obtain data from participants. Finally, to determine the findings, the researcher addressed data processing, analysis and assumptions. Each of the aforementioned was delineated with ethical principles and concerns taking first priority in adherence to IRB requirements as well as meeting the responsibility and respect of welfare of the study's participants.

CHAPTER FOUR: DATA ANALYSIS AND RESULTS

Restatement of the Purpose

The purpose of this study was to investigate the complex relationship between four constructs: Romantic Attachment (Anxious, Avoidant), Intimacy, Pornography Use, and Marital Satisfaction to determine whether Pornography Use accounts for unique variance in Marital Satisfaction after accounting for the effects of Romantic Attachment and Intimacy. There were three research questions the study sought to address.

First, what is the relationship between Attachment, Intimacy, Pornography Use and Marital Satisfaction? Second, in what ways does Intimacy influence Marital Satisfaction among Pornography Users with Insecure Attachment (Anxiety and Avoidance)? Finally, is Pornography used to regulate attachment emotions among pornography users with insecure attachment?

This study used a sample of 550 married and cohabitating participants and those involved in romantic relationships who were administered measures of Romantic Attachment, Intimacy, Pornography Use, and Marital Satisfaction. Complete data was available for 280 married participants.

The first research question was examined using correlation coefficients to determine the relationship between the independent and dependent variables. The second research question used hierarchical regression analyses to determine whether Intimacy mediates the relationship between Romantic Attachment (Anxious and Avoidant) and Marital Satisfaction. Finally, the third research question also used hierarchical regression analyses to determine whether Pornography Use moderates the relationship between

Attachment and Intimacy for those with Attachment Anxiety or the relationship between Intimacy and Marital Satisfaction for those with Attachment Avoidance. This chapter presents the results and summary of findings with their corresponding hypotheses of the statistical analysis of the three research questions guiding this study.

Demographics

The sample consisted of male and female participants ($n=280$) who were married and currently living with their spouse. Participants ranged in age from 20-66 ($M = 33$) and most had been married between 1-5 years without any prior marriages. Thirty-eight percent engaged in pornography 1-3 times per month, followed by nearly 37% viewing pornography 10 or more times per month. Eighteen percent viewed pornography 4-6 times per month, and 7.9% of the participants viewed pornography 7-9 times per month. When asked how their spouse would feel about their pornography use, 32% of the participants felt it would be a negative response, 24% believed they would not have any feelings at all about the discovery of the pornography use, and the remaining 33% believed their spouse would have a positive reaction to its discovery. See Tables 4.1 and 4.2.

Table 4.1

Demographic Information of Participants Relationship History and Pornography Use

Age	Freq	%
20 to 29	92	32.9
30 to 39	121	43.3
40 to 49	47	16.9
50 to 59	11	4.2
60 to 66	9	3.4
Race	Freq	%
Caucasian/White	237	84.6
African American/Black	14	5.0
Asian	9	3.2
Hispanic, Latino, or of Spanish Origin	13	4.6
Other	6	2.1
Did Not Answer	1	0.4
How Many Times Have You Been Married?	Freq	%
Once	242	86.4
Twice	33	11.8
Three	5	1.8
How Long Have You Been Married to Your Current Spouse?	Freq	%
0 to 5 Years	158	56.4
5 to 10 Years	57	20.4
10 to 15 Years	28	10.0
15 to 20 Years	11	3.9
20 Years or More	24	8.6
Did Not Answer	2	.7

Table 4.2

Relationship and Sexual History

Within the Past Month, How Many Times Have You Viewed Pornography Online?	Freq	%
1 to 3 Times	106	37.9
4 to 6 Times	50	17.9
7 to 9 Times	21	7.5
10 or More Times	103	36.8

Does Your Spouse/Partner Know You Engage in Pornography Use?	Freq	%
No	59	21.1
Yes	219	78.2
Not Applicable	2	.7

If You Did Use Pornography, How Do You Think Your Spouse/Partner Would Feel About Your Pornography Use?	Freq	%
Extremely Negative	20	7.1
Somewhat Negative	26	9.3
Negative	45	16.1
No feelings at all	68	24.3
Positive	61	21.8
Somewhat Positive	26	9.3
Extremely Positive	34	12.1

Does Your Spouse/Partner Know How Frequently You Engage in Pornography Use?	Freq	%
Does Know	92	32.9
Is Somewhat Aware	80	28.6
Does Not Know	102	36.4
Not Applicable	3	1.1
Did Not Answer	3	1.1

Research Question One

A bivariate correlation analysis was performed to examine the relationship between Attachment (Anxiety and Avoidance), Intimacy, Pornography Use, and Marital Satisfaction. Significant relationships were found between Intimacy and Marital Satisfaction, and between Attachment Anxiety and Pornography Use. Negative relationships were found between Attachment Anxiety and Intimacy, Attachment Anxiety and Marital Satisfaction, and Pornography Use and Marital Satisfaction. No relationship was found between Attachment Avoidance and Intimacy, Attachment Avoidance and Pornography Use and Attachment Avoidance and Marital Satisfaction (see Table 4.3).

Table 4.3

Results of Pearson Correlations for Anxiety, Avoidance, Intimacy, Pornography Use, and Marital Satisfaction

	RANX	RAVD	PAIR	CPUI
RAVD	.09			
PAIR	-.38*	.07		
CPUI	.24*	.05	-.11	
Marital Satisfaction	-.38*	.10	.80*	-.18**

Note: RANX = Romantic Anxiety; RAVD = Romantic Avoidance; PAIR = Intimacy; CPUI = Pornography Use; RSAT = Marital Satisfaction

* $p < .001$ ** $p < .01$

Anxious Attachment

It was hypothesized negative correlation would exist between Anxiety and Intimacy, and Anxiety and Marital Satisfaction. As hypothesized, results show Anxiety ($r = -.38, p < .001$) was negatively correlated with Intimacy; Anxiety ($r = -.38, p < .001$) also showed a negative correlation with Marital Satisfaction. It was hypothesized a positive correlation would exist between Anxiety and Pornography Use. Results show Anxiety ($r = .24, p < .001$) was positively correlated with Pornography Use. Hypotheses 1a, 2a, and 3a were supported.

Avoidant Attachment

It was hypothesized Attachment Avoidance would be significantly negatively correlated with Intimacy, and Marital Satisfaction. Results show Avoidance ($r = .07, p = .257$) was not correlated with Intimacy. Results found Avoidance ($r = .10, p = .103$) was also not correlated with Marital Satisfaction. It was also hypothesized Avoidance would be significantly positively correlated with Pornography Use. Results show Avoidance ($r = .05, p = .385$) had no correlation with Pornography Use. Unexpectedly, no relationship

was found between Avoidance and Intimacy, Avoidance and Marital Satisfaction, or Avoidance and Pornography Use. Hypotheses 1b and 2b were not supported.

Pornography Use

It was hypothesized Pornography Use would show a strong negative correlation with Marital Satisfaction. Pornography Use ($r = -.18, p < .01$) showed a negative correlation to Marital Satisfaction but did not demonstrate a strong statistical significance. Hypothesis 3b was not supported.

Intimacy

It was hypothesized Intimacy would be significantly positively correlated with Marital Satisfaction. Intimacy ($r = .80, p < .001$) demonstrated the highest correlation in the study with Marital Satisfaction. It was also hypothesized Intimacy would be negatively correlated with Pornography Use. No statistically significant relationship was found between Intimacy ($r = -.11, p = .068$) and Pornography Use.

Research Question Two

A cited in Warner, using the Baron and Kenny (1986) causal steps approach, a mediation analysis was performed to determine in what ways Intimacy influences Marital Satisfaction among Pornography Users with relational Avoidance or Anxiety. For those with Attachment Avoidance, no statistically significant results were demonstrated. For those with Attachment Anxiety, results showed statistical significance F change (see Table 4.4). The initial causal variable was Attachment (Anxious, Avoidant); the outcome variable was Marital Satisfaction; and the proposed mediating variable was Intimacy. Preliminary data screening suggested that there were no serious violations of

assumptions of normality or linearity. All coefficients reported here are unstandardized unless otherwise noted; alpha = .05 two-tailed is the criterion for statistical significance.

Anxious Attachment

It was hypothesized that Intimacy mediates the relationship between Attachment Anxiety and Marital Satisfaction (H_{4a}). A hierarchical regression was utilized to determine the relationship between Attachment Anxiety and Intimacy as they relate to Marital Satisfaction. Anxious Attachment was first entered into the regression analysis, followed by Intimacy. This approach examined the relationship Intimacy had on Anxious Attachment and Marital Satisfaction. The first step generated by this method addressed whether Anxious Attachment accounted for significant variance on Marital Satisfaction (see Table 4.4). The second step attempted to identify the amount of total variance accounted for by Anxiety and Pornography Use combined. Finally, the third step identified whether Intimacy accounted for significant variance in Marital Satisfaction and the degree that Intimacy mediated the relationship between Attachment and Marital Satisfaction.

Results indicated that Anxious Attachment uniquely identified less than 1% of the variance associated with Marital Satisfaction after the variance from Pornography Use and Intimacy were considered. In the third step of the regression analysis, results demonstrated Intimacy mediated the relationship between Attachment Anxiety and Marital Satisfaction by 65% ($sr^2 = .1529$; $sr^2 = .1225$; $sr^2 = .0043$) (See Table 5). Hypothesis 4a was supported.

Table 4.4

Hierarchical Regression to Predict Marital Satisfaction from Anxiety and Pornography Use

	Predictors	R^2	<i>Adjusted R²</i>	<i>F Change</i>
Step 1	Anxiety	.153	.150	50.208*
Step 2	Anxiety Pornography Use	.161	.155	2.523
Step 3	Anxiety Pornography Use Intimacy	.644	.483	374.198*

* $p \leq .001$

Table 4.5

Standardized and Unstandardized Beta Coefficients of Regression Models Predicting Unique Variance in Marital Satisfaction Produced by Anxiety and Pornography Use

Predictors	Unstandardized Coefficients	Standardized Coefficients	t	sr^2
Step 1				
Anxiety	-.490	-.391	-7.086	.1529
Step 2				
Anxiety	-.463	-.369	-6.505	.1225
Pornography Use	-.157	-.090	-1.589	.0076
Step 3				
Anxiety	-.092	-.074	-1.835	.0043
Pornography Use	-.157	-.080	-2.149	.0059
Intimacy	.054	.756	19.344	.4830

* $p \leq .001$

Avoidant Attachment

It was hypothesized that Intimacy mediates the relationship between Attachment Avoidance and Marital Satisfaction (H_{4b}). A hierarchical regression was utilized to determine the relationship between Attachment Avoidance and Intimacy as they relate to Marital Satisfaction. Attachment Avoidance was first entered into the regression analysis, followed by Intimacy. The first step of this method addressed whether Attachment Avoidance accounted for significant variance on Marital Satisfaction (see Table 4.6). The second step identified the amount of total variance accounted for by Intimacy and Attachment Avoidance combined. The results of the third step of the regression analysis demonstrated that Intimacy mediated the relationship between Attachment Avoidance and Marital Satisfaction by 63% ($sr^2 = .0130$; $sr^2 = .0027$; $sr^2 = .0034$) (see Table 6). Hypothesis 4b was supported (see Table 4.7).

Table 4.6

Hierarchical Regression to Predict Marital Satisfaction from Avoidance, Intimacy, and Pornography Use

Predictors	R^2	Adjusted R^2	F Change
Step 1	.013	.009	3.643
Avoidance			
Step 2	.633	.631	468.472**
Avoidance			
Intimacy			
Step 3	.643	.639	7.313*
Avoidance			
Intimacy			
Pornography Use			
Step 4	.648	.642	3.837*
Avoidance			
Intimacy			
Pornography Use			
Intimacy X Pornography Use			

* $p \leq .01$; ** $p \leq .001$

Table 4.7

Standardized and Unstandardized Beta Coefficients of Regression Models Predicting Unique Variance in Marital Satisfaction Caused by Avoidance, Intimacy, and Pornography Use

Predictors	Unstandardized Coefficients	Standardized Coefficients	<i>t</i>	<i>sr</i> ²
Step 1				
Avoidance	.373	.114	1.909	.0130
Step 2				
Avoidance	.171	.052	1.430	.0027
Intimacy	.056	.790	21.644**	.6209
Step 3				
Avoidance	.191	.058	1.608	.0034
Intimacy	.056	.779	21.441**	.5944
Pornography Use	-.171	-.098	-2.704*	.0094
Step 4				
Avoidance	.207	.063	1.753	.0040
Intimacy	.055	.777	21.476**	.5914
Pornography Use	-.169	-.097	-2.685*	.0092
Intimacy X Pornography Use	-.007	-.070	-1.959	.0049

* $p \leq .01$; ** $p \leq .001$

Research Question Three

The third research question sought to determine whether Pornography Use moderates the relationship between Attachment and Intimacy for those with Attachment Anxiety (H5_a) and whether it moderates the relationship between Intimacy and Marital Satisfaction for those with Attachment Avoidance (H5_b). The question also sought to determine whether Pornography Use regulates attachment emotions among pornography

users with Attachment Anxiety (H6_a) and Attachment Avoidance (H6_b). Four regression analyses were used to test the moderated-mediation (H5_a) and mediated-moderated models (H5_b). Results indicated pornography use was not a moderator of Attachment Anxiety on Intimacy. However, Pornography Use was found to moderate the relationship between Intimacy and Marital Satisfaction. Based on research findings, those high in Anxious Attachment do not engage in Pornography Use to regulate attachment emotions; however, the opposite occurs for those with Attachment Avoidance do engage in Pornography Use to regulate attachment emotions.

Anxious Attachment

It was hypothesized Pornography Use moderates the relationship between Attachment and Intimacy for those who are higher in Anxious Attachment (H5_a). A regression analysis was performed to assess the moderating effect of Pornography Use on the association between relational Anxiety and Intimacy and how that variance ultimately is related to Marital Satisfaction. Preliminary data screening did not suggest problems with assumptions of normality and linearity. Prior to forming a product term to represent an interaction between Attachment Anxiety and Intimacy, scores on both variables were centered by subtracting the sample mean. The regression included Anxious Attachment (ECR-R_{anx}), Pornography Use (PU), and an ECR-R_{anx} by PU interaction term as predictors of Marital Satisfaction.

The overall regression was statistically significant, $R = .401$, $R^2 = .161$, adjusted $R^2 = .155$, $F(2, 279) = 26.503$, $p \leq .001$. Unstandardized regression coefficients are reported (see Table 4.5). Results show there was not a significant ECR-R_{anx} X PU interaction, $sr^2 = .0003$. Despite a significant effect for Pornography Use, $b = -.157$,

$t(280) = -6.505, p \leq .001, sr^2 = .0076$, results do not demonstrate a relationship between the Anxiety-Pornography interaction and Marital Satisfaction. Because the interaction term was not statistically significant, the interaction was not retained in the model.

Hypothesis 5a was not supported.

Avoidant Attachment

It was hypothesized pornography use moderates the relationship between Intimacy and Marital Satisfaction for those with Attachment Avoidance (H_{5b}). A regression analysis was performed to assess whether Intimacy and Pornography Use interact to predict Marital Satisfaction. Preliminary data screening did not suggest problems with assumptions of normality and linearity. Prior to forming a product term to represent an interaction between Attachment Avoidance and Intimacy, scores on both variables were centered by subtracting the sample mean. The regression included Attachment Avoidance (ECR-R_{avd}), Intimacy, Pornography Use (PU), and Intimacy by PU interaction term as predictors of marital satisfaction.

With results indicating nearly 65% of statistical significance, the model demonstrates to be strong, $R = .804, R^2 = .648, \text{adjusted } R^2 = .642, F(2, 279) = 3.837, p \leq .001$. Unstandardized regression coefficients are reported (see Table 4.7). Results did show a significant ECR-R_{avd} X PU interaction, $sr^2 = .0049$, demonstrating small but statistically significant unique variance of the interaction between the Intimacy-Pornography Use interaction and Marital Satisfaction (see Table 4.7). Hypothesis 5b was supported.

Variance Associated to Pornography Use

Anxious Attachment

It was hypothesized Pornography Use would account for significant variance to Intimacy above that of Anxious Attachment (H_{6a}). Hierarchical regression was carried out to determine if Pornography Use added any unique variance to Intimacy after accounting for the effects of Anxiety on Intimacy. Anxious Attachment was entered first into the hierarchical regression, followed by Pornography Use. The first R^2 generated by this method addressed whether Anxious Attachment accounted for significant variance on Intimacy. The second R^2 identified the amount of variance accounted for by Pornography Use. The change in R^2 identified the unique variance caused by Pornography Use after controlling for Anxious Attachment. Results are shown in Table 4.8. In the first regression, Marital Satisfaction was regressed onto Anxious Attachment, which revealed that Marital Satisfaction accounted for 15% of unique variance ($R^2 = .155$, $F = 51.169$). In the second regression, Marital Satisfaction was regressed onto Pornography Use while statistically controlling for the effects of Anxious Attachment. This accounted for nearly 16% of the unique variance ($R^2 = .156$, $F = .060$). See Table 4.8. Hypothesis 6a was not supported.

Avoidant Attachment

It was hypothesized Pornography Use would account for significant variance to Marital Satisfaction above that of Attachment Avoidance (H_{6b}). Hierarchical regression was carried out to determine if Pornography Use added any unique variance on Marital

Satisfaction after accounting for the effects of Intimacy. Avoidant Attachment was entered first into the hierarchical regression, followed by Pornography Use. The first R^2 generated by this method addressed whether Pornography Use accounted for significant variance on Intimacy. The second R^2 identified the amount of variance created by Intimacy. The change in R^2 identified the unique variance accounted for by Pornography Use after controlling for Attachment Avoidance. The third R^2 identified the total variance accounted for by the interaction between Pornography Use and Intimacy. Results are shown in Table 4.10. In the first regression, Attachment Avoidance was regressed onto Intimacy, which revealed that Attachment Avoidance accounts for only 1.3 percent of unique variance ($R^2 = .013$, $F = 3.643$). In the second regression, Intimacy was added into the equation while statistically controlling for the effects of Attachment Avoidance. Intimacy accounted for nearly 5% of the unique variance ($R^2 = .048$, $F = 10.077$, $p \leq .001$) (see Table 4.10). Results demonstrated nearly 35% of the unique variance in Intimacy was caused by Avoidance and Pornography Use. See Table 4.11.

The overall regression was statistically significant, $R^2 = .048$, adjusted $R^2 = .041$, $F(1, 279) = 10.077$, $p \leq .01$. Unstandardized regression coefficients are reported (see Table 4.10). Results did show a significant ECR- R_{avd} X PU interaction, $b = -.324$, $t(280) = -3.174$, $p \leq .01$, $sr^2 = .0346$, demonstrating nearly 3.5% of the unique variance in the interaction between the Intimacy-Pornography Use interaction and Marital Satisfaction (see Table 4.11). Hypothesis 6b was supported.

To visualize the nature of Intimacy-by-Pornography Use interaction with Attachment Avoidance, see Figure 4.1. Unexpected findings showed that when Intimacy was high, high Pornography Use scored lower than Low Pornography Use. These results

were opposite of what was predicted in the hypothesis, which stated that low Intimacy for those with Attachment Avoidance would predict higher Marital Satisfaction and high Intimacy would predict lower Marital Satisfaction (6_b). Additionally, the figure also demonstrates that when Intimacy is low, Marital Satisfaction is also low. However, high Pornography Use reported to have lower Marital Satisfaction than low Pornography Use. In other words, Marital Satisfaction was higher regardless of low or high Intimacy when Pornography Use was low. Significantly, Avoidance uses psychological and emotional distance in order to remain in control and regulate attachment emotions. Avoidant individuals take pride in maintaining their control and distance. Due to their perception of always remaining in control of their emotions and feelings, they also create psychological and emotional distance with their pornography use. Since the CPUI measures the pornography user's perception of attitudes, beliefs, and efforts made to obtain pornography, participants in the study did not respond to an account of pornography use or non-use but instead responded to their perceptions of their pornography use having a negative effect, compulsivity, and efforts to obtain pornography.

Table 4.8

Hierarchical Regression to Predict Marital Satisfaction from Anxiety and Pornography Use

Predictors		R^2	<i>Adjusted R²</i>	<i>F Change</i>
Step 1	Anxiety	.155	.152	51.169*
Step 2	Anxiety Pornography Use	.156	.150	.060

* $p \leq .001$

Table 4.9

Standardized and Unstandardized Beta Coefficients of Regression Models Predicting Unique Variance in Intimacy Caused by Anxiety and Pornography Use

Predictors	Unstandardized Coefficients	Standardized Coefficients	t	sr^2
Step 1				
Anxiety	-6.922	-.394	-7.153*	.1552
\Step 2				
Anxiety	-6.862	-.391	-6.867*	.1436
Pornography Use	-.340	-.014	-.245	.0002

* $p \leq .001$

Table 4.10

Hierarchical Regression to Predict Intimacy from Avoidance and Pornography Use

Predictors	R^2	<i>Adjusted R²</i>	<i>F Change</i>
Step 1 Avoidance	.013	.009	3.643
Step 2 Avoidance Pornography Use	.048	.041	10.077*

* $p \leq .01$

Table 4.11

*Standardized and Unstandardized Beta Coefficients of Regression Models
Predicting Unique Variance in Marital Satisfaction Caused by Avoidance and
Pornography Use*

Predictors	Unstandardized Coefficients	Standardized Coefficients	t	sr^2
Step 1				
Avoidance	.373	.114	1.909	.0130
Step 2				
Avoidance	.404	.123	2.102*	.0151
Pornography Use	-.324	-.186	-3.174**	.0346

* $p \leq .05$; ** $p \leq .01$

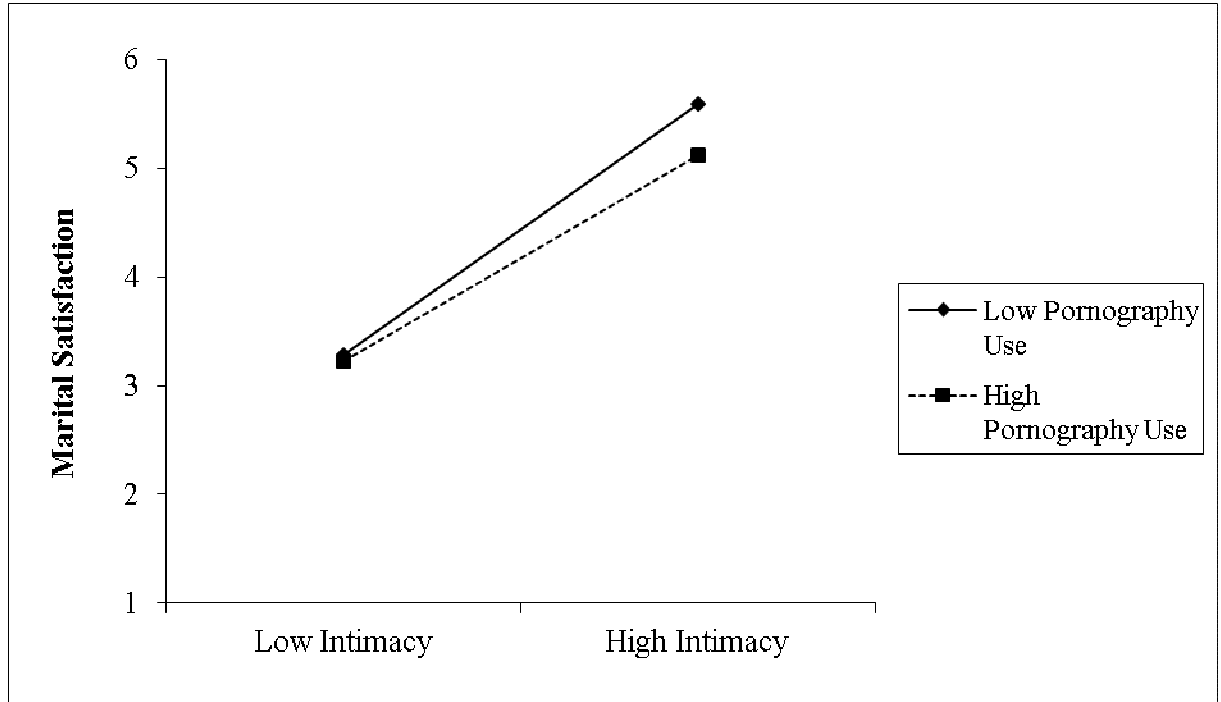


Figure 4.1 Attachment Avoidance Pornography Use - Intimacy and Marital Satisfaction

Summary

A participant sample of 280 married heterosexual pornography users was used in this study. Bivariate correlation analyses were utilized to answer the first research question: What is the relationship between Romantic Attachment (Anxiety and Avoidance), Intimacy, Pornography Use and Marital Satisfaction? Results showed significant relationships between Intimacy and Marital Satisfaction and between Attachment and Anxiety and Pornography Use. Negative relationships were found between Attachment Anxiety and Intimacy, Attachment Anxiety and Marital Satisfaction, and Pornography Use and Marital Satisfaction. No relationship was found between Attachment Avoidance and Intimacy, Attachment Avoidance and Pornography Use, or

Attachment Avoidance and Marital Satisfaction. Hierarchical multiple regression analyses were utilized to examine the second research question: In what ways does Intimacy influence Marital Satisfaction among Pornography Users with insecure Attachment? Intimacy was determined to mediate the relationship between Anxious Attachment and Marital Satisfaction and Avoidant Attachment and Marital Satisfaction by nearly 65%. Hierarchical multiple regression analysis was also utilized to examine the third research question: Is pornography used to regulate attachment emotions among pornography users with insecure attachment? Results demonstrated that Pornography Use does not show a relationship between the Anxiety-Pornography interaction and Marital Satisfaction; however, it did demonstrate unique variance of the interaction between the Intimacy-Pornography Use interaction and Marital Satisfaction for those with Attachment Avoidance. Further discussion of the results is provided in chapter five.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the Findings

This chapter discusses the significance of the findings discovered as they are related to the following research questions investigated by the study: (a) What is the relationship between Attachment (Anxiety, Avoidance), Intimacy, Pornography Use and Marital Satisfaction, (b) In what ways does Intimacy influence Marital Satisfaction among pornography users with insecure attachment, and (c) Is pornography used to regulate attachment emotions among pornography users with insecure attachment. This chapter seeks to unfold and explicate the findings of this quantitative study in a way that simplifies the complexity of this mediation-moderation study. The chapter entails a brief discussion of the findings for research questions one through three, an explication of each of the research independent variables (Attachment: Anxiety and Avoidance, Intimacy, and Pornography Use) and their influence on Marital Satisfaction, Implications for practice and research, discussion of limitations, and recommendations for future research.

Research Question One

The purpose of this study was to investigate the complex relationship between four constructs: Romantic Attachment (Anxiety and Avoidance), Intimacy, Pornography Use, and Marital Satisfaction to determine whether Pornography Use accounts for unique variance in Marital Satisfaction after accounting for the effects of Romantic Attachment and Intimacy. Bivariate correlations revealed that of the two dimensions of Romantic Attachment (Anxiety and Avoidance), only Anxiety was significantly (inversely) correlated with Marital Satisfaction and Intimacy (see Table 4.1). Additionally,

significant relationships were found between Intimacy and Marital Satisfaction and Pornography Use and Marital Satisfaction.

Research Question Two

Hierarchical multiple regression analyses found that Intimacy mediated the relationships between Attachment and Marital Satisfaction. Research findings demonstrated Intimacy accounted for 63% of the variance of the effect of Attachment Anxiety on Marital Satisfaction and 64% of the variance of the effect of Attachment Avoidance on Marital Satisfaction. This suggests that Intimacy is still obtainable in spite of attachment challenges.

Research Question Three

Again, hierarchical multiple regression analyses were conducted. Pornography Use did not demonstrate a relationship between the Anxiety-Pornography interaction and Marital Satisfaction. Since the interaction term was not statistically significant, the interaction was not retained in the model. Conversely, it was found that Pornography Use does demonstrate unique variance of the interaction between the Intimacy-Pornography Use interaction and Marital Satisfaction.

Influence of Attachment on Marital Relationships

The Internal Working Model (IWM) is a cognitive grid that determines how felt security is sought, and the extent to which people perceive they are successful in achieving this goal. From Bartholomew's IWM model emerges the dimensions of Attachment Anxiety and Attachment Avoidance and the extent to which individuals worry about abandonment and rejection (anxiety) and limit intimacy with others

(avoidance). Attachment Anxiety and Avoidance are activated once the attachment system has identified a threat or stress to the person (Holmes & Johnson, 2009). As it pertains to the construct of Marital Satisfaction, the identified threat is the possible damage, dissolution, or intrusion upon the marital relationship as perceived by the identifying spouse.

Anxious Attachment and Attachment Avoidance

The individual perception of self and other adopted by each dimension determines how that particular attachment style will perceive, evaluate, and respond to experiences in relationships. Therefore, it would be conceivable that Anxious Attachment would predict Marital Satisfaction and Attachment Avoidance did not. The results of this study replicated prior research findings that have identified the attachment security of a spouse to contribute to a person's perception of marital satisfaction (Attu & Akpan, 2011; Kobak & Hazan, 1991; Millwood & Watz, 2008; Volling et al, 1998). The difference in the attachment dimensions is due to the individual perception identified in one's IWM. Researchers have shown there is a reciprocal influence of marital satisfaction on attachment security, such that increased levels of marital satisfaction lead to increased attachment security and vice versa (Dinero et al., 2008). Those higher in Anxious Attachment are already preconditioned to believe their unworthiness of being loved and tend to worry about being rejected or abandoned by their romantic partner. It seems conceivable that once their attachment system is activated, their perception of marital satisfaction is determined by their perception of felt security (i.e., their spouse being available and responsive to their attachment needs). This dynamic seems to place control of the satisfaction of the relationship in the ability or inability of the spouse to perform as

expected by those with higher Anxious Attachment. Contrarily, those higher in Attachment Avoidance would not place such control in the hands of their spouse because they already have a lessened sense of trust in their relationships. In essence, it is plausible that their avoidance is used to manage and control their feelings. If a spouse disappoints, the response is unsurprising and expected due to the preexisting condition of a lack of trust. In other words, each attachment dimension holds to the preconception people hold of their relationship and whether that preconception has fulfilled their expectations (McCabe, 2002).

Influence of Intimacy on Marital Relationships

Intimacy is recognized as a crucial variable in marriage and the work and maintenance towards it where, when it is given, intimacy must be perceived by the receiver as being authentic (Kirby et al., 2005). Whether intimacy is being established, maintained, or improved in a marital relationship, partners must demonstrate continual efforts to ensure its development and satisfaction. Such efforts require the presence of certain actions and behaviors in order for intimacy to improve (Benjamin & Tlusten, 2010). Such actions are indicative of attachment emotions and evidenced in attachment behaviors. This finding substantiates results of previous studies, which evidenced intimacy to mediate the relationship between Attachment and Relationship Satisfaction (Feeney, 2002a, 2002b).

In the current study, it was hypothesized Intimacy would mediate the relationships between Attachment (Anxious and Avoidant) and Marital Satisfaction. Intimacy was found to mediate both the relationships between Attachment Avoidance and Marital

Satisfaction as well as that of Anxious Attachment and Marital Satisfaction. Therefore, results in the current study seem to further demonstrate the importance of Intimacy as a contributor in Marital Satisfaction as well as extend research findings demonstrating intimacy as a mediator between Attachment and Marital Satisfaction.

Attachment Anxiety

Results in this study indicated that Anxious Attachment did predict Intimacy and Intimacy mediated the relationship between Anxious Attachment and Marital Satisfaction. Significantly, this study did not represent a simple mediation between a predictor variable and outcome variable. Instead, the study indicated a mediated-moderation where it was hypothesized Pornography Use moderated the relationship between Attachment Anxiety and Intimacy for those higher in Attachment Anxiety. The results indicated there was no interaction between Anxiety-Pornography interaction and Marital Satisfaction. Using the Baron and Kenny (1986) causal steps approach, Warner (2008) stated that when an interaction (i.e., moderation) is not predictive or related to the outcome variable, it cannot act as a mediator; however, the researcher has the choice of whether or not to test the interaction of the mediator variable. In this study, the mediator variable, Intimacy, was tested and found to mediate the relationship between Anxious Attachment and Marital Satisfaction.

One plausible explanation why Intimacy was found to mediate the relationship between Attachment Anxiety and Marital Satisfaction is the value placed on closeness in the relationship. While individuals with anxious attachment are known for their high dependency for closeness, it seems expected that Intimacy would mediate this relationship due to the great importance it holds in the marital relationship for these

individuals. Attachment beliefs contribute to one's perception of marital satisfaction. Research has already determined that the association between attachment and relationship satisfaction is mediated by perceptions of level of closeness and autonomy within the relationship (Feeney, 2002a, 2002b). Additionally, individuals often project their intimacy goals onto their partner, often irrespectively of their partner's views and goals (Dandurand & Lafontaine, 2013). For that reason, it seems understandable that those higher in Attachment Anxiety place great weight on Intimacy in their relationship. Due to their tendency to ruminate on causes, meanings, negative thoughts, and their belief of being unworthy of love, such individuals' perception of their spouse's positive or negative affectivity gauges their own perception of marital satisfaction (Gordon & Baucom, 2009).

Attachment Avoidance

The study found that Attachment Avoidance did not predict Intimacy. Yet, Figure 4.1 provides strong evidence that the perception of Marital Satisfaction improves for those with Attachment Avoidance when Intimacy improves within the relationship. Such results would seem contradictory for the Attachment Avoidance variable but expected for the Attachment Anxiety variable. Those high in Attachment Avoidance are unaware of the strain in their relationships, which gives explanation to why they evidence low anxiety over abandonment or rejection (Clinton & Straub, 2010). They do experience high anxiety with regard to intimacy (Hazan & Shaver, 1987). For those higher in Avoidant Attachment, neither Pornography Use nor Intimacy has any bearing on marital satisfaction. Regardless of whether Pornography Use or Intimacy is high or low, Marital Satisfaction will be the same. This seems to indicate that those with higher Attachment

Avoidance recognize their fear of intimacy, but that does not negate their appreciation for intimacy when it is successfully achieved. This ability to appreciate intimacy helps them to build trust in their spouse's trustworthiness of their emotions and ability to be available and responsive to their needs. They also experience the emotional hurt felt when intimacy is unsuccessfully achieved and when they believe their spouse is not trustworthy of their emotions and unavailable and unresponsive to their needs. Those who are higher in Attachment Avoidance do not believe they need people to survive and thrive. They experience real emotions but they have repressed them for so long that they are not aware many of their feelings still exist (Clinton & Straub, 2010). Research has indicated that the fear of intimacy was a significant factor for engaging in pornography use (Popovic, 2011). It is conceivable that such individuals unconsciously value intimacy but consciously have fear of it due to their experiences with their primary caregiver in childhood or their former or current partner as an adult (Holmes & Johnson, 2011). In essence, their fear of intimacy does not negate their innate need for dependency and closeness with a significant other (i.e., primary attachment figure).

Influence of Pornography Use on Marital Satisfaction

Anxious Attachment

Romantic attachment is a continuous measure that predicts how individuals' IWMs assess how they perceive the physical and emotional availability and reliability of their romantic partner and which attachment behaviors are activated when threat or stress occurs. Attachment Anxiety places great value on closeness. Closeness helps gratify various needs and is a protective buffer against stressors, psychosomatic symptoms

depression, powerlessness, and loneliness (Popovic, 2011). Those with higher Attachment Anxiety value the assurance they receive from their partner during times of connection both emotionally and physically. The need to draw close to one's spouse is healthy; however, for those higher in Attachment Anxiety, the need becomes unhealthy because they do not view the closeness in terms of strengthening their relationship but instead as a way to increase their felt security. In attempts to obtain greater closeness, individuals who score higher on Attachment Anxiety experience intermediate levels of comfort with dependence and intimacy, but due to their anxiety over being rejected or abandoned, they are inclined to turn towards their partner in attempts to fulfill intimacy needs and secure their relationship (Hazan & Shaver, 1987; Mayseless & Scharf, 2007). The attempt to develop this extreme overemphasis on closeness comes at the cost of emotional independence (Feldman et al., 1998). This creates a lack of balance between closeness and separateness. These individuals are often labeled as 'clingy' because their belief of insufficient closeness creates increased efforts to dismiss separateness in order to fuse with their partner (Belsky & Cassidy, 1993; Feldman et al., 1998).

In the current study, results indicated that Pornography Use predicted Marital Satisfaction for those higher in Attachment Anxiety. Intimacy mediated the relationship between Anxious Attachment and Marital Satisfaction. Additionally, in the current study, Pornography Use was found not to moderate the relationship between Anxious Attachment and Intimacy and Pornography Use was not engaged to act as a substitute to regulate the attachment emotions of those who scored higher in Anxious Attachment. These results point to the possible value Anxiety respondents place on marriage or the significance placed on the preference such individuals have to achieve intimacy with

one's spouse over that of pornography use. Research has shown the regulation of attachment emotions was found in close relationships, and that it takes two years for the attachment bond to form (Eastwick & Finkel, 2008; Monin et al., 2012).

Prior research has also indicated anxiety over relationships may show stronger and more consistent links with marital satisfaction than dating relationships (Feeney, 2002a, 2002b). Therefore, it would seem married individuals with Anxious Attachment beliefs seem to place considerable importance to the bond formed with their spouse. Due to their cognitive schemas, they believe they are not worthy of love; therefore, it would seem plausible they engage in pornography use as a substitute when rejected by their spouse in attempts to establish, maintain, or develop greater intimacy. That is, the results of the study pose the possibility that the purpose of pornography use is to regulate attachment emotions after spouses have tried to engage in intimacy with their partner and not before; therefore, the Pornography Use would moderate the relationship for those with Anxious Attachment for the purpose of regulating attachment emotions ignited due to the felt rejection or abandonment of the pornography user.

Lastly, it is important to give considerable attention to hypotheses 5a and 6a. It was predicted Pornography Use would moderate the relationship between Attachment and Intimacy for those with Anxious Attachment (H_{5a}). It was also hypothesized Pornography Use would account for significant variance to Marital Satisfaction above that of Anxious Attachment (H_{6a}). Although the results did not support hypotheses 5a and 6a, this researcher argues that, in fact, both hypotheses were actually supported. The research questions address whether pornography is consumed to regulate attachment emotions, and if so, results are believed to identify that it does so above that of the

pornography user's attachment emotions. However, it is important to identify the term "pornography use". Although the research questions address Pornography Use, the study did not actually measure Pornography Use, but instead measured the attitude, beliefs, and efforts to engage in pornographic activity. Therefore, when considering the purpose of the measure was to obtain self-report responses as to individuals' perceptions of their attitudes, beliefs, and efforts to obtain pornography use, it is important to note that those with higher Attachment Anxiety would downplay their perceptions regarding pornography because their attention and focus is on maintaining the closeness of their spouse.

Another point to note is that the study proposed the Anxious Attachment Pornography User would elect to engage in Pornography Use *prior* to interacting with their spouse. Yet, this is not the case for this person. Those with higher Attachment Anxiety elect to engage with their spouse above that of any outside activity or person due to their preference for closeness with their attachment figure, i.e., their spouse. Therefore, it would seem more feasible for the study to have proposed a moderation-mediation where there is an interaction between Intimacy and Pornography Use and Marital Satisfaction. The current study proposed a mediation-moderation and this proposal was not supported. However, it is still believed such individuals do use pornography to regulate their attachment emotions, but only after they have first made attempts to engage with their spouse. In the event they are rejected, they would then turn to pornography to return to baseline, that is, use the pornography to deactivate their attachment emotions.

Attachment Avoidance

In this study, results indicated that Pornography Use did not predict Marital Satisfaction for those higher in Attachment Avoidance, but based on *t* values, Pornography Use did demonstrate statistical significance. These results indicate that those higher in Attachment Avoidance may use Pornography to regulate their emotions after their attachment system has been activated by Intimacy. When considering the attachment dimension, it is important to remember that those who score higher on Attachment Avoidance experience lower levels of closeness in their relationships because they do not see the need for intimacy. They are confident in their abilities and are self-reliant, perceive the self to be in control of feelings and emotions, and are able to withdraw physically and emotionally from those who express their emotional needs (Clinton & Straub, 2010). Therefore, those who score high on Attachment Avoidance would see the need to rely on Pornography Use to regulate their activated attachment emotions because it allows them to withdraw and restore comfort from those who express emotional needs (i.e. Intimacy) (Clinton & Straub, 2010). It seems probable they are able to cut off their emotions during times of stress, which for them, equates to distancing themselves from their spouse when intimacy is required of them (Simpson et al., 1996). Therefore, the regulation of attachment emotions through Pornography Use is probable because it allows for the disconnection of psychological closeness and intimacy with one's spouse.

Researchers have discovered that some individuals utilize avoidant coping strategies simply to avoid other unpleasant thoughts or emotions (Wetterneck et al.,

2012). Therefore, those higher in Attachment Avoidance could engage in pornography use in attempt to regulate attachment emotions brought on by the request to engage in intimacy by their spouse. It is possible the pornography is utilized as an emotionless sexual activity that allows such individuals to emotionally disengage from their partner and to focus energy and emotion into an activity that deactivates their attachment system (Szymanski & Stewart-Richardson, 2014).

The study's findings that Attachment Avoidance showed a unique variance of the interaction between the Intimacy-Pornography Use interaction and Marital Satisfaction could be attributed to the CPUI measure. The CPUI assessment does not directly measure pornography use; instead, it assesses the perceived attitude, beliefs, and efforts pornography users give toward Pornography Use. Those higher in Avoidance Attachment seek autonomy and control; they believe they are in control of their emotions and feelings and see outside influencers, which may include their pornography use, as controllable. Consequently, it would seem such individuals would not give weight to their pornography use because they add no perceived attachment to it. Hence, such individuals may have greater attitudes and beliefs toward pornography use and apply greater efforts toward consuming pornography, but due to their ability to disengage and remove themselves psychologically in order to remain in control, they may see their pornography use as something to do in order to disengage them instead of something to rely upon (Simpson et al., 1996). The evidence seems to point to the recognition of the powerful effects of Intimacy independent of Attachment style and Pornography Use.

Implications for Practice

The majority of participants in the study had been married under five years and were in their first marriage. Forty-four percent of the participants had engaged in pornography use seven or more times within the past month, and one third of such respondents believed their spouse would feel negatively about their pornography use if discovered. Such results give credence to the anonymity involved in pornography use and may shed light on the problems which may evolve in their relationship if the pornography use is discovered. Pornography use has been identified as a dysfunctional behavior that causes disconnection between spouses. A wall of secrecy develops between spouses and support obtained from this unhealthy reliance is achieved from outside the confines of the marital relationship (Bachman & Bippus, 2005; Fraley & Shaver, 2000). Research has shown that disconnection leads to unhappiness and defines success or failure in a relationship, but the ability to emotionally engage each other is important to reestablish connection and satisfaction within the relationship (Solomon, 2009). The discovery of pornography creates a new worldview that alters perceptions of individuals' relationship with their partner, their view of their own worth and desirability, and their view of the character and personal worth of their partner (Bridges et al., 2003). The discovery of pornography use has also been described as traumatic because it leaves the spouse at a loss for how they may effectively correct the situation. Researchers reported that such discovery causes a major drop in intimacy within the relationship, creating a gulf between partners in which attachment and intimacy are impaired to the extent that the spouse develops strong feelings that their partner failed to understand them

or their distress regarding the pornography. Finally, such discovery imparts a belief that the couple was living a shameful lie in presenting themselves to others as a loving and together couple (Bridges et al., 2003).

For spouses who are aware of their partner's pornography use, perceiving greater levels of engagement in pornography consumption causes greater levels of distress (Maddox et al., 2011; Manning, 2006). Research has indicated higher distress levels occur when partners believe that the frequency and duration of the pornography use is excessive or unhealthy (Maddox et al., 2011). Significantly, one person's distress causes distress in his or her partner. Therefore, a spouse's distress of their partner's viewing of pornography will in turn cause the partner distress, possibly increasing pornography viewing and leading to more pornography use, which leads to more relational distress, creating a perpetual negative cycle (Manning, 2006). Research has evidenced the division pornography causes by decreasing relational stability and relational commitment (Olmstead et al., 2013), the increase it brings to marital infidelity (Tarver, 2010), and the pornography user's dissatisfaction of their partner and the relationship (Staley & Prause, 2013).

Therapists and counselors are beginning to witness the damage pornography causes to the marital relationship when discovered. These relationship infractions at the hands of pornography use, although different from relationship infidelity, are nonetheless compared when speaking to the partner who discovers the pornography use (Lambert et al., 2012). It is important for therapists to be proactive in understanding and treating the reasons for the pornography use in attempts to repair the marital relationship. In essence, treating the problem from the root will help increase treatment effectiveness and

possibly result in diminishing relapses. The findings from this research, although mixed, evidence the conceivable nature (employed by pornography users with higher anxious attachment and avoidant attachment) of the motivation and purpose. If indeed such persons utilize pornography to regulate their attachment emotions, it would be beneficial for therapists to teach such individuals and couples healthy forms of relational functioning and connecting. By teaching advantageous ways to develop a healthy belief in self or other (depending upon the attachment belief), and a healthy way in building intimacy, therapists would in essence aid the development of healthy relational dependency between couples and reestablish connection where intimacy can be built and maintained within the confines of the marital relationship (Levesque, 2012).

Implications for Research

Findings from this study revealed Marital Satisfaction was not impacted by either low or high pornography use when Intimacy was already perceived to be low or high in the relationship for Attachment Avoidance (see Table 4.2). Such conclusions expose the importance Intimacy has on perception of Marital Satisfaction. In the current study, for couples who already perceived their relationship consisted of low Intimacy, Pornography Use was not considered to be a threat to the relationship and was not found to affect perceptions of Marital Satisfaction. It is the identification of a threat that activates the attachment system and weakens the marital bond and intimacy (Lambert et al., 2012). In this case, the perceived level of intimacy, not Pornography Use, was the major threat. Whether Intimacy was low or high, Marital Satisfaction did not matter. That is, when Intimacy was high, Marital Satisfaction was also high, and due to the discomfort with

intimacy for those who are higher in Attachment Avoidance, Pornography Use may have been engaged to deactivate the attachment system and regulate emotions. Although the intimacy was enjoyable, it did not negate the fact that such closeness activated the attachment system for those with Attachment Avoidance. As well, when Intimacy was low, Marital Satisfaction was also low and Pornography in such cases may have been consumed because the preconception of the pornography user's belief in their partner's inability to be available and responsive to their attachment needs was expected and fulfilled (Mikulincer, 1998; Volling, 1998). Prior research has indicated that only when pornography use is considered a threat to one's relationship does the marital bond begin to bear the weight of the division caused by the pornography use, thus weakening perceptions of marital satisfaction (Bridges et al., 2003; Lambert et al., 2012). Intimacy demonstrated 64% of the variance on Marital Satisfaction and was a key factor in both Attachment Anxiety and Attachment Avoidance. Now that it has been demonstrated that intimacy mediates the relationship between attachment and marital satisfaction, future research may wish to examine how different types of intimacy affect relational functioning in secretive and non-secretive pornography use, or pornography use and non-use. Additionally, it would be interesting to investigate intimacy in greater depth by conducting a longitudinal study of pornography use and examining the differences between groups with low and high levels of intimacy among pornography users with insecure attachment.

Limitations of the Study

There are a number of limitations in this study to consider. First, this study used a cross-sectional research design. A longitudinal research design examining the effects of Romantic Attachment, Intimacy and Pornography Use on Marital Satisfaction should be employed in future studies to increase statistical power. Secondly, the study's participant pool decreased from 550 to 280 after removing all romantic partners who were not married (i.e., dating, committed, and cohabitating respondents). It was believed that including a mix of both cohabitating and married partners would provide greater numbers in participants, thus increasing the sample size. However, the mixture of these two populations brought incongruence with results. Waite and Gallagher (2000) stipulate that a difference exists in the mindsets of different types of relationships, and in the level of investment to the relationship and partner when one cohabitates as opposed to being married. Benjamin and Tlusten (2010) stated there is a vast difference in these two populations because marrieds maintain more negative relationship beliefs than those who cohabitate. Therefore, the findings cannot be generalized to couples who cohabitate or who are long-term romantic partners. Future studies should be mindful to investigate the differences in these three groups (married, cohabitating, and long-term romantic partners without legal commitment) to understand the influence of Romantic Attachment, Intimacy, and Pornography Use on Relationship Satisfaction to see if findings are similar to the current study.

During data collection, some questions on the PAIR measure were inadvertently omitted. The primary investigator was able to adjust scores to allot for the

misconfiguration, but this error could have compromised results received from participants' scores on the measure and alter affirmative conclusions (Kazdin, 2003).

In addition, this study utilized the Cyber Pornography Use Inventory as its instrument to measure Pornography Use. However, this measure looks at the perceived compulsivity, affects, and efforts employed to engage in pornography, and is not a direct assessment of pornography use. The importance of this study was to ascertain the motivation behind pornography use. A scale that assesses pornography use (i.e., use or no use) would better determine findings congruent with the study's intent. Future studies would benefit from replacing this instrument with one which measures pornography use to determine if the measure may be the reason for the results not demonstrating any statistically significant variance to the moderator or outcome variables.

Conclusion

The study extended the current research regarding the influence of Romantic Attachment, Intimacy, and Pornography Use on Marital Satisfaction. The study found that in the sample population, Attachment Anxiety was significantly inversely correlated with Marital Satisfaction. Moreover, the study found that Intimacy mediated the relationship between Attachment (Avoidance and Anxiety) and Marital Satisfaction, and Pornography Use added unique variance to Marital Satisfaction above that which was explained by Attachment Avoidance. Findings supported the hypothesis that Pornography Use moderates the relationship between Attachment Avoidance and Marital Satisfaction. Additionally, although Intimacy was found to mediate the relationship for those higher in Anxious Attachment, no statistical evidence was found for Pornography

Use adding unique variance to Marital Satisfaction above that which was explained by Anxious Attachment. These results were surprising because of the importance a relationship holds for those with Attachment Anxiety. This finding does not explain prior research, which asserts that individuals who have more anxious attachment styles may have tendencies to view materials like pornography more because they do not have to experience the risk, threat, or anxiety that can come with romantic or sexual rejection. By using or even substituting pornography and fantasy relationships for real intimacy, anxiously attached individuals may not need to become vulnerable with a real partner (Szymanski & Stewart-Richardson, 2014). However, the results in the current study may explain the value such individuals place on their marriage and marital partner. Research has indicated anxious attachment styles use sex as a means by which to attain love and acceptance and avoid abandonment, while more enjoying the intimate aspects of sex than sex itself (Dandurand & LaFontaine, 2013). And so, it may be probable that participants engaged in pornography when they perceived their spouse to be unavailable, but by no means was pornography preferred to the interaction and intimacy with their spouse.

Popovic (2011) found that for some who experience attachment avoidance, pornography use was consumed in order to obtain intimacy. In the current study, 95% of the participants masturbated when viewing pornography, but findings also demonstrated 86% of participants admitted that they did not think of pornography when engaging in sexual activity with their spouse. Research has previously shown that those higher in attachment avoidance display negative affect upon their partner's attempts to seek greater emotional intimacy and regard such efforts as being needy and dependent. They are less inclined to use touching, kissing, cuddling, and hugging to express affection or seek care

from their partner (Dandurand & LaFontaine, 2013). Such deactivation of emotions, discomfort with intimacy, and emphasis on self-reliance may require these individuals to self-regulate their attachment emotions due to the importance placed on self-reliance and the expression of intimacy without risk. Yet, due to the value and sacredness and physical, emotional and intimate expression of love, sexual activity with their spouse is treated separately. Whereas those higher in Anxious Attachment enjoy the intimate aspects of sex rather than sex itself because they see such opportunities as a means by which to attain love, acceptance, and avoid abandonment, those with higher Attachment Avoidance are discomforted by this emotional and physical expression. Therefore, use of pornography and masturbation may act as a safe form of expression of intimacy needs and a means by which to return to baseline.

Although the primary application of the researcher was to demonstrate whether attachment emotions are regulated by pornography use, it is important to understand the significance of the marital relationship, its value, and the walls insecure attachment constructs in order to obtain a sense of felt security. However, this previously successful safety mechanism constructed in one's childhood has destructive results with regard to the oneness of marriage. That is, stronger marriages lead to stronger families and strengthened societies (Johnson & Zabriskie, 2006). While not everyone possesses the necessary skills to build a strong marriage or to communicate their needs, it is of the betterment of the person, relationship, family, and even society that individuals learn to build trust in one another to satisfy needs as opposed to constructing alternatives to have integral needs met (Cook & Jones, 2002). The pursuit of stable, happy marriages remains a goal for most Americans (Phillips et al., 2009). Understanding what builds stronger

marriages as well as that which tears down strong marriages should be of key importance to marriage educators, counselors, and therapists. Increased awareness and understanding of pornography use that is engaged to regulate attachment emotions is essential to raise awareness and support individuals in living healthy functioning relationships interpersonally and intra-personally so that healthy dependency upon one's spouse has the foundation from which to grow and emerge.

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Appendix A-D

Appendix A

Informed Consent Form

“The Influence of Attachment, Intimacy and Pornography Use in Relationship Satisfaction ” Study
Saudia L. Twine, MA
Liberty University

If you are a US citizen at least 25 years of age and either cohabitating or married and wouldn't mind providing your feedback, you are invited to participate in a doctoral research study. Please read this form and ask any questions that you might have before completing the online surveys.

This study is being conducted by Saudia L. Twine, MA, a doctoral candidate at Liberty University in the Center for Counseling and Family Studies located in Lynchburg, Virginia.

Background Information

You are invited to participate in a research study examining the relationship between attachment styles, intimacy and pornography use on relationship satisfaction. For this study, 200-500 married or cohabitating participants 25 years of age or older are being sought. You were selected as a possible participant because you are an adult U.S. citizen over the age of 25, married (or cohabitating) and currently living with your spouse/significant other. You have also been selected because you admitted to viewing Internet pornography and have done so within the past month. We ask that you read this form and ask any questions you may have before agreeing to be in this study.

Procedures

Please respond to the questionnaires by selecting the answers that are most correct for you. There are no “right or wrong” answers. The questions will relate to your attachment beliefs, intimacy preferences, and pornography use. The surveys may require between 25-35 minutes to complete. Please try to answer every question.

Voluntary Nature of Study

Participation in this study is completely voluntary. Your decision whether or not to participate is of your own volition. Should you elect to participate you have the right to withdraw your participation at any time without penalty, but without compensation.

Benefits and Risks of Being in the Study

While no study is without risks, the risks associated with this research are no more than in everyday life. The assessment was designed to be as non-invasive as possible. As you respond to the surveys, you might become aware of some emotional issues that could

cause discomfort. On the other hand, it is possible that you might grow relationally and emotionally from considering where you stand in regards to your relationship, emotions, relationship behaviors and practices.

Confidentiality

You have a right to privacy, and all information identifying you will remain anonymous and confidential. Your answers on the questionnaires will be coded with numbers, and only the primary researcher and advisors will have access to the names. No identifying information will appear on any material. Research records, both electronic and hard copies, will be locked or encrypted and stored securely and only this researcher and her school superiors will have access to the records. At the end of three years, all data will be destroyed. Publications of this research study will only report on statistical information and no personal information will be cited.

Compensation

For your participation in this study where you complete and submit all survey materials, you will be compensated one (\$1) US dollar. If you fail to complete the surveys or submit your assessments, compensation will not be granted.

Contacts and Questions

If you have questions, please do not hesitate to contact Saudia Twine at stwine@liberty.edu.

Saudia's advisor for this dissertation is Dr. Fred Volk, and may be contacted at 434-592-4049 or fvolk@liberty.edu. Please feel free to ask questions at any time during the course of this study. You may direct correspondence via e-mail: fvolk@liberty.edu or stwine@liberty.edu. Should you have questions at a later time, you are encouraged to contact them in the Center for Counseling and Family Studies Department at 434-592-4049. You can also request a copy of the overall results. If you have any questions or concerns regarding this study and would like to talk to someone other than Saudia, you are encouraged to contact the Institutional Review Board, at 1971 University Blvd, Suite 1837, Lynchburg, VA 24515 or email irb@liberty.edu.

Procedures:

If you agree to be in this study, we would ask you to complete the questionnaires. When they are completed please make certain to submit it. A compensation of one U.S. dollar will be made available to participants who complete the questionnaires in their entirety.

Statement of Consent:

Please click on “agree” if you agree with the following statement: “I have read the above information and I consent to participate in the study *and for my data to be analyzed for the purposes of the study.*”

Thank you for taking your time to participate in this study that has the potential to benefit an important group of individuals.

Saudia L. Twine, MA

Appendix B

BACKGROUND INFORMATION AND RELATIONSHIP HISTORY

1. Gender:

Male Female

2. Please choose your age group:

25-35 36-45 46-55 56-65 66-75
76-over

3. Ethnicity:

Caucasian African-American Hispanic Bi-Racial Other
Bi-Racial Native American Asian/Pacific Islander

4. Highest Education Level:

Grade High Some College Graduate
School School College Graduate School
Other:
Please Specify

5. Where do you live

North South West Coast East Coast Midwest
Other

6. Employment

Unemployed Student Clergy Sales Education
Engineering Medical Laborer Professional Computers
Other

7. Annual Income

Under \$10,000	\$10,000-\$19,999	\$20,000-\$29,999	\$30,000-\$39,999
\$40,000-\$49,999	\$50,000-\$69,999	\$70,000-\$99,999	Over \$100,000

8. Current Marital Status

Single	Engaged	Long Term Relationship	Dating
Cohabitation	Married		

9. How many times have you been married?

Once	Twice	Three Times	More than 3 Times
------	-------	-------------	-------------------

10. How long have you been married to your current spouse?

0-5 years	5-10 years	10-15 years	15-20 years	20 years or More
-----------	------------	-------------	-------------	------------------

11. Did you and your current spouse engage in premarital sex?

Yes	No
-----	----

12. Do you have children?

Yes	No
-----	----

13. Do you have a personal computer with uninterrupted Internet access?

Yes	No
-----	----

14. Age when pornography was first viewed:

Under 10	Between 10-15	Between 16-21	Over 21
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15. How where you first introduced to Internet Pornography:

Family Please Specify_____	Friend	Other: Please Specify_____
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Appendix C

Experiences in Close Relationships Scale (ECR-R)

Instructions: The questionnaire is designed to measure your ‘attachment style’—the way you relate to others in the context of intimate relationships. Please read each of the following statements and rate the extent to which you believe each statement best describes your feelings about **close relationships in general**. Respond to each statement by indicating how much you agree or disagree with it.

Mark your answer using the following rating scale:

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree

1. I'm afraid that I will lose my partner's love.
2. I prefer not to show a partner how I feel deep down.
3. I often worry that my partner will not want to stay with me.
4. I feel comfortable sharing my private thoughts and feelings with my partner.
5. I often worry that my partner doesn't really love me.
6. I find it difficult to allow myself to depend on romantic partners.
7. I worry that romantic partners won't care about me as much as I care about them.
8. I am very comfortable being close to romantic partners.
9. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
10. I don't feel comfortable opening up to romantic partners.
11. I worry a lot about my relationships.

12. I prefer not to be too close to romantic partners.
13. When my partner is out of sight, I worry that he or she might become interested in someone else.
14. I get uncomfortable when a romantic partner wants to be very close.
15. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
16. I find it relatively easy to get close to my partner.
17. I rarely worry about my partner leaving me.
18. It's not difficult for me to get close to my partner.
19. My romantic partner makes me doubt myself.
20. I usually discuss my problems and concerns with my partner.
21. I do not often worry about being abandoned.
22. It helps to turn to my romantic partner in times of need.
23. I find that my partner(s) don't want to get as close as I would like.
24. I tell my partner just about everything.
25. Sometimes romantic partners change their feelings about me for no apparent reason.
26. I talk things over with my partner.
27. My desire to be very close sometimes scares people away.
28. I am nervous when partners get too close to me.
29. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
30. I feel comfortable depending on romantic partners.

31. It makes me mad that I don't get the affection and support I need from my partner.
32. I find it easy to depend on romantic partners.
33. I worry that I won't measure up to other people.
34. It's easy for me to be affectionate with my partner.
35. My partner only seems to notice me when I'm angry.
36. My partner really understands me and my needs.

Appendix D

Cyber-Pornography Use Inventory (CPUI)

Compulsivity

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree

1. Pornography has sometimes interfered with certain aspects of my life.
2. I sometimes use pornography as a reward for accomplishing something (e.g. finish a project, stressful day, etc.).
3. I see no purpose in viewing online pornography.
4. I have made promises to myself to stop using the Internet for pornography.
5. When I am unable to access pornography online, I feel anxious, angry or disappointed.
6. It is easy for me to turn down the chance to view online pornography.
7. I have punished myself when I use the Internet for pornography e.g. time-out from computer, cancel Internet subscription, etc.).
8. Even when I do not want to view pornography online, I find myself drawn to it.
9. I feel unable to stop my use of online pornography.
10. I have no problem controlling my use of online pornography.
11. I believe I am addicted to Internet pornography.

Social

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Always

1. I use sexual humor and innuendo with others while online.
2. I have participated in sexually related chats.
3. I have a sexualized username or nickname that I use on the Internet.
4. I have increased the risks I take online (give out name and phone number, meet people offline, etc.)
5. I have met face to face with someone I met online for romantic purposes.

Isolated

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Always

1. I search for pornography through an Internet search tool.
2. I try to hide what is on my computer or monitor so others cannot see it.
3. I have stayed up after midnight to access pornography online.
4. I masturbate while looking at pornography on the Internet.

Interest (Choose One)

1. I have some pornographic sites bookmarked.
 True False
2. I spend more than 5 hours per week using my computer for pornography.
 True False

Efforts

1. I have rearranged my schedule so that I would be able to view pornography online without being disturbed.
 True False

2. At times, I try to arrange my schedule so that I will be able to be alone in my house/office to view pornography.

True False

3. I have gotten up earlier or gone to bed later than my partner to view pornography.

True False

4. I have refused to go out with friends or attend certain social functions to have the opportunity to view pornography online.

True False

5. I have put off important priorities to view pornography.

True False

Guilt

1	2	3	4	5
Never	Rarely	Sometimes	Frequently	Always

1. I am very uncomfortable when the subject of Internet pornography comes up.

2. The subject of Internet pornography does not make me uncomfortable.

3. After viewing pornography online, I clear my browser's history.

4. I avoid situations in which my pornography usage could be exposed or confronted.

5. I fear that my spouse/partner might someday discover my secret of viewing online pornography.

6. Viewing pornography online does not bother me.

7. I feel no negative emotions after viewing pornography online.

8. I feel ashamed after viewing pornography online.

9. I feel depressed after viewing pornography online.
10. I feel sick after viewing pornography online.
11. I feel good after viewing pornography online.
12. When I am unable to access pornography online I feel relieved that I did not sin.

Appendix E

CPUI Permission

On Oct 12, 2015, at 8:24 AM, Volk, Fred (Ctr for Counseling & Family Studies) wrote:

You have my permission to reproduce the instrument in the Digital Commons and ProQuest.

From: Twine, Saudia (Ctr for Counseling & Family Studies)

To: Volk, Fred (Ctr for Counseling & Family Studies)

Subject: Request to reproduce the CPUI

Hi Dr. Volk,

I am writing because I am in the process of publishing my dissertation through Digital Commons and ProQuest database and was informed that although I had approval to use the CPUI instrument for my dissertation, I would also need direct permission from the author explicitly stating that "you grant me permission to reproduce the instrument in the Digital Commons and ProQuest". Would you please grant me permission using the words in quotation marks, so that I may include the instrument?

Saudia

Saudia L. Twine, Ph.D., LLMFT

Adjunct Instructor/Clinical Consultant

Center for Counseling and Family Studies

313-617-3314

Appendix F

ECR-R Permission

On Oct 11, 2015, at 11:08 PM, R. Chris Fraley wrote:

I grant you permission to reproduce the instrument in the Digital Commons and ProQuest.

;-)

~ Chris

R. Chris Fraley
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--

On Sun, Oct 11, 2015 at 8:21 PM, Twine, Saudia (Ctr for Counseling & Family Studies) wrote:

Hi Dr. Fraley,

I am writing because I am in the process of publishing my dissertation through Digital Commons and ProQuest database and was informed that although I received approval to use the ECR-R instrument for my dissertation (as per according to the frequently asked questions on: <http://internal.psychology.illinois.edu/~rcfraley/measures/ecrr.htm>), I would also need direct permission from the author that explicitly stating that 'you grant me permission to reproduce the instrument in the Digital Commons and ProQuest'. Would you please grant me permission so that I may include the instrument?

Saudia

Saudia L. Twine, Ph.D., LLMFT
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