

MARITAL SATISFACTION AMONG NEWLY MARRIED COUPLES: ASSOCIATIONS  
WITH RELIGIOSITY AND ROMANTIC ATTACHMENT STYLE

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The marriage and family literature has identified a host of factors that contribute to a satisfactory marital union. For example, research on religious congruency has indicated that the more similar partners are in their religious beliefs the higher their reported marital satisfaction. Another construct studied in conjunction with marital satisfaction is adult attachment style. The attachment literature has consistently shown that secure couples tend to report higher marital satisfaction than couples with at least one insecure partner. The purpose of this study was to examine the combined role of religious commitment and attachment in marital satisfaction. Heterosexual couples ( $N = 184$ ; 92 husbands, 92 wives) without children and married 1-5 years were administered a background information questionnaire, the Religious Commitment Inventory-10, the Dyadic Adjustment Scale, and the Experiences in Close Relationships Inventory. Results indicated that couples with congruent religious commitment reported higher marital satisfaction than couples with large discrepancies in religious commitment. Religious commitment did not mediate the relationship between attachment and marital satisfaction, but instead was found to moderate this relationship. Results of this study will benefit clinicians working in the field to help newly married couples negotiate the marital relationship.

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## CHAPTER 1

### INTRODUCTION

According to recent statistics on marital trends conducted by the U.S. Census Bureau (1996), over 94% of men and women over the age of 60 have married at least once in their life. It is projected that this trend will continue, with 80 to 90% of the U.S. population marrying at some time in their life. Statistics have also indicated that of those marriages that end in divorce over half will remarry (Kreider & Fields, 2001). With a great majority of the population choosing to marry and remarry, it is evident that marriage continues to be a desirable lifestyle for most people. Despite this strong desire for a satisfactory marital union, the divorce rate continues to remain high with approximately one third of first marriages ending in divorce in the first ten years (Bramlett, & Mosher, 2002).

Marital satisfaction research has resulted in the identification of a multitude of factors that contribute to a satisfactory marital union. These factors include feelings of love, trust, respect and fidelity (Kaslow & Robinson, 1996; Rosen-Grandon, 1998), social support, commitment, equity of tasks, gender roles, and sexual interaction (Bradbury, Thomas, Fincham, Frank, Beach, & Steven, 2000; Kaslow & Robinson, 1996; Rosen-Grandon, 1998; Veroff, Douvan, Orbuch, & Actelli, 1998). Numerous studies have also been conducted to investigate marital satisfaction in relation to communication and interpersonal processes (Bradbury et al., 2000; Greeff, 2000). Another line of research examines partner similarities, or congruence, such as shared interests in leisure, shared interests in children (Kaslow & Robinson, 1996), similar cognitive processes, religious beliefs and philosophy of life (Bradbury et al., 2000; Chinitz, 2001; Greeff, 2000; Greenberg 1996; Kaslow & Robinson, 1996; Kohn 2001; Rosen-Grandon, 1998).



Because marriage has traditionally been associated with religious ceremony and affirmation, it's not surprising that researchers would be interested in the relation of marital satisfaction to religion and religiosity. Religion has been defined as the feelings, thoughts, experiences and behaviors that arise from a search for the sacred (Hill et al., 1998), while the term religiosity, refers to the extent to which an individual feels that religious beliefs influence his or her life (Pittman, Price-Bonham, & McKenry, 1983). Religiosity consists of numerous interrelated but distinct components, such as denominational affiliation (Call & Heaton, 1997; Heaton & Pratt, 1990; Snow & Compton, 1996), homogamy or congruence of religious faith between partners (Chinitz, 2001; Heaton & Pratt, 1990; Kohn, 2001), church attendance (Call & Heaton, 1997; Sussman & Alexander, 1999; Vaughan, 2001), prayer (Butler, Stout & Gardner, 2002; Ing, 1998; Tloczynski & Fritzsich, 2002), importance of religion (Snow & Compton, 1996; Sussman & Alexander, 1999), religious commitment (Mockabee, Monson, & Grant, 2001; Vaughan, 2001; Worthington et al., 2003), and religious style or orientation (Johnson, 1997; Seegobin, 1996; Sullivan, 2001).

Religion can be viewed as a general cognitive schema, which guides how individuals perceive the world around them, as well as their reactions and behaviors in daily life. Religion, as a schema, allows individuals to interpret environmental stimuli, fill in the missing elements or gaps, and employ heuristics that simplify and shorten the process of problem solving (Taylor & Crocker, 1981). Religion has also been studied in association with coping and meaning making, as individuals tend to turn to religion during times of crises or tragedy. This search for meaning in misfortune is often associated with effective adjustment (Tompson, 1991).

Generally, findings have indicated the greater the religious congruence, the greater marital satisfaction and the fewer family and religious stressors (Chinitz, 2001; Kohn 2001). For

in interfaith couples, the more congruent couples are in religious beliefs, the greater their marital satisfaction and religious commitment (Chintiz, 2001). Similarly, homogeneous couples, congruent in faith and cultural heritage, reported more family support, less severe problems with religion, and fewer discrepancies in acculturation levels than interracial couples (Kohn, 2001).

In addition, since the late 1980's, a number of studies have examined attachment processes in the context of marriage. Attachment theory is a way of conceptualizing the propensity of human beings to make strong affectional bonds with particular others (Bowlby, 1978). According to Bowlby (1982), attachment behavior is any form of behavior that results in a person attaining or maintaining proximity to some clearly identified individual, who is conceived as better able to cope with the world. Such attachment behaviors may include crying, following, clinging, and strong protest when left with a stranger. The knowledge that an attachment figure is available and responsive provides a strong and pervasive feeling of security, or secure attachment. Ainsworth, another leading figure in the field, investigated children's attachment behaviors during the first year of life and identified three primary attachment strategies (Ainsworth, Blehar, Waters, & Wall, 1978). Later research identified a fourth attachment category and extended the application of attachment constructs to adolescence and adulthood. Hazan and Shaver (1994) proposed that attachment theory was a useful theory for conceptualizing romantic relationships, as adult partners serve similar attachment functions and satisfy the same needs as primary caregivers do in infancy.

Marital satisfaction has been studied in conjunction with religiosity and attachment separately, but there is only one study to date that explores the interrelations among all three variables. The purpose of the proposed study is to further examine the role of religious commitment and attachment in marital satisfaction. A better understanding of the role of

religious commitment and attachment in the lives of individuals and couples may help identify problematic aspects underlying marital dissatisfaction and poor romantic relationships.

## CHAPTER 2

### LITERATURE REVIEW

The following chapter will first provide a general overview of the marital satisfaction literature including factors related to couple satisfaction. The religiosity literature will then be discussed with an explanation of religious commitment. In addition, attachment theory with a concentrated focus on adult attachment will be reviewed. Finally, the interrelationships among marital satisfaction, religiosity and attachment will be discussed, followed in Chapter 3 by a research proposal.

#### Marital Satisfaction

Social scientists have studied the marital relationship by investigating two primary constructs: marital stability and marital quality. Marital stability refers to the duration of marriage, whether dissolved by death, divorce, separation, desertion or annulment (Lewis & Spanier, 1979). Marital quality is not as easily defined and researchers have interchangeably used the terms marital adjustment, marital satisfaction and marital happiness to refer to marital quality. In reviewing the research on marital stability and marital quality, Lewis and Spanier chose to include an entire range of terms such as marital satisfaction, marital happiness, and marital adjustment in the overall definition of marital quality. The common characteristic in each of these terms is the qualitative or subjective dimension of marital quality. Lewis and Spanier (1979) defined marital quality as "a subjective evaluation of a married couple's relationship" (p. 269). Similarly, marital satisfaction was defined by Hendrick and Hendrick (1997) as "a subjective experiencing of one's own personal happiness and contentment in the marital relationship" (p. 57).

### *Factors Related to Marital Satisfaction*

Research has identified numerous factors relating to marital satisfaction. Bradbury, Thomas, Fincham, Beach and Steven (2000) reviewed the literature on marital satisfaction conducted in the 1990's, organizing the various studies into two main themes: interpersonal processes and microcontexts/macrocontexts. Interpersonal processes include such factors as cognition, affect, physiology, behavioral patterning, violence and social support. While, microcontexts are circumstances that are likely to have direct links to interpersonal functioning in marriage, macrocontexts are broader social contexts that have more indirect or subtle effects on interpersonal functioning.

With respect to interpersonal process, research on cognitions related to marital satisfaction has focused on the attributions of marital partners. Studies have indicated that maladaptive attributions are related to elevated rates of negative behaviors between partners during problem solving (Bradbury, Beach, Fincham, & Nelson, 1996). There are mixed findings regarding negative affect, with some studies showing that it is detrimental to the marital relationship, whereas others found negative affect to be unrelated to the marital relationship (Fincham & Beach, 1999). In addition, research on physiology, such as blood pressure, heart rate, skin conductance and hormone changes has supported the link between marital functioning and physical well being (Brown, Smith, & Benjamin, 1998; Kiecolt-Glasser, Newton, Cacioppo, MacCallum, Glaser, & Malarkey, 1996; Stampler, Wall, Cassisi, & Davis, 1997).

The research on behavioral patterning in couples has investigated the demand/withdrawal pattern of interaction between partners (Christensen, 1987; Klinetob & Smith, 1996). This pattern typically consists of one partner criticizing or nagging the other partner, who reacts by avoiding discussion and disengaging from confrontation. Increased demands by the pursuing

partner result in increased avoidance by the other partner, which ultimately ends in conflict and decreased marital satisfaction (Christensen, 1987; Klinetob & Smith, 1996). Similarly, studies on physical aggression in marriage have found that the interactional patterns of distressed couples are characterized by negative reciprocation, anger and contempt (Cordova, Jacobson, Gottman, & Rushe, 1993; Holtzworth-Munroe, Smutzler, & Stuart, 1998). In contrast, Pasch and Bradbury (1998) found that satisfied spouses are more likely to behave in ways that facilitate mutual understanding and less likely to disrespect or blame their partners. Other studies have indicated that satisfied spouses express significantly lower levels of anger and contempt as compared to their unsatisfied counterparts (Pasch & Bradbury, 1998). Furthermore, social support networks and supportive behaviors between spouses have been associated with improvements in marital quality (Carels & Baucom, 1999; Pasch & Bradbury, 1998; Saitzyk, Floyd, & Kroll, 1997).

The second theme Bradbury et al. (2000) identified in the marital satisfaction research, microcontexts/macrocontexts, was related to the broader social context of couple's lives. One of the most significant factors affecting the marital relationship is the transition to parenthood. Children clearly affect the marital relationship, with most studies indicating that the presence of children tends to increase marital stability while decreasing marital satisfaction (e.g., Belsky, 1990; Waite & Lillard, 1991). In contrast, research on major life and transition stressors has indicated that difficult times often bring couples together, increasing marital satisfaction (Gritz, Wellisch, Siau, & Wang, 1990; Hoekstra-Weebers, Jaspers, Kamps, & Klip, 1998; Moore & Moore, 1996, Pavalko & Elder, 1990), with the exception of economic difficulties which tend to lead to poorer marital satisfaction (Conger, Rueter, & Elder, 1999). Research has also found separation and divorce to be more prevalent among bereaved parents (Najam et al., 1993). Other macrocontextual risk factors for marital dissolution include high geographic mobility, high levels

of unmarried women in the labor force and high numbers of potential mates (South & Loyd, 1995).

Based on Bradbury et al.'s (2000) review of the marital satisfaction literature, it is evident that there are a wide variety of factors related to marital satisfaction. Some components of a long-term satisfying marital relationship that have been identified are feelings of love, trust, respect, fidelity and commitment (e.g., Kaslow & Robinson, 1996; Rosen-Grandon, 1998). Other components are more tangible, such as social support, equity of tasks, gender roles and sexual interaction (Bradbury et al., 2000; Kaslow & Robinson, 1996; Rosen-Grandon, 1998; Veroff et al., 1998). Communication and interpersonal processes have also been found to be significant contributors to marital satisfaction (Bradbury et al., 2000; Greeff, 2000). Kaslow and Robinson (1996) found shared interests in leisure and children to be an important factor in marital satisfaction. Still other elements of long-term satisfying marital relationships include similar religious beliefs, philosophy of life and cognitive processes (Bradbury et al., 2000; Greeff, 2000; Kaslow & Robinson, 1996; Rosen-Grandon, 1998).

Kaslow and Robinson (1996) interviewed couples who were married over 25 years to find the central elements of a long-term satisfying marriage. Results indicated the top ten factors, in order from greatest to least, to be love, mutual trust, mutual respect, mutual support, corresponding religious beliefs, loyalty/fidelity, mutual give and take, similar philosophy of life, enjoyment of shared fun/humor, and shared interests.

Similarly, Mackey and O'Brien (1995) interviewed 120 couples that had been married for at least twenty years and found five vital components to marital satisfaction: level of conflict, decision making, communication, relational values and intimacy. Higher levels of interpersonal conflict had a significant negative effect on marital satisfaction, with the highest level of conflict

occurring during the child rearing years. The more difficult and unresolved the conflict, the lower the marital satisfaction. Mutuality in decision making, especially regarding children and parenting, was positively correlated with marital satisfaction. Couples reporting high marital satisfaction also indicated positive communication and felt they were able to talk to their partner about a wide variety of issues. Consistent with other research (Kaslow & Robinson, 1996; Rosen-Granson, 1998), relational values found to be related to marital satisfaction included trust, respect, empathic understanding and equity. Finally, according to Mackey and O'Brien, both physical and psychological intimacy, were found to continue throughout the marriage in satisfying relationships, with an increase in psychological intimacy as the marriage progressed.

#### *Gender and Marital Satisfaction*

Another important variable related to marital satisfaction is gender. Gender differences have been reported in the marital satisfaction literature, but the findings are mixed. Some studies have indicated that husbands tend to be more satisfied in their marriages than wives (Acitelli & Antonucci, 1994; Markman & Hahlweg, 1993; Rogers & Amato, 2000; Vemer, Coleman, Ganong, & Cooper, 1989), while other studies have suggested that wives are more satisfied (Karney & Bradbury, 1995; Sternberg & Hojjat, 1997). Many studies report gender differences in other factors that are related to marital satisfaction. For example, Rhoades (1994) found that the strongest predictors of marital satisfaction for men were their relationships to their children, followed by approval of parents and friends regarding the marriage, couple communication, and lastly emotional health. Conversely, the strongest predictors of marital satisfaction for women were couple communication, followed by approval of parents and friends, emotional health, impulsivity, and lastly the parent-child relationship. Koehne (2000) found intimacy, defined as



voluntary closeness to one's spouse while maintaining distinct boundaries to the self, was the most significant predictor of marital satisfaction for men. On the other hand, commitment, defined as the bond with a spouse characterized by marital stability with little need to monitor and test alternatives, was found to be the most significant predictor of marital satisfaction for women.

With the increase of dual-earner families, couples have been forced to reevaluate their gender and marital roles. Recent research examining the link between gender roles and marital satisfaction has produced inconsistent results. Some research has indicated that individuals who hold more egalitarian perceptions of gender roles are more satisfied in their marital relationship than those holding more traditional roles (Craddock, 1991). Other research (Veroff et al., 1998) found that as men changed or accommodated their wives' more egalitarian ideals, marital satisfaction decreased for both men and women. Results of the latter study also indicated that having a spouse with higher anxiety and agreeableness increased marital satisfaction for men but not for women. Relatedly, several other studies (Lye & Biblarz 1993; Zvonkovic, Schmiede & Hall, 1994) found that couples who prefer traditional gender roles report higher levels of marital satisfaction than couples who possess more egalitarian gender roles and couples who are in agreement on gender roles have higher levels of marital satisfaction than those who disagree. Finally, as might be expected, Thompson and Walker (1989) found that husbands were more satisfied with their marriage if their wives did more than their fair share of housework and childcare, while Barnett and Baruch (1987) found that wives were more satisfied with their marriages if their husbands did their fair share of household work.

As a whole, the research on marital satisfaction and gender roles seems to indicate that marital satisfaction is related to the couple's view of gender roles and gender expectations. It

would appear that partners who have different ideas regarding gender roles and role expectations, in turn have differing levels of marital satisfaction depending on their spouse's fulfillment of those expectations.

### Religiosity

Religion plays an important role in the lives of Americans, with recent surveys reporting that 92% describe themselves as religious (Gallup Jr., 2004). Because religion is often a powerful force in peoples lives, philosophers and psychologists have studied its impact on human development and functioning. Within the psychological community, religion has been recognized as a form of diversity, which psychologists are ethically bound to understand and consider in clinical treatment (American Psychological Association, 2002). Consequently, it is of critical importance to investigate psychological processes associated with religion.

Difficulties in the study of religion and religiosity include defining these constructs, as well as discriminating between the several components of religiosity. According to Mickley, Carson, and Soeken (1995), religion the more broad and encompassing term, is comprised of beliefs, attitudes, and patterns of behavior in relation to the supernatural, and usually includes a community of believers. Similarly, Hill et al. (1998) defined religion as "the feelings, thoughts, experiences and behaviors that arise from a search for the sacred" (p. 21). In discussing the religious process, Shafranske (1996) stated that:

With each form of belief and communal practice, moods are elicited that motivate the individual to action. These moods are prompted and encoded through institutional and private religious involvement through out the life of the person. Beliefs, practices, and affiliation conjoin to establish moods that propel the individual into behavior. Religious beliefs, unlike scientific and commonsense understanding, allow the inexplicable to be comprehended and the challenges and tragic discontinuities of life to be accepted through faith. (p.2).

Hoge (1996), distinguishes five entities of religion: religious preference, church

affiliation, church involvement, religious belief, and personal religious behavior. Religious preference refers to the sense of belonging to a particular religious group. Church affiliation includes the actual membership in a particular church or synagogue, while church involvement is primarily concerned with church attendance, but also includes participation in service groups or committees, financial contributions, and socialization with other members. Religious belief includes belief in God as well as personal religious behavior such as prayer, devotional readings, the study of religious books, meditation, and other behaviors such as keeping religious dietary rules.

Overall, religion and its various components has been associated with better psychological functioning across the life-span (Koenig, George, & Patricia, 2004; Plante, Yancey, Sherman, & Guertin; 2000; Laurencelle, Abell, Schwartz; 2002). Plante et al. investigated the general use of religion in approximately 100 undergraduate students. They found that religiousness was associated with positive coping, optimism, experiencing meaning in life, viewing life as a positive challenge, and low anxiety. Similarly, Laurencelle et al. found that religiousness was associated with improved psychological functioning in a sample of approximately 200 adults, with a mean age of 29.4 years. Specifically, high faith participants had significantly lower anxiety and depression, were less likely to exhibit signs of character pathology, and had significantly higher ego strength than low faith participants. In another investigation with an elderly sample, Koenig et al. found religiousness to be associated with greater social support, fewer depressive symptoms, better cognitive functioning, and greater cooperativeness.

Other research has investigated religiosity, a term more frequently seen in the psychological literature, which refers to "the extent to which an individual feels that religious

beliefs influence his or her life" (Pittman et al., 1983, p.522). Research examining religiosity varies in focus from general conceptualizations to the more specific (Shehan, Wilbur, & Lee, 1990). For example, research has indicated that religiosity is positively correlated with general factors, such as physical well being (Chamberlain & Hall, 2000; Plante & Sharma, 2001), psychological well being (Graham et al., 2001; Hammermeister et al., 2001) and overall life satisfaction (Ayele et al., 1999; Bergan & McConatha, 2000; Peacock & Poloma, 1999). Other research in religiosity has focused on specific components of religiosity. These components include such aspects as denominational affiliation, church attendance, prayer, religious orientation, and religious commitment. Bergan and McContha (2000) reported external components of religiosity, such as denominational affiliation, are significant predictors of general life satisfaction while internal components, such as prayer, were not related to life satisfaction.

Denominational affiliation has been defined as the degree to which an individual feels connected or affiliated with a specific denomination or sect of religion. Bergan and McContha (2000) found that individuals' denominational affiliation is positively associated with life satisfaction. Studies have also indicated that those who hold a stronger denominational affiliation are more likely to abstain from alcohol, have a lower risk of binge drinking (Astley, Bailey, Talbot & Clarren, 2000; Luczak, Shea, Carr, Li, & Wall, 2002; Patock-Peckham, Hutchinson, Cheong & Nagoshi, 1998), and lower rates of unprotected sex (Fierros-Gonzales & Brown, 2002). Denominational affiliation has been found to influence moral judgment and ethical decision-making with an increase in pro-life/anti-abortion beliefs (Gay & Lynxwiler, 1999; Wimalasiri, 2001).

Similarly, church attendance has been associated with many of the same variables. For

example, church attendance is related to decreased alcohol and cocaine use (Richard, Bell & Carlson, 2000), as well as decreased exposure to physical violence (Barkin, Kreither & DuRant, 2001). Higher church attendance of both husbands and wives also appears to reduce the likelihood of a marriage's dissolution (Call & Heaton, 1997). Church attendance has also been associated with higher educational goals (Koivusilta, Rimpelae & Rimpelae, 1999) and increased psychological well-being (Francis & Kaldor, 2002).

Prayer, another component of religiosity, has been linked to many aspects of well-being. Spini, Pin and d'Epina (2001) found that increased frequency of prayer was positively related to increased survival among the elderly, while Leibovici (2001) found that prayer was associated with shorter hospitalization. Prayer has also been linked to increased optimism and psychological well-being (Ai, Peterson, Bolling & Koenig, 2002; Francis & Kaldor, 2002). Butler, Stout and Gardner (2002) found that couples who used prayer during marital conflict decreased negativity, contempt, and hostility while increasing emotional intimacy with their partner.

Religious orientation discriminates the manner in which individuals use religion. Intrinsic religious orientation, defined as the use of religion as way of life, has been correlated with negative attitudes toward homosexuality (Griffiths, Dixon, Stanley & Weiland, 2001) and increased probability of collaborative coping (Strizenec, 2000). Depression scores were found to be positively correlated with the extrinsic religious orientation, the use of religion for one's own needs, and negatively correlated to the intrinsic religious orientation (Park, Murgatrody, Raynock & Spillett, 1998). Worthington et al. has also (2003) explored religious orientation and defines an intrinsic orientation as more intrapersonal or largely cognitive, while the extrinsic orientation is more interpersonal in nature and largely behavioral.

Another common construct found in the literature is religious commitment, which refers

to "the level of devotion to one's religious beliefs" (Hoefel, 2001, p.13) or "the degree to which a person adheres to his or her religious values, beliefs, and practices and uses them in daily living" (Worthington, 2003, p.85). Surveys of Americans have indicated that religion plays an important role in their life with 61% of respondents indicating religion to be very important, and 24% indicating religion to be fairly important (Newport, 2004). Religious commitment has been studied in association with a variety of variables. Campbell (2002) found religious commitment to be associated with Republican Party identification, while Jeynes (2003) found religious commitment to be positively associated with academic achievement. Religious commitment has also been associated with moral judgment and more conservative views regarding sexual orientation (Mohr & Sedlacek, 2000; Wimalasiri, 2001).

In addition, Holder et al. (2000) found that religious commitment was associated with decreased sexual activity in adolescence. Adolescent participants were asked to complete surveys on voluntary sexual activity as well as various dimensions of spirituality or religiosity (e.g., church attendance, religious orientation, belief in God, divine support, quest spirituality, spiritual interconnectedness or supportive interpersonal relationships within a body of faith, and importance of religion or religious commitment). Results indicated that only two religious variables were associated with voluntary sexual activity: importance of religion or religious commitment and spiritual interconnectedness or supportive interpersonal relationships within a body of faith. Religious commitment was found to be negatively associated with voluntary sexual activity, such that respondents who were not sexually active had higher religious commitment scores than sexually active individuals. It appears that religious commitment is a powerful influence in individual's lives.

Finally another important variable studied in association with religion is gender. Studies

of religious beliefs and gender have consistently shown that women tend to be more religious and participate in more religious behaviors than men (Heaton & Pratt, 1990; Koenig, Kvale, & Ferrel, 1988; Miller & Hoffman, 1995). In addition, research by Edgell, Becker and Hofmeister (2001) investigated the differences between men's and women's use of religion and found support for men's increased use of religion during high stress phases of life. They found that while men's use of religion is directly related to their role as a provider and father, women's use of religion is directly related to their personal value and belief system.

### Attachment Theory

Attachment theory has its roots in several theories of human behavior. John Bowlby, the founder of attachment theory, was trained in the psychoanalytic tradition. After studying juvenile delinquency in boys (Bowlby, 1944), he was invited to work for the World Health Organization in 1950 to investigate and report on the mental health of London's homeless children. Bowlby's findings of strong associations between early maternal separation and maladaptive social behavior spurred his early formulation of attachment theory, in which he proposed that maternal deprivation, especially during the first three years of life, puts children at risk for physical and mental illness. Later work with institutionalized children, whom Bowlby observed to suffer extreme distress and even death despite being fed and cared for by staff, confirmed some of his initial hypotheses regarding separation and loss.

Bowlby was influenced by evolutionary theory and his contemporaries in the field of ethology. For example, Harlow (1959) found that rhesus monkeys preferred artificial mothers with a soft terry cloth wrap rather than the bare wire mother, even when the latter was the only source of food. Bowlby also followed the work of Lorenz (1965), who formulated the concept of imprinting to refer to the tendency for the newly hatched goslings to instinctually follow the first

moving object seen. Bowlby (1969) applied these findings to his view of human behavior in infants and proposed that the human species, similar to other members of the animal kingdom, is also equipped with instinctual behavioral systems such as attachment to ensure species survival.

In addition to ethology, consistent with his training, attachment theory also integrates other ideas from psychodynamic or object-relations theory. These theories purport that the individual's personality is shaped by their environment and the context of the early caregiver-infant dyad, which profoundly affect how the child organizes their world. According to Bowlby (1982), "attachment behavior is any form of behavior that results in a person attaining or maintaining proximity to some clearly identified individual, who is conceived as better able to cope with the world" (p. 668). For example, attachment behaviors may include crying, following, clinging, and strong protest when left with a stranger. Bowlby (1969) believed that children develop "internal working models" or "cognitive maps," which consist of mental representations of the attachment figure, the self, and the environment. Expectations of the attachment figure's accessibility and responsiveness are incorporated into the child's representational model of the parental figure. If working models are adaptive, they can help individuals to make appropriate life decisions and facilitate security; if they are maladaptive, they can hinder adequate coping and optimal development (Bowlby, 1969).

According to Hazan and Zeifman (1999), the attachment relationship includes four interrelated characteristics: proximity seeking to a figure, use of the attachment figure as a 'safe haven', the 'secure base' effect, and separation protest. Proximity seeking occurs when a child feels anxious or frightened and responds by seeking the attention and support of the primary caregiver, who provides comfort and a haven to which the child can retreat. Maintaining visual sight of the caregiver or being physically held and soothed reduces the anxiety in the child and



engenders positive feelings and love. When the goal of proximity is achieved, the child experiences a sense of safety and security, or 'safe haven.' The caregiver acts as a 'secure base' from which the child can interact with and explore his or her environment with confidence, because the child knows that the caregiver will be available if needed. If during exploration the child is confronted with any anxiety or distress the child will again retreat to the primary caregiver or 'secure base' (Hazan & Zeifman, 1999). Finally, separation protest occurs when an infant behaviorally objects to separation from the attachment figure. As trust is built and the attachment figure becomes stabilized, the child progressively develops the ability to endure longer periods of separation from the attachment figure without significant distress.

Mary Ainsworth, another pioneer in attachment research, investigated the experiences of children, during the first year of life. One of her most recognized contributions is the development of an experimental procedure called the Strange Situation (Ainsworth et al., 1978). The Strange Situation is a laboratory procedure designed to evoke the attachment behaviors of infants by exposing them to increasingly stressful separations from their mother. Observations of the infant's reactions to their mother's return resulted in the identification of three different attachment groups. Infants who actively sought proximity and were easily soothed were classified as secure. Infants who avoided proximity and contact with their mothers by turning away or averting their gaze were classified as avoidant. A third group of infants who responded with intense distress to separation and showed angry resistant behavior combined with a strong desire to maintain contact and proximity to their mother upon return, were classified as anxious-ambivalent. Ainsworth and her colleagues found that one could predict general aspects of the infant's relationship with his or her mother at home based on behavioral responses in the Strange Situation.

In 1986, Main and Solomon identified a fourth attachment classification, which included infants who were difficult to categorize into Ainsworth's three categories. Main and Solomon described the unidentified fearful, odd, disorganized, or overtly conflicted behaviors exhibited by some infants during the strange situation as "disorganized/disoriented." Disorganized attachment is associated with family risk conditions, such as child maltreatment, maternal alcohol consumption, maternal depression, and adolescent parenthood (Lyons-Ruth, Zeanah, & Benoit, 1996), and is linked to higher rates of dysfunction and psychopathology (Carlson & Stroufe, 1995).

### *Continuity of Attachment*

Research has demonstrated stability in infant attachment from over six months (Waters, 1978) through six years and late adolescence especially in middle class low-risk families (Main, Kaplan, & Casidy, 1985; Waters, Merrick, Treboux, Crowell, & Albersheim, 2000). However, Waters, Merrick, Treboux, Crowell and Albersheim (2000) reported that a history of negative life events (e.g., loss of parent, divorce, life-threatening illness, psychiatric disorder, physical or sexual abuse by a family member) was associated with a change in attachment classification over the course of 20 years.

According to Ainsworth (1978), the attachment system becomes elaborated over the course of development, while the purpose of attachment behavior remains the same. Attachment behaviors characteristic of the early phases of development do not necessarily continue in the same form throughout childhood and adulthood. Bowlby (1980) asserted that internal working models of attachment are not static constructions, but are dynamic and capable of being restructured. Attachment orientations can, and often do change in adulthood, especially during

major life transitions when individuals encounter new information that is incongruent with, and must be assimilated into, their internal working models (Bowlby, 1980). Egeland, Jacobvitz, and Stroufe (1988) found that secure individuals with insecure attachment histories reported that they had (a) emotionally reconciled their negative childhood attachments with their parents (b) obtained early professional help, (c) were presently involved in satisfying and stable marriages, and (d) had strong affectional ties to their spouses' families.

### *Adult Attachment*

Although attachment has been studied most often with children, attachment is a lifetime construct that applies to adolescents and adults as well. Ainsworth (1989) discussed various types of attachment, which occur over the life span, including parent-child, peer and romantic. Ainsworth defined the bond between partners as an affectional bond. This affectional bond is "a relatively enduring tie, in which the partner is important as a unique individual, and is not interchangeable with any other." An affectional bond has several components: there exists the desire to maintain proximity to one's partner, distress upon inexplicable separation, pleasure or joy upon reunion, and grief at loss. Ainsworth purports that attachment is one type of affectional bond or subset of an affectional bond and thus an attachment figure is never entirely interchangeable with or replaceable by another, even though additional attachments may exist for that individual. There is one criterion, however, which is found in attachment but not necessarily found in other affectional bonds. This is the desire for closeness which if found results in the feeling of security and comfort with one's partner. Bowlby (1978) asserted that there is a strong causal relationship between an individual's experiences with his or her parents and their later capacity to make affectional bonds with significant others. In many cases of childhood pathology

not only is there evidence of dysfunctional family relationships but also emotional problems of parents, which were developed in their own maladaptive childhood.

Main, Kaplan, and Cassidy (1985) developed the Adult Attachment Interview (AAI) to expand developmental lines of attachment research to adulthood. The AAI was designed to assess respondents' current representation of their childhood relationship with their parents, and classifies adult attachment into four attachment types: secure-autonomous, preoccupied, dismissing-avoidant, and disorganized-disoriented. The AAI seeks to tap into individuals internal working models to predict the strange situation behavior of respondent's children.

In a different line of research, Hazan and Shaver (1987; 1994) proposed that attachment theory is useful for conceptualizing romantic relationships. In infancy, attachment is unidirectional with the infant seeking security and protection from the caregiver. In contrast, adult attachment relationships are bi-directional and typically reciprocal, with each partner providing protection and security at varying times. Adult attachment also differs from infant attachment, in that the proximity seeking of adults includes not only the search for security and protection, but may also include a desire to comfort a partner or the desire to engage in sexual activity. According to Hazan and Shaver (1994), adult peers can satisfy the attachment needs for emotional support and security in adulthood. These needs, for which parents are primarily responsible during infancy and childhood, can thus be transferred from parents to peers in adolescence and adulthood. Hazan and Shaver (1987) developed a 1-item self-report measure that identified three adult attachment classifications analogous to Ainsworth's infant classifications: secure, avoidant, and anxious-ambivalent.

Bartholomew (1990) expanded Hazan and Shaver's three-category model of adult attachment to allow for a clearer explanation of the two types of avoidant attachment styles:

secure, preoccupied, dismissing and fearful. Bartholomew's attachment model proposes that various combinations of two types of internal working models, model of self and model of others, characterize each of the four attachment styles. Bartholomew and Horowitz (1991) described the secure attachment style as one indicating a sense of self-worth and expectations that others love and accept them and will be responsive to them. The preoccupied attachment style indicates a sense of unworthiness combined with a positive sense of others. The dismissing avoidant type can be described as having a sense of self-worth, while also having a negative disposition towards other people. The fearful avoidant style indicates a sense of unworthiness combined with negative expectations of others.

### *Attachment and Gender*

Research conducted by Hazan and Shaver (1987) found no significant differences in gender with regards to the three original attachment styles: secure, avoidant, and anxious/ambivalent. Brennan, Clark, and Shaver (1998), however, found gender differences, reporting that significantly more men are dismissing in romantic attachment orientation than women. Similarly, using the AAI, Riggs and Jacobvitz (2002) found that men were more likely to be classified as dismissing and women were more likely classified as secure. Other research has indicated that there are no gender differences in the distribution of attachment groups with men and women equally likely to be securely or insecurely attached (Ammaniti, van IJzendoorn, Speranza, & Tambelli, 2000; Schmitt et al., 2003; Shi, 2003).

## Interrelationships among Marital Satisfaction, Religiosity and Attachment

### *Marital Satisfaction and Religiosity*

Historically, the role of religion has generally been accepted as an important component of the marital union. Research on the role of religion and marital satisfaction has shown an overall positive correlation between religiosity and marital satisfaction. Indeed, as previously mentioned, Kaslow and Robinson (1996), found religious beliefs to be the fifth most important component for marital satisfaction. However, more recent research is inconsistent, with some studies indicating that religiosity has a positive correlation with marital satisfaction (Craddock, 1991; Flynn, 1987; Heaton & Pratt, 1990; Snow & Compton, 1996; Sullivan, 2001), while other studies showed no relationship or even a negative relationship (Astacio, 1999; Burchinal, 1957; Koehne, 2000; Vaughan, 2001). These inconsistencies in the research may be due to varied definitions and measurement differences, but may also indicate that religiosity can either improve or decrease marital satisfaction depending on other contextual factors.

Research on religiosity and marital satisfaction has examined components of religiosity such as church attendance, religious commitment, church affiliation/membership, philosophy of life, and coping styles (Astacio, 1999; Burchinal, 1957; Koehne, 2000; Zehrung, 1998). Koehne (2000) found church attendance was not significantly correlated with marital satisfaction for either gender. Similarly, Burchinal (1957) found that church affiliation/membership was not associated with marital satisfaction. Results from these studies may be misleading, however, because both studies used very simplistic 2-item instruments. It is possible that a more comprehensive survey of religiosity might reveal a significant relationship between religiosity and marital satisfaction.

Research supports the idea that cognition and attributions influence marital satisfaction (Bradbury et al., 2000). Religion may play a role in marital satisfaction because it provides a cognitive schema or philosophy of life for individuals as they negotiate their way through life. Rokeach (1973) suggested that people use religious values to evaluate their world and guide their behavior. Sullivan (2001) explored three models describing the link between religiosity and marital satisfaction: the direct model, indirect model and compensatory model. In the direct model, religiosity directly affects the couple's marital satisfaction. The indirect model posits that religiosity indirectly affects marital satisfaction by affecting other dimensions of marital quality, which over time may affect marital satisfaction. Such variables include attitudes toward divorce, commitment to the marriage, willingness to seek help in times of marital distress, etc. The compensatory model posits that risk factors to marital satisfaction, such as age at marriage and neuroticism, are moderated by religiosity. Hence, religiosity may compensate for couples' vulnerabilities and help them remain relatively satisfied despite these vulnerabilities (e.g., high religious couples with one neurotic spouse having higher marital satisfaction than low religious couples with one neurotic spouse). Although Sullivan's analyses disconfirmed all three models, results did indicate that religiosity is related to couples' attitudes in the first four years of marriage. Specifically, couples who are more religious are more likely to have more conservative attitudes toward divorce, higher levels of marital commitment, and are more likely to seek help in times of marital trouble.

Astacio (1999) investigated religious coping styles and marital satisfaction. He found that for husband's, but not wives, church attendance correlated negatively with marital satisfaction, indicating that men with higher church attendance had lower marital satisfaction. Based on research by Edgell Becker and Hofmeister (2001) showing that men may more often seek out

religion at times when life is particularly stressful, Astacio speculated that increased stress may be the driving force behind church attendance, and could either be caused by or lead to dissatisfaction in their marriages.

Consistent with Astacio's findings, Vaughan (2001) found that religious commitment and church attendance were negatively correlated with marital satisfaction among couples drawn from a local Christian university. These findings suggest that high levels of religiosity may negatively impact the marital relationship. Alternatively, the results may be due to the researcher's decision to combine and average the individual scales of both spouses to represent the couple in all statistical analysis. Consequently, couples who might have varied on religious commitment or church attendance were averaged together, and discrepancies between partners were not analyzed. Another contributing factor may be the sample itself, which may have had higher levels of religious commitment and church attendance expectations than the general population. According to the authors, since marriage is a topic often discussed in religious settings, with a great deal of emphasis on maintaining the marital union, it is possible that this population may have lower, more realistic marital satisfaction scores than couples who hold an idealized conceptualization of marriage. These high expectations of religious commitment and church attendance combined with a more realistic view of marriage may have led to the negative correlation found in this study.

In contrast, other studies have found a positive relationship between religiosity and marital satisfaction (Craddock, 1991; Flynn, 1987; Heaton & Pratt, 1990; Snow & Compton, 1996). For example, using 1- and 2-item measures of marital satisfaction and religiosity, Heaton and Pratt (1990) found that the belief that the Bible contains answers to all important human problems was positively associated with marital satisfaction. Flynn (1987) used the 23-item



Faulkner-Dejong Religiosity Scale, where low scores indicate traditional Judaeo-Christian beliefs and high scores indicate a departure from this tradition. Flynn found that religious beliefs were correlated with marital satisfaction, suggesting that the more traditional the religious beliefs the greater the marital satisfaction. Similarly, Snow and Compton (1996), using a 10-item religiosity measure, found religiosity to be positively correlated with marital satisfaction. Specifically, the importance of religion in couples' lives was positively correlated with marital satisfaction.

Craddock (1991) also found a positive relationship between religiosity and marital satisfaction. Craddock used the ENRICH inventory which contains two structural dimensions. The Equalitarian Roles dimension measures attitudes of equalitarian versus traditional gender roles within marriage; the Religious Orientation dimension measures commitment to religious beliefs, values and practices. The ENRICH inventory also contains eight individual marital satisfaction scores and one global satisfaction score. A positive correlation was found between similarity of couple religious orientation and couple satisfaction for six of the nine marital satisfaction variables, suggesting that the more similar or congruent a couple's views of religion, the higher the marital satisfaction.

Other studies examining religious congruence support Craddock's (1991) findings, indicating that the greater the religious congruence, the greater marital satisfaction and the fewer family and religious stressors (Chinitz, 2001; Heaton & Pratt, 1990; Kohn 2001). For example, Chinitz (2001) compared interfaith couples, Jewish and Christian, and same faith couples (i.e., both partners Jewish or both partners Christian). Results indicated that the more congruent couples are in religious beliefs the greater their marital satisfaction and religious commitment. In another study, Kohn (2001) compared interfaith and interracial couples, to homogeneous

couples, whose partners shared similar faith and racial heritage. Results indicated that intermarried couples (i.e. interfaith and interracial) reported less family support, more severe problems with religion, and greater discrepancies in acculturation levels. Similarly, Greenberg (1996) found that interfaith couples reported less marital satisfaction and greater conflict regarding their children's religious education than similar faith couples.

Religious congruence studies generally indicate that couples with similar religious affiliation have lower divorce rates than couples with mixed-faith or no religious affiliation (Call & Heaton, 1997). For instance, Heaton and Pratt (1990) found that couples with similar religious affiliation not only had higher marital satisfaction but also had higher marital stability than mixed-faith couples.

### *Marital Satisfaction and Attachment*

In general, most research regarding attachment and marital satisfaction supports the theoretical expectation that secure attachment is associated with higher levels of marital satisfaction than insecure attachment (Banse, 2004; Forness, 2003; Fuller & Fincham, 1995; Maclean, 2002). For example, Fuller and Fincham (1995) reported that secure attachment was significantly related to higher marital satisfaction for wives in a sample of 53 middle-class couples married an average of 8.4 years. Crowell and Treboux (2001) conducted a longitudinal study investigating the association between attachment and relationship satisfaction among 150 couples when they were engaged and again at their five year wedding anniversary. The sample was recruited from suburban and rural Long Island, New York and consisted of couples who were predominantly Caucasian, had not been married prior to their engagement and had no children. Results indicated that for both couple members secure attachment was related to

relationship satisfaction, as well as satisfaction with partner behaviors just prior to their wedding. However, secure attachment was not related to satisfaction at their 5-year anniversary, suggesting that other factors become important as the marriage progresses.

Forness (2003) investigated the relationship between attachment styles and marital satisfaction in 153 married couples solicited from both religious and university settings. Based on self-reported attachment style, couples were classified into one of three dyads: secure-secure, secure-insecure or insecure-insecure attachment types. Marital satisfaction scores were then compared for various dyadic attachment configurations. Results indicated that congruent secure-secure dyadic configurations had higher levels of marital satisfaction than couples where at least one partner was identified as insecure. Senchak and Leonard (1992) studied the same three attachment configurations among marital couples, including approximately 300 recently married couples (1<sup>st</sup> marriage). Couples were included in the study if husbands were between the ages of 18 and 29. The investigators found that secure couples had better marital adjustment than both mixed and insecure couple types. Similar to Forness' study, mixed couples reported levels of marital adjustment more congruent with the insecure group than the secure group, indicating that in a mixed couple, the attitudes and behavior of the insecure partner may override the influence of the secure partner on the quality of the marriage.

Recent research by Banse (2004) also investigated whether various combinations of attachment styles in couples were related to marital satisfaction. Results indicated that for wives 42% of the variance in marital satisfaction was accounted for by their own attachment style and an additional 7% was accounted for by their partner's attachment style. For husbands, 39% of the variance in marital satisfaction was accounted by their own attachment style and an additional 4% was accounted for by their wife's attachment style. Regarding specific dyadic configurations,

several predictors emerged for wife marital satisfaction. Having an insecure-preoccupied husband predicted lower marital satisfaction for secure wives. In contrast, having a secure husband predicted low satisfaction for insecure-fearful wives. Interestingly, having insecure-dismissing husbands predicted higher marital satisfaction for both secure and dismissing wives. Husband's marital satisfaction was predicted by various dyadic configurations as well (Banse, 2004). For secure husbands, having a secure wife predicted higher husband marital satisfaction, while, having a secure wife predicted lower marital satisfaction for preoccupied or dismissing husbands. Overall results suggest that insecure attachment does not necessarily predict lower marital satisfaction but rather interacts with gender and partner attachment style. The negative effects of insecure attachment on marital satisfaction may be partially compensated for by the positive effects of specific dyadic combinations of insecure attachment styles. Interestingly, it also appears that preoccupied attachment of husbands is related to low marital satisfaction for both husbands and wives, and there is no apparent compensation for this specific attachment type even with a secure spouse.

Other research has investigated mediating and moderating variables of attachment and marital satisfaction. Marchand (2004) found that wives' conflict resolution behaviors partially mediated the association between wives' attachment anxiety and marital satisfaction. In a similar study, Lussier, Sabourin, and Turgeon (1997) reported that attachment and marital satisfaction was moderated by coping styles. The authors found that for wives who used task-oriented coping, the negative association between anxious/ambivalent attachment and marital satisfaction was weakened. Likewise for men who used task-oriented coping, the negative association between anxious/ambivalent attachment and marital satisfaction was eliminated. It appears that active problem solving ability might reduce the clingy, ambivalent, anxious, and doubting

behavior often evident among anxious/ambivalent adults, which in turn can positively affect marital satisfaction. Furthermore, when men used avoidant coping, a negative relationship between anxious/ambivalent attachment and marital adjustment was evident.

Recent research has also demonstrated that affective variables mediate the association between attachment and marital satisfaction. Feeney (1999) reported that husband's attachment security and marital satisfaction is mediated by emotional control. Specifically, controlling for attachment, findings indicated that the more husbands contained or controlled their emotions the lower their marital satisfaction was. Similarly, Davila, Bradbury and Fincham (1998) found that negative affectivity mediates the association between attachment and marital satisfaction. This study included two samples, one composed of newlyweds married less than 6 months, and another composed of adults married between 33 and 38 months. Findings indicated that for the newlyweds negative affectivity fully mediated the association between attachment and marital satisfaction while in established couples negative affectivity was a partial mediator.

Other research has suggested that the behavior of the spouse is important in linking attachment to marital satisfaction. For example, Feeney (2002) found that the association between attachment and marital satisfaction was moderated by spouse behavior. Specifically, compared to secure individuals evaluations of partner relationships by insecure adults were more dependent on recent spouse behavior (eg., greeted me affectionately, expressed understanding or support of my feelings or mood, called me derogatory names, got angry and wouldn't tell me why) than evaluations by secure individuals; this effect was especially true for those with fearful attachment. Another study (Myers & Landsberger, 2002) found that individual's levels of psychological distress and their perceptions of social support mediated the relationship between attachment and marital satisfaction. Specifically, secure attachment was associated with lower

psychological distress and greater marital satisfaction. Secure attachment may provide an internal resource that protects individuals from psychological distress, which in turn enhances marital quality. Social support was also found to mediate the relationship between avoidant attachment and marital satisfaction, suggesting that avoidant individuals not only withdraw from the marital relationship but also seek less assistance and reassurance from friends and family members as well. In another investigation of social support, Cobb, Davila and Bradbury (2001) found that for individuals who perceive their partner as secure, regardless of self or partner-reported security, higher marital satisfaction was reported by both spouses. Furthermore, secure attachment was not directly associated with marital satisfaction, but was indirectly related through perception of partner's attachment style, suggesting that if spouses see their partners as secure, they will have greater feelings of comfort and well-being in the relationship, leading to greater marital satisfaction.

Simpson and Rholes (2002) investigated the mediating effects of spousal support on the association between attachment and marital satisfaction and also examined how major life stressors, such as the transition to parenthood, impact marital satisfaction in persons with differing attachment styles. They found that ambivalent women transitioning to parenthood tend to report declines in perceived support from their spouse from the time of their pregnancy to after the birth of their child. Perception of decreased spousal support in turn predicted significant declines in marital satisfaction for both spouses. Interestingly, they also found that ambivalent women who perceived high spousal support were similar to less ambivalent women in that they had no significant declines in perceived spousal support or marital satisfaction over this transition period.

### *Religiosity and Attachment*

Researchers investigating religion and attachment have generally conceptualized God as an attachment figure (Brigegard & Granqvist, 2004; Byrd & Boe, 2004; Granqvist, 1998; Granqvist & Hagekull, 1999; Granqvist & Hagekull, 2003; Kirkpatrick, 1992; Kirkpatrick & Shavert, 1990; Sim & Loh, 2003; Tenelshof, 2000). While religious behavior can indicate attachment to God, it is a unique concept in and of itself and can be differentiated from religiosity, including practices engaged in (e.g., speaking in tongues, prayer), beliefs subscribed to (e.g., view of God as a loving deity), presence or absence of a personal relationship with God, and/or significant religious events or experiences (e.g., conversion) (Sim & Loh, 2003).

Kirkpatrick and Shaver (1990) found that securely attached individuals tend to view God as more loving, less distant, and place a greater importance on religion than insecurely attached individuals. Results also indicated that avoidant individuals were more likely to describe themselves as agnostic and anxious/ambivalent participants were more likely to have reported speaking in tongues. Based on these findings, Kirkpatrick (1992) proposed two hypotheses to explain the relationship between individual attachment and religious behavior. First, there is the direct correspondence hypothesis, which suggests a direct correspondence between one's interpersonal relationships and one's religious beliefs. Just as securely attached individuals tend to believe other people are available, caring and responsive, so do securely attached religious individuals perceive God as available, caring and responsive. Avoidant individuals, on the other hand, desire to maintain distance from others and avoid intimacy and might be expected to identify themselves as agnostics, which distances them from religious doctrines and church communities. In contrast, Anxious/Ambivalent individuals desire a strong emotional experience

in their personal relationships and thus may be more open to highly emotional religious behavior, such as speaking in tongues.

Kirkpatrick (1992) also proposed a compensation hypothesis, suggesting that individuals who fail to develop secure attachments with their parents may seek attachments elsewhere, and God or another supernatural figure may represent a possible alternative attachment figure. Previous research (Kirkpatrick & Shaver, 1990) indicated that avoidantly attached individuals were more religious as adults when their parents were reported as having been relatively nonreligious. Results also indicated that the incidence of a sudden religious conversion was four times greater for avoidantly attached individuals, than for those who were securely or anxiously attached. However, a later study by Kirkpatrick (1997) found that insecure-anxious women were more likely to report a religious experience or conversion during a four year period than all other attachment types.

Recent research has revisited the compensatory and correspondence hypothesis. Granqvist and Hagekull (1999) reported that securely attached individuals tend to participate in more socialization based religiosity, defined as religious behavior that was learned and passed down from generation to generation. Securely attached individuals also tend to experience gradual religious changes, whereas insecurely attached individuals, both insecure-anxious and insecure-avoidant, tend to experience sudden and intense religious changes indicating a more emotionally based religiosity. Granqvist (1998) reported that insecure respondents reported a greater increase in the importance of their religious beliefs over a 15 month span than secure individuals. However, if parents of secure respondents had been highly religious, secure respondents generally scored higher on the religiosity variables than insecure respondents. This indicates that for secure individuals the correspondence hypothesis may be a more likely



explanation, whereas the compensation hypothesis appears to more accurately explain religious involvement by insecurely attached individuals.

In another interesting study, Brigeard and Granqvist (2004) investigated attachment and religiosity at the unconscious level, by presenting subliminal exposures to one of two phrases "God has forsaken me" or "people are walking." Participants, recruited from a Theology Department and a Christian student society, were given attachment and religiosity measures before and after the exposure to the subliminal messages. There were no significant differences between insecurely and securely attached individuals when exposed to the "people are walking" stimulus. However, when individuals were presented with the "God has forsaken me" stimulus, insecurely attached individuals were less likely to report emotionally based religiosity than securely attached individuals. Brigeard and Granqvist suggested that an insecure attachment history is linked to inhibition of attachment in relation to God, who is seen as less reliable and less loving, whereas a secure attachment history allows for the use of God as an attachment-like figure. Compensatory religiosity for insecure attachment may have limitations and insecurely attached individuals may have difficulty seeking out attachment, including attachment to God or a spiritual figure.

Prayer has been described by Kirkpatrick (1999) as a proximity maintaining attachment behavior directed toward God. Byrd and Boe (2004) investigated the religious behavior of prayer and its association with attachment among 166 students at a Midwestern university. Consistent with theoretical postulates that avoidant individuals are uncomfortable with closeness and attempt to decrease their discomfort by distancing themselves from others, avoidantly attached individuals reported less colloquial (i.e., conversational) and meditative (i.e., contemplative) prayer, which suggest that they distance themselves from God. Findings also indicated that anxious

attachment was predictive of petitionary (i.e., materialistic help-seeking) prayer, indicating that anxiously attached individuals may use petitionary prayer as a coping mechanism or help-seeking behavior.

Another study conducted by Tenelshof (2000) investigated the attachment styles of seminary students and spiritual maturity, which is defined as "the degree to which a person embodies in relationship the priorities, commitments, and perspectives characteristic of vibrant and life-transforming faith" (Tenelshof, 2000, p.102). Horizontal faith maturity includes service to others, while vertical faith maturity emphasizes a personal relationship with God. Results indicated that secure attachment was the best predictor of overall faith maturity and vertical faith maturity. Interestingly, results also indicated that reported parental overprotection in childhood, which is associated with anxious attachment (Heiss, Berman, & Sperling, 1996; Parker, 1993), was the most significant predictor of horizontal faith maturity.

As with most research, results are situationally dependent. Granqvist and Hagekull (2003) reported that both insecure childhood and insecure adult attachment, predicted increased religious commitment for those who had experienced a separation or loss of significant other due to a breakup. Insecurely attached individuals who experienced a new romantic relationship, however, were more likely to report a decrease in religious commitment. The pattern for securely attached individuals was reported in the opposite direction, with securely attached individuals who experienced a separation or loss of significant other reporting less religious participation generally but more religious participation when experiencing a new romantic relationship. These findings support the compensatory hypothesis for insecurely attached individuals and the correspondence hypothesis for those with secure attachment. In addition to highlighting the importance of both childhood attachment and adult attachment as important factors in predicting

religious behavior, this study also illustrates the importance of individual differences and the effect of contextual changes.

### *Marital Satisfaction, Religiosity and Attachment*

To date, there appears to be a paucity of research investigating the relationship between marital satisfaction, religiosity, and attachment. In one of the few existing studies, Watson, Klohnen, Casillas, Simms, and Haig (2004) found that although there was strong similarity among newlywed couples in religiosity, there was little similarity in attachment style. Additionally, similarity of religiosity or attachment within couples had little effect on marital satisfaction. Rather, an individual's satisfaction in marriage was found to be primarily a function of his/her self-rated characteristics. Anxious attachment of spouse did, however, have a small affect on marital satisfaction.

### *Purpose of Study*

The primary purpose of the proposed study was to explore associations of religious commitment and adult attachment style to marital satisfaction. Because religiosity consists of several components, religious commitment (i.e., the importance or degree of religion) was chosen for the current study to represent religiosity as it relates to attachment and marital satisfaction. With only one study that has addressed all three variables of religiosity, attachment and marital satisfaction, more research is needed.

The current study examined differences in marital satisfaction related to religious commitment. Based on several studies indicating that religious congruency is an important factor in marital satisfaction, it was hypothesized that marital satisfaction would be higher for couples

with congruent religious commitment. In addition, based on research demonstrating the positive association between religiosity and marital satisfaction (Craddock, 1991; Flynn, 1987; Heaton & Pratt, 1990; Snow & Compton, 1996) and adult attachment style and marital satisfaction (Banse, 2004; Forness, 2003; Fuller & Fincham, 1995; Maclean, 2002), we tested two separate hypotheses regarding the manner in which secure attachment may be related to marital satisfaction. First, we examined the possibility that religious commitment is the primary manner in which secure attachment is positively associated with marital satisfaction. That is, we tested whether religious commitment mediates the relationship between attachment style and relationship satisfaction. Second, applicability of the compensatory hypothesis to the relationship between attachment, religiosity, and marital satisfaction was examined. Several studies have indicated that for insecure individuals religious behavior or attachment to a supernatural being is used to compensate for the lack of secure attachment in relationship with other people (Granqvist, 1998; Granqvist & Hagekull, 1999; Granqvist & Hagekull, 2003; Kirkpatrick, 1992; Kirkpatrick, 1997; Kirkpatrick & Shaver, 1990). Thus we examined the possibility that religious commitment would moderate the relationship between romantic attachment style and marital satisfaction.

## CHAPTER 3

### METHOD

#### Participants

A community sample of 92 heterosexual couples ( $N = 184$ ) without children living in the home and married 1-5 years was recruited to participate in the study. Ages of husbands ranged from 21 to 50 years, with a mean age of 28.12 years ( $SD = 4.47$ ) and ages of wives ranged from 20 to 37 years with a mean age of 26.40 years ( $SD = 3.72$ ). The mean number of years married for couples was 2.57 years with a  $SD$  of 1.26 years. Most participants were employed full time with 80.2% of husbands ( $n = 73$ ) employed full time and 67% of wives ( $n = 61$ ) employed full time. Part-time employment reported by husbands was 5.5 % ( $n = 5$ ) and 5.4% by wives ( $n = 10$ ). For husbands 13.2% ( $n = 12$ ) reported student status and 10.3% ( $n = 19$ ) of wives reported student status. One husband and one wife reported that they were unemployed. The median family income was \$45,000-\$60,000. The distribution of family income is represented in Table 1. The ethnic distribution of the sample was predominantly White or European American, but included a variety of ethnicities (see Table 1).

#### Measures

##### *Background Information Questionnaire*

The Background Information Questionnaire is a 29-item questionnaire created by the principal investigator specifically for the purposes of this study. This questionnaire asks respondents for demographic information regarding their age, gender, ethnicity, number of marriages, length of marriage, number of children, level of education, occupation, and level of income. Family background information includes the number of siblings, adoption, parental

Table 1

*Frequency Characteristics of the Sample (N = 184)*

Variables	Males		Females		Total Sample	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
<b>Level of Education</b>						
Less Than HS Graduate	0	0%	0	0%	0	0%
High School Graduate	5	5.4%	1	1.1%	6	3.3%
Some College	23	25.0%	25	27.2%	48	26.1%
Technical/2 yr. Degree	8	8.7%	5	5.4%	13	7.1%
Bachelors Degree	44	47.8%	47	51.1%	91	49.5%
Graduate/ Professional Degree	12	13.0%	14	15.2%	26	14.1%
<b>Ethnicity</b>						
African American	0	0%	0	0%	0	0%
Asian/Pacific Islander	1	1.1%	3	3.3%	4	2.2%
White/European American	86	93.5%	79	85.9%	165	89.7%
Hispanic/Latino/ Mexican American	3	3.3%	6	6.5%	9	4.9%
Native American	0	0%	1	1.1%	1	.5%
Bi-racial/Multi-racial	2	2.2%	3	3.3%	5	2.7%
<b>Family Income</b>						
Less than \$15,000	5	5.4%	6	6.5%	11	6.0%
\$15,000-\$30,000	8	8.7%	9	9.8%	17	9.2%
\$30,000-\$45,000	17	18.5%	18	19.6%	35	19.0%
\$45,000-\$60,000	15	16.3%	13	14.1%	28	15.2%
\$60,000-\$75,000	15	16.3%	17	18.5%	32	17.4%
Over \$75,000	32	34.8%	29	31.5%	61	33.2%

divorce, death of a family member, relationship of parents, and family history of mental health concerns.

*Religious Commitment Inventory-10 (RCI-10; Worthington et al., 2003)*

The RCI-10 is a self-report measure designed to assess an individual's religious commitment, which is defined as the degree to which a person adheres to his or her religious values, beliefs, and practices and uses them in daily living. The RCI-10 was constructed from earlier 62-item (Sandage, 1999), 20-item (McCullough & Worthington, 1995; Morrow, Worthington, & McCullough, 1993) and 17-item (McCullough, Worthington, Maxie, & Rachal, 1997) versions. The RCI-10 yields three scores; a full-scale mean, an Intrapersonal Religious Commitment factor, and an Interpersonal Religious Commitment factor. The full scale contains 10 items based on a 5-point Likert scale in which respondents are asked to respond to items from 1 (not at all true of me) to 5 (totally true of me). The Intrapersonal Religious Commitment factor contains six Likert scale items and is largely cognitive, while the Interpersonal Religious Commitment factor contains four Likert scale items, and is largely behavioral. Worthington et al. (2003) reported reliability coefficients for the full-scale RCI-10, Intrapersonal Religious Commitment, and Interpersonal Religious Commitment as .87, .86 and .83 respectively. Worthington et al. (2003) also reported good construct, discriminate, and criterion validity. Missing data for the RCI total commitment score ( $n = 16$ ) was replaced separately by gender using the mean substitution method in subsequent analyses.

*Dyadic Adjustment Scale (DAS; Spanier, 1976)*

The Dyadic Adjustment Scale was developed by Spanier (1976) and is a widely used

clinical and research tool to assess marital satisfaction (Hunsley, Pinsent, Lefebvre, James-Tanner, & Vito, 1995). Since its development the DAS has undergone several psychometric tests and is considered one of the most psychometrically sound paper-pencil couple assessments in the field today. The DAS is written at the eighth grade reading level and can be scored by hand or by computer.

The current version of the DAS is a 32-item self-report measure of marital quality developed for both cohabiting and married couples. The DAS has also been shown to be valid and reliable for heterosexual and same sex couples (Kurdek & Schmitt, 1986). Items are rated on a 6-point Likert scale ranging from 0 (always disagree) to 5 (always agree). The DAS yields a Total Adjustment score and four subscales: Dyadic Consensus, Dyadic Satisfaction, Dyadic Cohesion, and Affectional Expression. Dyadic Consensus measures the amount of marital agreement between partners. Dyadic Satisfaction measures the tension or discord between partners. Dyadic Cohesion measures the sharing of pleasant activities. Affectional Expression measures the amount of affection expressed between partners including sexual concerns. Reliability for the total scale and four subscales were as follows: total scale .96, dyadic consensus, .90, dyadic satisfaction, .94, dyadic cohesion, .86, and affectional expression, .73. Validity studies indicate the DAS correlates significantly with other criteria of marital or dyadic satisfaction (Spanier, 1976). The current study used only the dyadic satisfaction scale. Missing data for the Dyadic Satisfaction Scale ( $n = 15$ ) was replaced separately by gender using the mean substitution method.

*Experiences in Close Relationships Inventory* (ECR; Brennan, Clark, & Shaver, 1998)

The ECR is an assessment of adult romantic attachment style. The ECR was developed



using items from 60 adult attachment instruments, which yielded 482 items and 60 attachment related constructs. The researchers eliminated redundant items if two out of the three researchers agreed. The 323 remaining items were included in one measure of attachment, which was administered to 1,086 undergraduate students, 682 women and 403 men ranging in age from 16 to 50, with a median age of 18. The 60 attachment constructs were then factor analyzed and yielded two primary factors: avoidance and anxiety. These two factors accounted for 62.8% variance of the 60 constructs. The constructs that had the highest loadings for both avoidance and anxiety were used to represent the new factors of avoidance and anxiety. Two 18-item scales were constructed from the 36 items that came from the highest loadings, one for avoidance and one for anxiety. The two scales indicate participants' discomfort with intimacy and fear of abandonment.

Following Bartholomew's 4-category conceptualization of attachment, it is possible to create four attachment categories from the 2 higher order scales. The secure style is described as comfortable with intimacy and autonomy, the preoccupied style is overly concerned with relationships, the dismissing style has a distinct discomfort with intimacy, and the fearful style is described as having a distinct discomfort with intimacy and is socially avoidant as well.

The ECR (Brennan, Clark, & Shaver, 1998) has good internal consistency and test-retest reliability for its two scales. The internal reliability has been reported at .94 and .91 for the scales avoidance and anxiety respectively. The test-retest reliability has been reported at .90 and .91 for the scales avoidance and anxiety respectively. The ECR avoidance and anxiety scales correlated highly with other attachment questionnaires. The concurrent validity ranges from .71 to .90 for the four scales. Discriminant validity yielded a correlation of .11, which indicates the two scales, anxiety and avoidance, are unrelated.

## Procedure

The current study was part of a larger study examining attachment processes among 92 couples married from one to five years, without children living in the home. Exclusionary criteria were selected to eliminate the confounds of higher marital satisfaction within the first year of marriage (Leonard & Roberts, 1998) and the negative impact of children on marital satisfaction (Twenge, Campbell, & Foster, 2003). After approval was granted by The University of North Texas Internal Review Board, flyers, newspaper advertisements were distributed throughout the Denton and the Dallas-Fort Worth Metroplex (e.g. universities, churches, grocery stores, coffee shops etc.). In addition, announcements on various online list-serves related to marriage resulted in some out-of-state participants.

Interested participants then contacted the project manager to set up an appointment time. Generally, after an appointment time was scheduled, a research team member administered the surveys in person. Confidentiality and consent forms were explained to participants, including potential risks and benefits associated with participation, before surveys were completed. Participants were asked to complete their packet independently with the investigator present. Alternatively, out of town/state participants were contacted via email or phone in order for the researcher to describe the study. Couples who agreed to participate were asked to complete packets independently from their partner and were mailed two questionnaire packets with pre-paid postage for return.

In order to protect confidentiality each packet was assigned a couple number and participant letter (A/B). The packets included the background information questionnaire, the RCI-10, the DAS, the ECR, a consent form (see Appendix), as well as other instruments not used in this study. In addition, participants were given a form to indicate their choice of two

incentives: a money order worth \$20 or entrance into a drawing for a weekend getaway valued at \$300. Participants who chose the \$20 were given a money order at the conclusion of data collection; participants who chose the weekend getaway, were given an entry form which contained couple contact information, name, phone number, email address, and home address. This contact information was separated from other data and did not indicate the couple number to prevent connecting participant identity with specific responses.

## CHAPTER 4

### RESULTS

To examine the role of religiosity in romantic attachment and marital satisfaction, three phases of analyses were conducted. Preliminary analyses were run with respect to gender, age, ethnic background, level of education, occupational status, and level of income, to determine if demographic differences existed for marital satisfaction, religiosity or attachment style. Primary analyses tested the study hypothesis regarding religious commitment and marital satisfaction within couples. In addition, regression analysis as outlined by Baron and Kenny (1986) was used to determine whether religiosity mediates and/or moderates the association between attachment style and marital satisfaction. Finally, exploratory analyses were performed to test the possibility that partner satisfaction mediates the relationship of religious commitment and marital satisfaction.

#### Preliminary Analyses

Preliminary ANOVAS indicated that religious commitment was not associated with gender, ethnic background, level of education, occupational status, or level of income. However, as displayed in Table 2, Pearson correlation results indicated that age was negatively associated with religious commitment, with younger individuals reporting higher religious commitment than older individuals. Similarly, results indicated that attachment anxiety was not associated with any demographic variable and attachment avoidance was not associated with level of education, occupational status or level of income. However, attachment avoidance was associated with gender,  $F = 12.34, p = .001$  and ethnic background,  $F = 5.47, p = .02$ . Results indicated that men reported more attachment avoidance than women and participants of minority descent reported more attachment avoidance than their Caucasian counterparts. Results also indicated

Table 2

*Correlations Between Variables (N = 184)*

	Age	Religious Commitment	Attachment Avoidance	Attachment Anxiety	Marital Satisfaction
Age	—				
Religious Commitment	-.31**	—			
Attachment Avoidance	.19**	-.15*	—		
Attachment Anxiety	.09	-.09	.27**	—	
Marital Satisfaction	-.08	.29**	-.17*	-.25**	—

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

that attachment avoidance was negatively associated with age (see Table 2). Finally, preliminary results indicated marital satisfaction was not associated with gender, age, ethnic background, level of education, occupational status, or level of income. Because demographic variables were not significantly related to the outcome variable of marital satisfaction, analyses proceeded as planned without controlling for demographics.

As shown in Table 2, correlations among scales used in this study indicated that ECR attachment avoidance was negatively correlated with both RCI religious commitment and DAS marital satisfaction. In addition, the subscales of the ECR (attachment anxiety and attachment avoidance) were positively correlated, while RCI religious commitment and DAS marital satisfaction were also positively correlated.

## Primary Analyses

One assumption of the statistical analyses planned is independence of data. Because of the dyadic nature of this data set (i.e., married couples), testing for non-independence of data was necessary. It was expected that the assumption of independence would be violated and thus subsequent analyses would need to address this issue (Kenny, 2004). To test for independence, partial correlations were performed on husband and wife marital satisfaction, while controlling for the independent variables ECR anxiety, ECR avoidance, and RCI religious commitment. Results indicated that husband and wife marital satisfaction were positively correlated, even when controlling for attachment anxiety and avoidance and religious commitment,  $r = .37, p < .001$ . In order to account for this non-independence of couples data, a repeated measure mixed ANOVA design was used for hypothesis 1, and partner marital satisfaction was controlled for in Hypothesis 2, 3 and 4 for analyses using the entire sample. In addition, separate analyses were conducted for husbands and wives.

### *Hypothesis 1*

It was hypothesized that couples with congruent religious commitment levels would report higher marital satisfaction than dyads with discrepant religious commitment levels. Individuals were placed into two groups based on the RCI scores. Specifically, couples with less than 1 Standard Deviation (12 points) discrepancy between partners in religious commitment level were assigned to the congruent religious commitment group ( $n = 73$ ), while couples with 1 Standard Deviation or more discrepancy between partners in religious commitment level were assigned to the discrepant religious commitment group ( $n = 19$ ). A 2 between (couple type) X within (husband-wife) repeated measures ANOVA was performed to test Hypothesis 1. The

assumptions of a repeated measures ANOVA research design include homogeneity of variance and normality of the dependent variable. For husband marital satisfaction the assumption of homogeneity of variance was assumed due to the Levene's test, which resulted in  $F(1, 90) = .48$ ,  $p = .49$ . Normality was rejected using the Shapiro-Wilk's test of Normality,  $F(1, 92) = .86$ ,  $p < .001$ . For wife marital satisfaction the assumption of homogeneity of variance was assumed due to the Levene's test, which resulted in  $F(1, 90) = 1.52$ ,  $p = .22$ . Normality was rejected using the Shapiro-Wilk's test of Normality,  $F(1, 92) = .95$ ,  $p < .01$ . However, ANOVA/ANCOVA analyses remain robust despite violations of either normality or homoscedasticity, although when both assumptions are violated the power of the analysis is weakened (Olejnik & Algina, 1984; Refinetti, R., 1996). Because only one violation was found in the current study, analyses proceeded as planned.

Overall results from the repeated measures ANOVA with couples indicated significance  $F(1, 90) = 4.33$ ,  $p < .05$ , thus supporting Hypothesis 1. To further examine this link univariate analyses were performed separately for husbands and wives, with the independent variable consisting of religious commitment group, as identified by the RCI, and the dependent variable consisting of individual marital satisfaction, as identified by the DAS (Spanier, 1976). For husbands, results of the ANOVA indicated no significant difference in husband marital satisfaction between the congruent and discrepant religious commitment groups,  $F(1, 90) = .89$ ,  $p = .35$ . However, for wives results indicated a significant difference in wife marital satisfaction between the congruent and discrepant religious commitment groups. Specifically, among couples with congruent religious commitment wives reported significantly higher marital satisfaction, as compared to couples who reported discrepant religious commitment,  $F(1, 90) = 7.78$ ,  $p < .01$ . Results for husband and wife marital satisfaction are presented in Table 3.

Table 3

*Repeated Measures ANOVA for Marital Satisfaction by Religious Commitment Groups*

	Congruent ( <i>n</i> = 73)	Discrepant ( <i>n</i> = 19)	<i>F</i>
Husband Marital Satisfaction			.89
<i>M</i>	35.25	34.54	
<i>SD</i>	2.83	3.42	
Wife Marital Satisfaction			7.78**
<i>M</i>	35.07	33.30	
<i>SD</i>	2.35	2.84	

\*\*  $p < .01$

Due to the small size of the discrepant religious commitment group ( $n = 19$ ) while investigating Hypothesis 1, we performed exploratory analyses that approached the data from a different perspective. Rather than looking at congruency between partners we examined how the degree of religious commitment endorsed by the couple might be associated with marital satisfaction. A mixed between X within repeated measures ANOVA design was performed to investigate the effect of religious commitment level on marital satisfaction, followed by separate univariate analyses for husbands and wives. For the mixed ANOVA, the between variable was religious commitment level, which was categorized into three levels (low, moderate, high) as determined by Worthington et al.'s (2003) validation of the RCI-10, while the within variable consisted of couple member (husband-wife). For both husband and wife marital satisfaction, the assumption of homogeneity of variance was assumed due to the Levene's test, which resulted in  $F(2, 89) = .33, p = .72$  and  $F(2, 89) = .57, p = .57$ , respectively. Results indicated that marital



satisfaction differed by religious commitment level,  $F(2, 89) = 8.76, p < .01$ , with post hoc analyses indicating that individuals with high religious commitment levels reported higher marital satisfaction than participants in both the moderate and low religious commitment level groups.

Subsequently, a series of ANOVAs were performed separately for husbands and wives using the participant's religious commitment level as the independent variable, and participants' or spouses' marital satisfaction as the dependent variables. Results are shown in Table 4. In analyses for husbands, the assumption of homogeneity was assumed for both husband and wife marital satisfaction,  $F(2, 89) = .87, p = .42$ , and  $F(2, 89) = .45, p = .64$ , respectively. For husbands, analyses indicated that husband level of religious commitment was associated with both husband  $F(2, 89) = 6.23, p < .01$ , and wife marital satisfaction,  $F(2, 89) = 10.88, p < .001$ . Specifically, post hoc analyses revealed that husbands who reported high religious commitment also endorsed higher marital satisfaction and had wives who endorsed higher marital satisfaction than those husbands who reported moderate or low religious commitment. For wife analyses, the assumption of homogeneity was assumed for both husband and wife marital satisfaction,  $F(2, 89) = .15, p = .86$ , and  $F(2, 89) = .61, p = .55$ , respectively. Results indicated that wives' religious commitment level was positively associated with both husband marital satisfaction  $F(2, 89) = 3.63, p < .05$ , and wife marital satisfaction,  $F(2, 89) = 7.89, p = .001$ . Similar to findings for husbands, post hoc analyses revealed that wives of high religious commitment endorsed higher marital satisfaction than wives who reported moderate or low religious commitment. Wives with high religious commitment also had husbands who endorsed higher marital satisfaction than husbands of wives with moderate religious commitment, but not low commitment.

Table 4

*Descriptive Statistics on Marital Satisfaction by Religious Commitment Level (N = 92)*

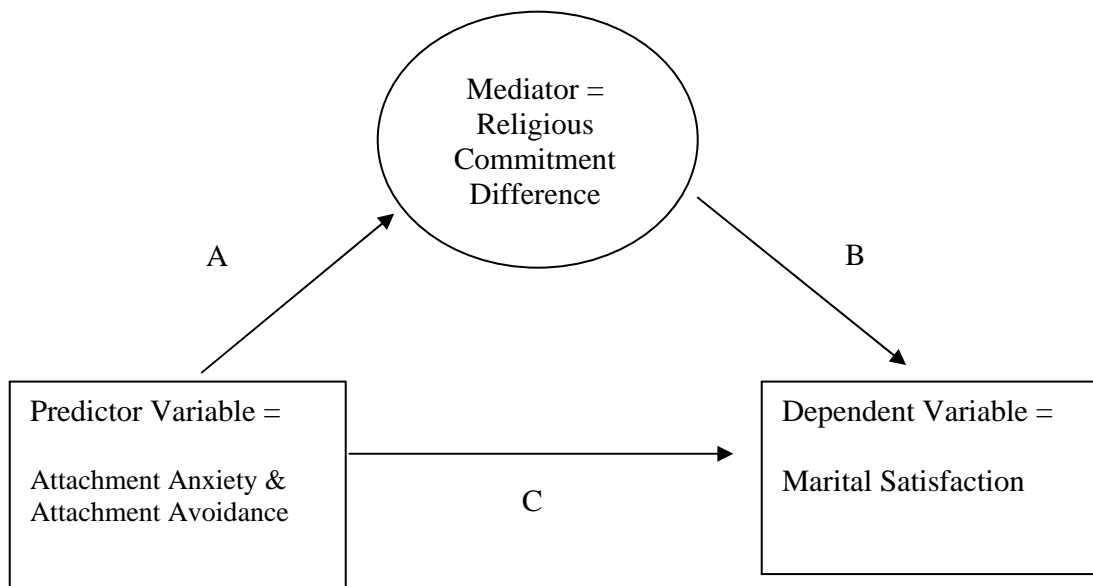
	Husband Low RC ( <i>n</i> = 26)	Husband Moderate RC ( <i>n</i> = 42)	Husband High RC ( <i>n</i> = 24)	<i>F</i>
Wife Marital Satisfaction				10.88***
<i>M</i>	33.78 <sub>a</sub>	34.20 <sub>a</sub>	36.57 <sub>b</sub>	
<i>SD</i>	2.54	2.33	2.01	
Husband Marital Satisfaction				6.23**
<i>M</i>	34.55 <sub>a</sub>	34.46 <sub>a</sub>	36.84 <sub>b</sub>	
<i>SD</i>	1.99	2.91	3.30	
	Wife Low RC ( <i>n</i> = 18)	Wife Moderate RC ( <i>n</i> = 40)	Wife High RC ( <i>n</i> = 34)	<i>F</i>
Wife Marital Satisfaction				7.89**
<i>M</i>	34.11 <sub>a</sub>	33.88 <sub>a</sub>	35.98 <sub>b</sub>	
<i>SD</i>	2.32	2.59	2.13	
Husband Marital Satisfaction				3.63*
<i>M</i>	34.61	34.44 <sub>a</sub>	36.16 <sub>b</sub>	
<i>SD</i>	2.17	2.97	3.06	

Note: Means with different subscripts differ significantly from one another at the  $p < .05$  level.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

## Hypothesis 2

To test the hypothesis that couple difference score in religious commitment would mediate the association between adult attachment style and marital satisfaction, a series of regression analyses were conducted. According to Baron and Kenny (1986) four conditions must be met for a variable to be considered a mediator: (a) the predictor (attachment style) must be significantly associated with the hypothesized mediator (religious commitment difference), (b) the predictor must be significantly associated with the dependent variable, (c) the mediator must be significantly associated with the dependent variable, and (d) the impact of the predictor on the dependent variable is less when the mediator is introduced into a multiple regression (see Figure 1).



*Figure 1.* When the relationships noted by paths A and B are controlled, an attenuation of the effect denoted by path C should be evident.

Due to interdependence of couple data each analyses was performed three times, once for the entire sample, once for husbands and once for wives. In addition, partner marital satisfaction was controlled for in analyses using the entire sample where marital satisfaction was the dependent variable (b, c, d). Although own and partner marital satisfaction were only moderately correlated ( $r = .42$ ), we controlled for partner marital satisfaction to account for the interdependence of couples data.

Results testing Hypothesis 2 are presented in Table 5. For the entire sample, results from the first two simple regressions did not indicate a significant relationship between religious commitment difference score and attachment anxiety,  $F(1, 182) = .50, p = .48$ , or attachment avoidance,  $F(1, 182) = .20, p = .66$ . However, in the next set of simple regressions, both ECR anxiety  $F(1, 182) = 12.06, p = .001$ , and ECR avoidance  $F(1, 182) = 5.08, p < .05$ , significantly predicted marital satisfaction. Specifically, attachment anxiety was a significant negative predictor of marital satisfaction, explaining 6% of the variance. Attachment avoidance was also a significant negative predictor of marital satisfaction, explaining 3% of the variance. The final simple regression indicated that religious commitment difference score was predictive of marital satisfaction,  $F(1, 182) = 5.41, p < .05$ , indicating that greater differences in religious commitment are associated with lower levels of marital satisfaction. Contrary to Hypothesis 2, mediation could not be established due to the nonsignificance of the first two simple regressions. However, when controlling for partner marital satisfaction, the full multiple regression for the entire sample with anxious attachment style and religious commitment difference accounted for 23.4% of the variance,  $F(3, 180) = 18.30, p < .001$ . Specifically, in the first step partner satisfaction ( $\beta = .39, p < .001$ ) accounted for 17.7% of the variance, while attachment anxiety ( $\beta = -.22, p < .01$ ) accounted for another 4.9% of the variance in the second step, indicating that as

Table 5

*Simple Regressions for Attachment Style, Religious Commitment Difference, and Marital**Satisfaction*

WHOLE SAMPLE ( $N = 184$ )			
Predictor	Criterion	$\beta$	$R^2$
ECR Anxiety	Marital Satisfaction	-.25***	.06
	RCI Discrepancy	.05	.00
ECR Avoidance	Marital Satisfaction	-.17*	.03
	RCI Discrepancy	.03	.00
RCI Discrepancy	Marital Satisfaction	-.17*	.03
HUSBANDS ( $n = 92$ )			
Predictor	Criterion	$\beta$	$R^2$
ECR Anxiety	Marital Satisfaction	-.18	.03
	RCI Discrepancy	-.06	.00
ECR Avoidance	Marital Satisfaction	-.15	.02
	RCI Discrepancy	.06	.00
RCI Discrepancy	Marital Satisfaction_	-.11	.01
WIVES ( $n = 92$ )			
Predictor	Criterion	$\beta$	$R^2$
ECR Anxiety	Marital Satisfaction	-.27**	.07
	RCI Discrepancy	.14	.02
ECR Avoidance	Marital Satisfaction	-.31**	.10
	RCI Discrepancy	-.01	.00
RCI Discrepancy	Marital Satisfaction	-.27**	.07

\* $p = .05$ , \*\* $p = .01$ , \*\*\* = .001

attachment anxiety increases marital satisfaction decreases. Religious commitment difference did not significantly contribute to the equation ( $\beta = -.09, p = .17$ ). Results of the full multiple regression with attachment avoidance and religious commitment difference accounted for 19% of the variance,  $F(3, 180) = 14.10, p < .001$ . Specifically, in the 1<sup>st</sup> step partner satisfaction ( $\beta = .39, p < .001$ ) made a significant contribution to the equation and accounted for 17.7% of the variance. Neither attachment avoidance ( $\beta = -.06, p = .38$ ) nor religious commitment difference ( $\beta = -.10, p = .14$ ) were significant predictors (see Table 6).

Analyses were then performed separately for husbands and wives. For husbands, all regression analyses were non-significant. Attachment anxiety  $F(1, 90) = .31, p = .58$ , and attachment avoidance,  $F(1, 90) = .27, p = .60$ , were not predictive of religious commitment difference. In addition, attachment anxiety  $F(1, 90) = 3.05, p = .08$ , and attachment avoidance,  $F(1, 90) = 1.99, p = .16$ , were not predictive of husband marital satisfaction. Similarly, religious commitment difference was not predictive of husband marital satisfaction,  $F(1, 90) = 1.10, p = .30$ . Due to the lack of significance for simple regressions, the multiple regression analysis for husbands were not performed.

In simple regressions for wives, attachment anxiety  $F(1, 90) = 1.86, p = .18$ , and attachment avoidance,  $F(1, 90) = .02, p = .90$ , were not predictive of wife religious commitment difference. However, both attachment anxiety,  $F(1, 90) = 6.99, p = .01$ , and attachment avoidance,  $F(1, 90) = 9.55, p < .01$ , as well as religious commitment difference  $F(1, 90) = 7.15, p < .01$ , were predictive of wife marital satisfaction. In each case, attachment anxiety, attachment avoidance and religious commitment difference were negatively associated with marital satisfaction. The full multiple regression analysis including attachment anxiety was significant,  $F(2, 89) = 6.50, p < .01$ , accounting for 12.7% of the variance. Specifically, both attachment

Table 6

*Multiple Regressions for Attachment Style and Religious Commitment Difference**Predicting Marital Satisfaction*

Step/Predictor	Final <i>B</i>	Step <i>R</i> <sup>2</sup>	Step <i>F</i>
WHOLE SAMPLE ( <i>N</i> = 184)			
1. Spouse Marital Satisfaction	.39***	.18	39.09***
2. Attachment Anxiety	-.22**	.22	26.35***
3. Religious Commitment Difference	-.09	.22	18.30***
1. Spouse Marital Satisfaction	.39***	.18	39.09***
2. Attachment Avoidance	-.06	.18	19.88***
3. Religious Commitment Difference	-.10	.19	14.10***
WOMEN ( <i>n</i> = 92)			
1. Attachment Anxiety	-.24*	.07	6.99*
2. Religious Commitment Difference	-.24*	.13	6.50**
1. Attachment Avoidance	-.31**	.10	9.55**
2. Religious Commitment Difference	-.28**	.17	9.24***

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001

anxiety and religious commitment difference were negatively associated with marital wife satisfaction, with attachment anxiety ( $\beta = -.24, p = .02$ ) contributing 7.2% of the variance and religious commitment difference ( $\beta = -.24, p = .02$ ) contributing an additional 5.5% of the

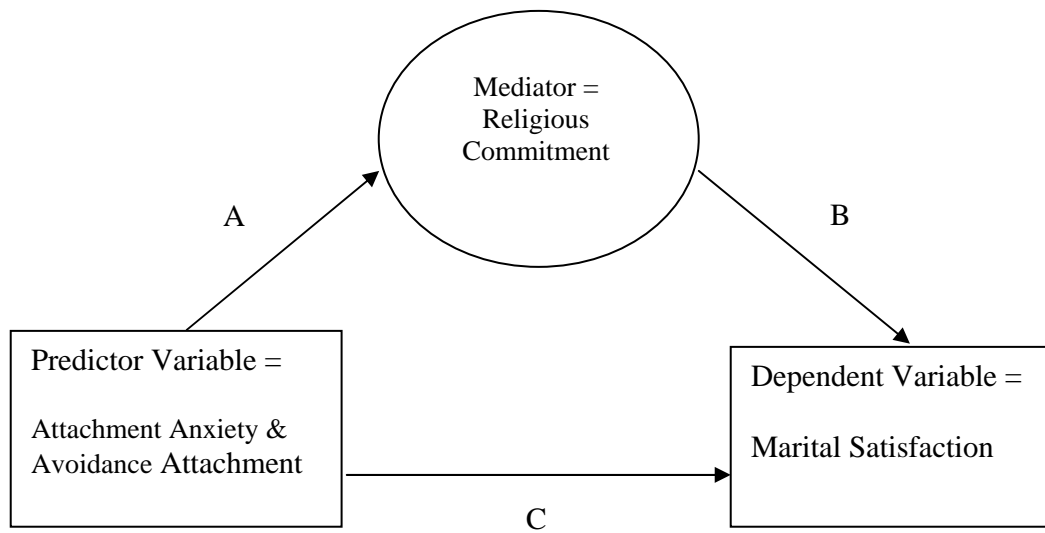
variance. Results of the multiple regression analysis including attachment avoidance was significant as well,  $F(2, 89) = 9.24, p < .01$ , accounting for 17.2% of the variance. Both attachment avoidance and religious commitment difference were negatively associated with marital satisfaction, with attachment avoidance ( $\beta = -.31, p < .01$ ) contributing 9.6% of the variance and religious commitment difference ( $\beta = -.28, p < .01$ ) contributing an additional 7.6% of the variance. In summary, although some of the predictors were independently associated with marital satisfaction, results did not support Hypothesis 2 regarding mediation effects of spousal difference in religious commitment (see Table 5 and 6).

### *Hypothesis 3*

The third hypothesis predicted that participants' degree of religious commitment would mediate the association between their attachment style and marital satisfaction. To test hypothesis 3, Baron and Kenny's (1986) procedure for testing mediation effects was again followed and analyses were run for the entire sample as well as husbands and wives separately. The model for the proposed mediation is presented in Figure 2 and results are presented in Table 7.

For the entire sample, simple regressions indicated that ECR anxiety was not significantly associated with religious commitment,  $F(1, 182) = 1.34, p = .25$ . However, ECR avoidance was a significant negative predictor of religious commitment  $F(1, 182) = 4.27, p < .05$ . As shown in previous findings for Hypothesis 2, the next set of simple regressions resulted in significance, as both ECR anxiety and avoidance were negatively predictive of marital satisfaction,  $F(1, 182) = 12.06, p = .001$ , and  $F(1, 182) = 5.08, p < .05$ , respectively. Results of the final simple regression indicate that individual religious commitment level was a positive predictor of marital satisfaction,  $F(1, 182) = 11.05, p = .001$ , accounting for 6% of the variance.





*Figure 2.* When the relationships noted by paths A and B are controlled, an attenuation of the effect denoted by path C should be evident.

Contrary to Hypothesis 3, mediation could not be established due to nonsignificance of the first simple regression. However, results of the full multiple regression including attachment anxiety indicated significance,  $F(3, 180) = 18.80, p < .001$ , accounting for 23.9% of the variance (see Table 8). Specifically, in the 1<sup>st</sup> step partner satisfaction ( $\beta = .37, p < .001$ ) contributed 17.7% of the variance, and in the 2<sup>nd</sup> step attachment anxiety ( $\beta = -.21, p < .01$ ) contributed an additional 4.9% of the variance. Religious commitment level did not significantly contribute to the prediction of marital satisfaction. Results of the full multiple regression including attachment avoidance also indicated significance,  $F(3, 180) = 14.60, p < .001$ , accounting for 19.6% of the variance. Only partner satisfaction ( $\beta = .37, p < .001$ ) made a significant contribution to the equation accounting for 17.7% of the variance. According to Kenny and Baron (1986) if the effect of the independent variable (avoidance attachment) on the dependent variable (marital

Table 7

*Simple Regressions for Attachment Style, Religious Commitment Level and Marital Satisfaction*

WHOLE SAMPLE ( $N = 184$ )			
Predictor	Criterion	$\beta$	$R^2$
ECR Anxiety	Marital Satisfaction	-.25***	.06
	RCI Level	-.09	.01
ECR Avoidance	Marital Satisfaction	-.17*	.03
	RCI Level	-.15*	.02
RCI Level	Marital Satisfaction	.24***	.06
HUSBANDS ( $n = 92$ )			
Predictor	Criterion	$\beta$	$R^2$
ECR Anxiety	Marital Satisfaction	-.18	.03
	RCI Level	-.16	.03
ECR Avoidance	Marital Satisfaction	-.15	.02
	RCI Level	-.08	.01
RCI Level	Marital Satisfaction_	.28**	.08
WIVES ( $n = 92$ )			
Predictor	Criterion	$\beta$	$R^2$
ECR Anxiety	Marital Satisfaction	-.27**	.07
	RCI Level	-.05	.00
ECR Avoidance	Marital Satisfaction	-.31**	.10
	RCI Level	-.17	.03
RCI Level	Marital Satisfaction	.30**	.09

\* $p = .05$ , \*\* $p = .01$ , \*\*\*  $p = .001$

Table 8

*Multiple Regressions for Attachment Style and Religious Commitment predicting Marital Satisfaction*

Step/Predictor	Final $\beta$	Step $R^2$	Step $F$
<b>WHOLE SAMPLE (<math>N = 184</math>)</b>			
1. Spouse Marital Satisfaction	.37***	.18	39.09***
2. Attachment Anxiety	-.21**	.23	26.35***
3. Religious Commitment	.12	.24	18.80***
1. Spouse Marital Satisfaction	.37***	.18	39.09***
2. Attachment Avoidance	-.05	.18	19.88***
3. Religious Commitment	.13	.20	14.60***
<b>WOMEN (<math>n = 92</math>)</b>			
1. Attachment Anxiety	-.25*	.07	6.99*
2. Religious Commitment	.29**	.16	8.14**
1. Attachment Avoidance	-.27**	.10	9.55**
2. Religious Commitment	.26*	.16	8.48***

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

satisfaction) decreases dramatically when the mediator (religious commitment) is present (e.g., its effect becomes nonsignificant), then the mediator may be accounting for the effects of the independent variable in question. To further examine mediation, the Sobel  $z$ -score was calculated using the MedGraph-I developed by Paul Jose (2003). Findings indicated that for the whole sample religious commitment level does not mediate the relationship between avoidance attachment and marital satisfaction (Sobel  $z$ -value = -3.36,  $p = .17$ ).

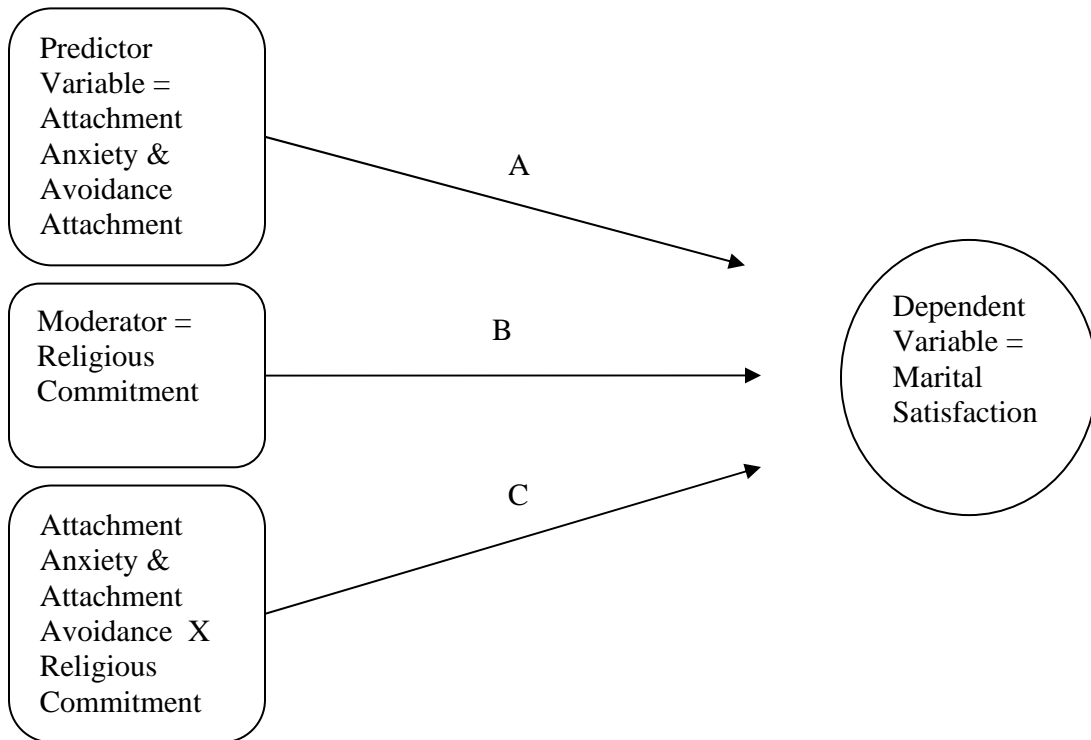
Analyses were then performed separately for husbands and wives. For husbands simple regressions indicated that ECR anxiety,  $F(1, 90) = 2.45, p = .12$ , and ECR avoidance,  $F(1, 90) = .55, p = .46$ , were not associated with religious commitment level. In addition, ECR anxiety,  $F(1, 90) = 3.05, p = .08$ , and ECR avoidance,  $F(1, 90) = 1.99, p = .16$ , were not predictive of marital satisfaction. However, higher religious commitment predicted greater marital satisfaction,  $F(1, 90) = 7.55, p < .01$ , accounting for 8% of variance. Multiple regression analyses were not performed for husbands because only one regression indicated significance.

For wives, results indicated that neither ECR anxiety nor avoidance was predictive of religious commitment,  $F(1, 90) = .25, p = .62$ , and  $F(1, 90) = 2.56, p = .11$ , respectively. However, ECR anxiety and avoidance significantly predicted wives' marital satisfaction,  $F(1, 90) = 6.99, p = .01$ , and  $F(1, 90) = 9.55, p < .01$ , respectively. Specifically, both attachment anxiety ( $\beta = -.27, p = .01$ ) and attachment avoidance ( $\beta = -.31, p < .01$ ) were significant negative predictors of marital satisfaction. The last simple regression indicated that for wives religious commitment level significantly and positively predicted marital satisfaction,  $F(1, 90) = 8.98, p < .01$ . Results of the full multiple regression analysis including attachment anxiety were significant,  $F(2, 89) = 8.14, p < .01$ , accounting for 15.5% of the variance. Specifically, attachment anxiety was negatively associated with marital wife satisfaction, while religious

commitment level was positively associated with marital satisfaction. Attachment anxiety ( $\beta = -.25, p = .01$ ) contributed 7.2% of the variance and religious commitment level ( $\beta = .29, p < .01$ ) contributed 8.3% of the variance. Results of the multiple regression analysis including attachment avoidance was significant as well,  $F(2, 89) = 8.48, p < .01$ , accounting for 16% of the variance. Specifically, attachment avoidance was negatively associated with marital satisfaction while religious commitment level was positively associated with marital satisfaction. Attachment avoidance ( $\beta = -.27, p < .01$ ) contributed 9.6% of the variance and religious commitment level ( $\beta = .26, p = .01$ ) contributed 6.4% of the variance. In summary, although some variables independently predicted marital satisfaction, results did not support Hypothesis 3 regarding the potential mediation effects of participants' degree of religious commitment.

#### *Hypothesis 4*

The fourth hypothesis predicted that the participant's degree of religious commitment would moderate the association between attachment style and marital satisfaction. As opposed to the mediation model where religiosity provided the primary link between attachment style and marital satisfaction, the moderation model proposes that attachment style and religiosity interact in the prediction of marital satisfaction. According to Baron and Kenny (1986) to test moderation three causal paths are tested: a) the impact of the predictor, b) the impact of the moderator, and c) the interaction or product of these two paths on the dependent variable. The moderator hypothesis is supported if the interaction path C is significant (see Figure 3). Paths A and/or B need not be significant. In testing moderation variables were centered to reduce multicollinearity among variables in the regression equation (Frazier, Tix & Barron, 2004). An analysis of the data indicated that the assumptions of regression analysis were not violated. There was no



*Figure 3.* When the relationships noted by path C is significant, the moderation hypothesis is supported. Paths A and B may, but do not need to, be significant.

violation of normality or problems with nonlinearity. Scatterplots indicated the assumption of homoscedasticity was met as well. Mahalanobis distances indicated three outliers for the ECR anxiety scale and two outliers for the ECR avoidance scale; these outliers were removed for the relevant analysis. Finally, no multicollinearity was evident as indicated by low variance inflation factors for each of the predictors.

To test Hypothesis 4, separate regressions were conducted for the ECR anxiety or avoidance scales as independent variables. In each analysis, RCI religious commitment score was the moderator and the products of either anxiety or avoidance and religious commitment were the interaction terms. The DAS marital satisfaction scale was the dependent

variable with partner satisfaction controlled for in Block 1 of the regression for the whole sample. Either ECR anxiety or ECR avoidance and RCI religious commitment were entered in Block 2, followed by the relevant interaction term of anxiety x religious commitment or avoidance x religious commitment in Block 3.

When interpreting moderation results, the unstandardized  $B$ 's were used rather than the standardized  $\beta$  regression coefficients; in equations that include interaction terms the  $\beta$  coefficients for the interaction terms are not properly standardized and thus are not interpretable (Frazier, Tix, & Barron, 2004). For the whole sample, results of the regression analysis performed on marital satisfaction with attachment anxiety as the independent variable and religious commitment as the moderator, were significant,  $F(4, 177) = 16.80, p < .001$ . The full model generated a multiple  $R$  of .53 and  $R$  Square of .28, indicating that four variables (partner satisfaction, participant attachment anxiety, participant religious commitment, and the interaction term) accounted for 28% of the variance of individual marital satisfaction. Upon further examination, two of the independent variables made a unique significant contribution to the equation: partner satisfaction ( $B = .44, p < .001$ ) and attachment anxiety ( $B = -.60, p = .001$ ). However, neither religious commitment nor the interaction term contributed significantly to marital satisfaction for the whole sample.

Results of the regression analysis performed on marital satisfaction with attachment avoidance as the independent variable and religious commitment as the moderator, were also significant,  $F(4, 176) = 12.14, p < .001$ . The full model generated a multiple  $R$  of .47 and  $R$  Square of .22, indicating that these four variables (partner satisfaction, participant attachment avoidance, participant religious commitment, and the interaction term) accounted for 22% of the variance of participant marital satisfaction. Upon further examination, only one of the

independent variables made a unique significant contribution to the equation: partner satisfaction ( $B = .45, p < .001$ ). Once again, neither religious commitment nor the interaction term contributed to marital satisfaction for the entire sample. Thus, the moderation effect predicted in Hypothesis 4 was not supported in the sample as a whole (see Table 9).

Analyses were also conducted separately for husbands and wives (see Table 10). For husbands, the regression analysis testing the interaction of attachment anxiety as the independent variable was significant,  $F(3, 88) = 4.77, p < .01$ . The model generated a multiple  $R$  of .37 and a  $R$  Square of .14, indicating that these three variables (participant attachment anxiety, participant religious commitment, and the interaction term) accounted for 14% of the variance of husband marital satisfaction. Upon further analysis the moderator and the interaction term reached significance: religious commitment ( $B = .05, p < .05$ ), and the product of attachment anxiety and religious commitment ( $B = -.06, p < .05$ ). The  $R$  Square Change associated with the interaction term was .04, indicating that the interaction between religious commitment and attachment anxiety explained an additional 4% of the variance of marital satisfaction above and beyond what was explained by the first order effects of anxious attachment and religious commitment. This finding provides partial support for Hypothesis 4 regarding the moderating role of religious commitment for attachment anxiety among husbands. To further explore the moderation effect, results were then analyzed by plotting the predicted values of marital satisfaction for each of the anxious attachment groups (low, medium, high), using ModGraph-I developed by Paul Jose (2003). Findings indicated that husbands with low levels of attachment anxiety and high levels of religiosity generally reported the highest level of marital satisfaction. Similarly, husbands with medium levels of attachment anxiety reported higher levels of marital satisfaction when religious commitment was greater. However, husbands with high levels of attachment anxiety had similar



Table 9

*Summary of Moderation: Religious Commitment Total (N = 182)*

Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	<i>F</i>
Step 1				.21	48.01***
Partner Satisfaction	.44***	.07	.40		
Step 2				.27	21.67***
ECR Anxiety	-.60**	.18	-.21		
Religious Commitment	.02	.01	.10		
Step 3				.28	16.80***
ECR Anxiety * Religious Commitment	-.02	.02	-.09		
<hr/>					
Whole Sample ( <i>n</i> = 181)					
Variable					
Step 1				.20	43.87***
Partner Satisfaction	.45***	.08	.41		
Step 2				.21	15.93***
ECR Avoidance	-.13	.23	-.04		
Religious Commitment	.03	.01	.12		
Step 3				.22	12.14***
ECR Avoidance * Religious Commitment	.02	.02	.06		

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 10

*Summary of Moderation: Religious Commitment Total (n = 92)*

Anxiety Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	<i>F</i>
Step 1					
ECR Anxiety					
Husbands	-.55	.34	-.16	.01	4.74*
Wives	-.59	.23	-.25	.16	8.14**
Religious Commitment					
Husbands	.05*	.02	.24	.01	
Wives	.06	.02	.29	.16	
Step 2					
ECR Anxiety * Religious Commitment					
Husbands	-.06*	.03	-.21	.14	4.77**
Wives	.00	.02	.00	.16	5.37**
Avoidance Variable	<i>B</i>	<i>SE B</i>	$\beta$	$R^2$	<i>F</i>
Step 1					
ECR Avoidance					
Husbands	-.44	.32	-.14	.31	4.57*
Wives	-.91*	.36	-.26	.16	8.48***
Religious Commitment					
Husbands	.06*	.02	.27	.31	
Wives	.05*	.02	.26	.16	
Step 2					
ECR Avoidance * Religious Commitment					
Husbands	.02	.02	.09	.32	3.30*
Wives	.00	.03	.02	.16	5.6**

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

marital satisfaction regardless of levels of religious commitment (see Figure 4).

Results of the regression analysis performed on husband marital satisfaction with attachment avoidance as the independent variable and religious commitment as the moderator, were significant,  $F(3, 88) = 3.30, p < .05$ . The model generated a multiple  $R$  of .32 and  $R$  Square of .10. This indicated that these three variables (participant attachment avoidance, participant religious commitment, and the interaction term) accounted for 10% of the variance of husband marital satisfaction. Upon further analysis, only one of the independent variables made a unique significant contribution to the equation: religious commitment ( $B = .06, p = .01$ ), which was positively associated with marital satisfaction. Neither attachment avoidance nor the interaction term contributed to marital satisfaction for husbands. Consequently, religious commitment does

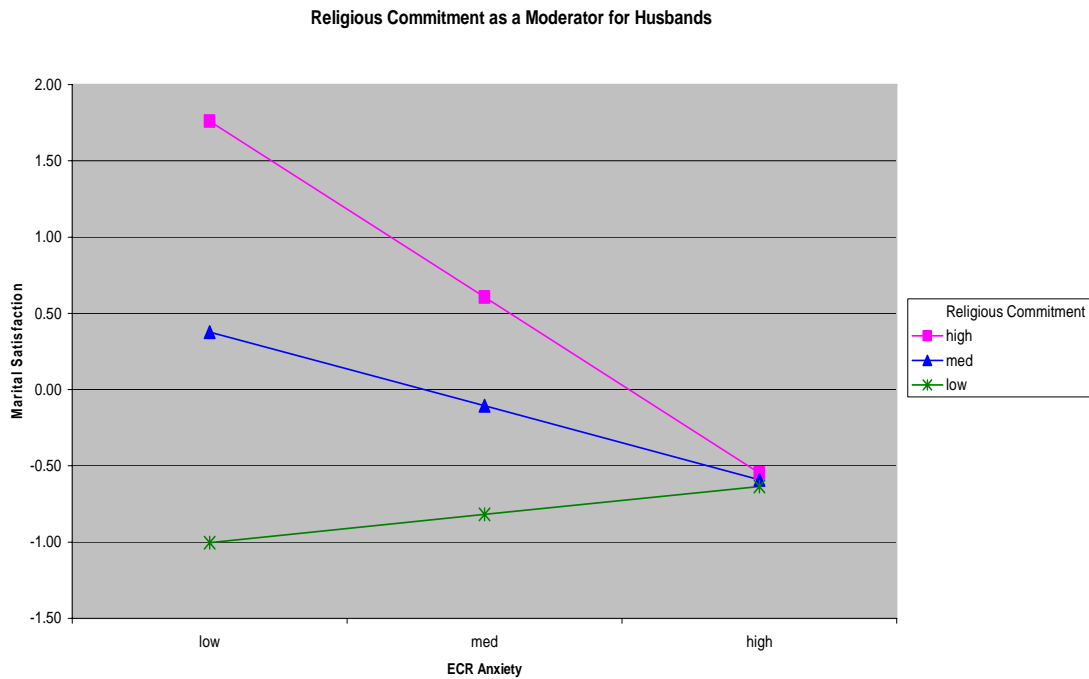


Figure 4. Plot of significant ECR anxiety X religious commitment interaction for husbands.

not appear to moderate the association between attachment avoidance and marital satisfaction among husbands.

Regression analysis performed on wife marital satisfaction with attachment anxiety as the independent variable and religious commitment as the moderator reached significance  $F(3, 88) = 5.37, p < .01$ . The model generated a multiple  $R$  of .39 and a  $R$  Square of .16, indicating that these three variables (participant attachment anxiety, participant religious commitment, and the interaction term) accounted for 16% of the variance of wife marital satisfaction. Further analysis revealed that the independent variables of religious commitment ( $B = .06, p < .01$ ) and attachment anxiety ( $B = -.59, p < .05$ ) made a significant contribution to the equation.

Specifically religious commitment was positively associated with marital satisfaction while attachment anxiety was negatively associated with marital satisfaction. No moderation was found for wives. Regression analysis performed on wife marital satisfaction with attachment avoidance as the independent variable and religious commitment as the moderator also reached significance  $F(3, 88) = 5.60, p < .01$ . The model generated a multiple  $R$  of .40 and a  $R$  Square of .16, indicating that these three variables accounted for 16% of the variance of wife marital satisfaction. Further analysis revealed that the independent variables of religious commitment ( $B = .05, p < .05$ ) and attachment avoidance ( $B = -.91, p < .05$ ) made a significant contribution to the equation. Results indicated hypothesis 4 was not supported and no moderation was found for wives.

### Exploratory Analyses

Due to the large proportion of participant marital satisfaction variance which was explained by partner marital satisfaction, exploratory analyses were conducted to see if partner satisfaction might mediate the relationship between religiosity and individual marital

satisfaction. Baron and Kenny's (1986) procedure for testing mediation effects was followed and analyses were run for the entire sample as well as husbands and wives separately. The model for the proposed mediation is presented in Figure 5 and results are presented in Table 11. For the entire sample, simple regressions indicated that religious commitment was significantly associated with both partner satisfaction,  $F(1, 182) = 14.63, p < .001$ , and individual marital satisfaction,  $F(1, 182) = 11.05, p < .01$ . In addition, partner satisfaction was significantly associated with individual marital satisfaction,  $F(1, 182) = 39.09, p < .001$ . In order to test for mediation, a full regression was then performed with religious commitment as the independent variable, marital satisfaction as the dependent variable and partner satisfaction as the mediator. Results for the full regression were significant,  $F(2, 181) = 21.73, p < .001$ . Specifically, in the

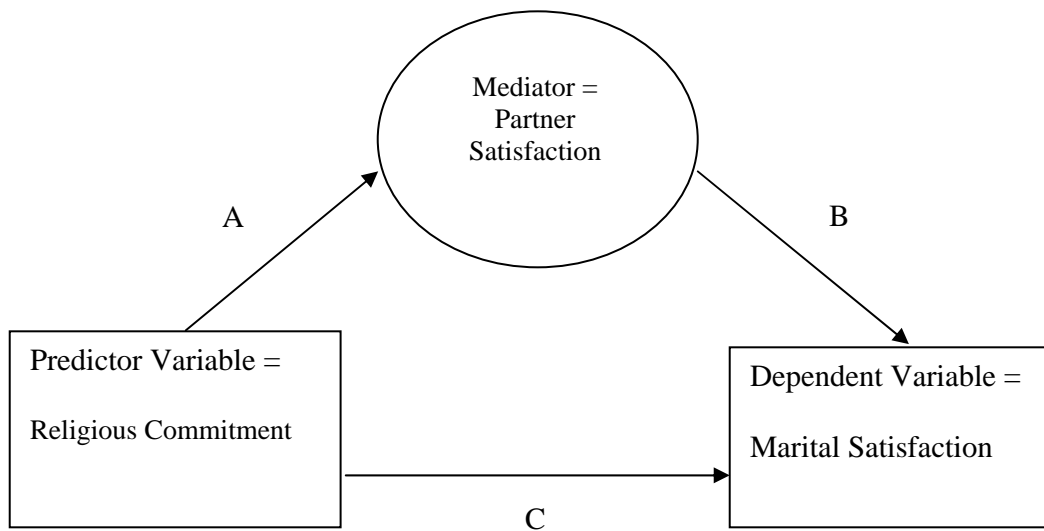


Figure 5. When the relationships noted by paths A and B are controlled, an attenuation of the effect denoted by path C should be evident.

Table 11

*Simple Regressions for Religious Commitment Total, Partner Satisfaction and Marital**Satisfaction*

WHOLE SAMPLE ( $N = 184$ )			
Predictor	Criterion	$\beta$	$R^2$
RCI	Partner Satisfaction	.27***	.07
	Marital Satisfaction	.24**	.06
Partner Satisfaction	Marital Satisfaction	.42***	.18
HUSBANDS ( $n = 92$ )			
Predictor	Criterion	$\beta$	$R^2$
RCI	Partner Satisfaction	.33**	.11
	Marital Satisfaction	.28**	.08
Partner Satisfaction	Marital Satisfaction	.61***	.37
WIVES ( $n = 92$ )			
Predictor	Criterion	$\beta$	$R^2$
RCI	Partner Satisfaction	.24*	.06
	Marital Satisfaction	.30**	.09
Partner Satisfaction	Marital Satisfaction	.75***	.56

\* $p < .05$ , \*\* $p < .01$ , \*\*\*  $p < .001$

1<sup>st</sup> step religious commitment ( $\beta = .24, p = .001$ ) made a significant contribution to the equation. In the 2<sup>nd</sup> step partner satisfaction ( $\beta = .38, p < .001$ ) contributed 13.6% of the variance, while religious commitment ( $\beta = .14, p = .05$ ) was barely significant (see Table 12). According to Kenny and Baron (1986) if the effect of the independent variable (religious commitment) on the dependent variable (marital satisfaction) decreases dramatically when the mediator is present (e.g., its effect becomes nonsignificant), then the mediator may be accounting for the effects of the independent variable in question. To further examine mediation, the Sobel *z*-score was calculated using the MedGraph-I developed by Paul Jose (2003). Findings indicated that for the whole sample partner satisfaction fully mediates the relationship between religious commitment and marital satisfaction (Sobel *z*-value = 3.14,  $p < .01$ ).

Results were then performed separately for husbands and wives. For husbands simple regressions indicated that religious commitment was significantly associated with both partner satisfaction,  $F(1, 182) = 11.16, p < .01$ , and individual marital satisfaction,  $F(1, 182) = 7.55, p < .01$ . In addition, partner satisfaction was significantly associated with individual marital satisfaction,  $F(1, 182) = 53.29, p < .001$ . In order to test for mediation, a full regression was then performed with husband religious commitment as the independent variable, husband marital satisfaction as the dependent variable and partner satisfaction as the mediator. Results for the full regression were significant,  $F(2, 181) = 27.08, p < .001$ . Specifically, in the 1<sup>st</sup> step religious commitment made a significant contribution to the equation ( $\beta = .28, p < .01$ ). In the 2<sup>nd</sup> step partner satisfaction ( $\beta = .58, p < .001$ ) contributed 30.1% of the variance, while

Table 12

*Multiple Regressions for Religious Commitment and Partner Satisfaction predicting Marital Satisfaction*

Step/Predictor	Final $\beta$	Step $R^2$	Step $F$
<b>WHOLE SAMPLE (<math>N = 184</math>)</b>			
1. Religious Commitment	.24**	.06	11.05**
2. Religious Commitment	.14*	.19	21.73***
Partner Satisfaction	.38***	.19	21.73***
<b>MEN (<math>n = 92</math>)</b>			
1. Husband Religious Commitment	.28**	.08	7.55**
2. Husband Religious Commitment	.09	.38	27.08***
Partner Satisfaction	.58***	.38	27.08***
<b>WOMEN (<math>n = 92</math>)</b>			
1. Wife Religious Commitment	.30**	.09	8.98**
2. Wife Religious Commitment	.13	.57	59.93***
2. Partner Satisfaction	.72***	.57	59.93***

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



religious commitment ( $\beta = .09, p = .34$ ) was reduced to nonsignificance. To further explore mediation effects, results were then analyzed using MedGraph-I (Jose, 2003). Findings indicated that for husbands, partner satisfaction fully mediates the relationship between religious commitment and marital satisfaction (Sobel  $z$ -value = 3.05,  $p < .01$ ). For wives simple regressions indicated that religious commitment was significantly associated with both partner satisfaction,  $F(1, 182) = 5.55, p < .05$ , and individual marital satisfaction,  $F(1, 182) = 8.98, p < .01$ . In addition, partner satisfaction was significantly associated with individual marital satisfaction,  $F(1, 182) = 113.77, p < .001$ . In order to test for mediation, a full regression was then performed with wife religious commitment as the independent variable, wife marital satisfaction as the dependent variable and partner satisfaction as the mediator. Results for the full regression were significant,  $F(2, 181) = 59.93, p < .001$ . Specifically, in the 1<sup>st</sup> step religious commitment made a significant contribution to the equation ( $\beta = .30, p < .01$ ). In the 2<sup>nd</sup> step partner satisfaction ( $\beta = .72, p < .001$ ) contributed 48.3% of the variance, while religious commitment ( $\beta = .13, p = .08$ ) was reduced to nonsignificance. MedGraph-I (Jose, 2003) was used to further explore mediation effects. Findings indicated that for wives, partner satisfaction fully mediates the relationship between religious commitment and marital satisfaction (Sobel  $z$ -value = 2.35,  $p < .05$ ).

## CHAPTER 5

### DISCUSSION

Although separate literatures have provided evidence linking marital quality to religiosity and adult attachment styles, little research has been conducted examining the combined contributions of these two variables to relationship satisfaction among married couples. The primary purpose of this study was to explore the associations of religious commitment and adult attachment style to marital satisfaction in a middle class sample of heterosexual couples married for less than 5 years. In partial support of the hypothesis that marital satisfaction would be higher for couples with congruent religious commitment, findings indicated that wives with religious commitment congruent to their husbands reported higher marital satisfaction than other wives. In addition, although mediation analyses investigating the possibility that religious commitment is a primary pathway linking secure attachment to marital satisfaction were nonsignificant, evidence emerged suggesting that religious commitment moderates the association between attachment anxiety and marital satisfaction among husbands. This chapter first addresses findings of preliminary analyses, followed by a discussion of the findings for the major hypotheses and exploratory analyses. Clinical and research implications of the findings are also explored.

#### Preliminary Analyses: Demographic Differences

Preliminary analyses indicated that religiosity was associated with age, with younger participants endorsing more religious commitment as compared to older participants. At first glance this finding appears to contradict much of the research on religiosity, which generally reports a positive correlation between age and religion (Bergan & McConatha, 2000; Newport, 2004; Peacock & Poloma, 1998). However, the current sample was limited to couples who were married from one to five years, without children living in the home. Ages of husbands ranged

from 21 to 50 years, with a mean age of 28.12 years ( $SD = 4.47$ ) and ages of wives ranged from 20 to 37 years with a mean age of 26.40 years ( $SD = 3.72$ ). Consequently, existing research on religiosity across the lifespan may not apply to the current sample, which differs considerably from samples used in previous studies. For example, several studies used much broader age ranges, representing emerging adulthood (e.g. 18 or 20) through very old age (e.g. 94 or 98) (McCullough & Laurenceau, 2005; Peacock & Poloma, 1998), and another study investigated religious trajectories over the life span using a sample of individuals 65 and older ( $M = 74.36$ ) (Intgersoll-Dayton, Krause, & Morgan, 2002).

Furthermore, recent research on religiosity has indicated that religious development follows three distinct trajectories throughout adulthood, which might account for current findings regarding age. McCullough, Enders, Brion and Jain (2005) investigated the religious development of individuals ranging in age from 24-40, who were identified during childhood as intellectually gifted for a study in 1940. McCullough et al.'s study sought to follow up the religiousness of these individuals' decades later in 1991. They found that 40% of the participants belonged to a high/increasing growth trajectory, wherein individuals who are highly religious in early adulthood become more religious with age; 41% belonged to a low/declining growth trajectory, consisting of initially low religious individuals who tend to become less religious as they age; and 19% belonged to a parabolic growth trajectory class, consisting of individuals who were somewhat religious in early adulthood, became more so in midlife, and then become less so through the remainder of the life course. It appears from this study that for most individuals religiosity is relatively stable in the high and low trajectories but for those who identify with moderate religiosity or the parabolic trajectory encounter significant changes in religiosity over the lifespan.

Another possible explanation for higher religiosity in the younger individuals of this sample may be related to developmental milestones and individuation in the context of the current socio-cultural milieu. With advances in technology, higher educational attainment and increased mobility, individuals often choose to start their careers and families several thousand miles from their families of origin. Younger couples in the process of separation and differentiation from their family of origin may experience feelings of loneliness or a sense of disconnect. For older couples, who may have already accomplished these developmental tasks, these feelings of loneliness and disconnect may not be as strong. It is possible that younger couples, who lack a sense of belonging, may seek connection through religious community or church membership. Indeed, research has suggested that church affiliation is an important type of support system that makes family relocations less stressful (Cornille, 1993).

Preliminary analyses also indicated that attachment avoidance was associated with gender, age and ethnic background. Specifically, male participants endorsed greater amounts of avoidance behaviors than females. Previous research regarding attachment and gender is inconsistent, with some studies indicating no gender differences (Ammaniti, van IJzendoorn, Speranza, & Tambelli, 2000; Hazan & Shaver, 1987; Schmitt et al., 2003; Shi, 2003), while other studies have indicated gender differences similar to current findings using various measures of attachment in different populations (Anders, 2000; Brennan, Clark, & Shaver, 1998; Riggs & Jacobvitz, 2002; Robin, 2003). Brennan, Clark, and Shaver (1998) reported that significantly more college men are dismissing in self-reported romantic attachment orientation than college women. Similarly, using the AAI with a middle-class married sample, Riggs and Jacobvitz (2002) found that husbands were more likely to be classified as dismissing, whereas wives were more likely to be classified as secure. In addition, Robin (2003) reported that self-reported

fearful attachment (high avoidance and high anxiety) was associated with male gender traits in a college population.

Preliminary analyses also indicated age differences in attachment avoidance, with older individuals endorsing more avoidance than younger individuals. The current sample consisted of young adults with a mean age of 27.26 years and ranging from 20-50 years of age. Historical cohort effects within this time frame may have contributed to these results. From an historical standpoint, 20 to 30 something year-old adults were raised in the socio-cultural context of the 1970s, 80s and 90s, which is far different from the 1950s and 60s society the older adults in this sample grew up in. This finding may reflect societal trends, which acknowledge the importance of self-exploration and interpersonal connection and their impact on emotional well being. Increasing emphasis on psychological health is reflected in findings that approximately 51.7 million visits were made to health professionals for mental health related concerns in the 2001-2002 calendar year (Schappert & Burt, 2006). Alternatively, previous research has indicated that attachment may change over the life span based on major life transitions and history of life events (Bowlby, 1980; Waters, Merrick, Treboux, Crowell & Albersheim, 2000). It is possible that by virtue of greater experience, older adults may have developed an avoidant attachment style as a coping mechanism with prior stressors.

Finally, preliminary analyses investigating attachment avoidance indicated differences in ethnic background. Specifically, individuals belonging to minority groups reported more avoidant attachment behaviors than their Caucasian counterparts. Although this finding should be interpreted with caution due to the small number of minority participants ( $n = 19$ ), results are consistent with recent research by Lopez, Melendez, and Rice (2000), who found that Hispanic/Latino respondents reported greater attachment avoidance than their Caucasian

counterparts. An important consideration in the interpretation of these findings is the acculturation process of individuals within a Caucasian male-dominated society. Because of the adversity that exists for individuals of color (e.g., prejudice, discrimination, poverty, violence, drug abuse, premarital pregnancy, disparities in mental health services etc.), it is likely that minorities have higher levels of distrust and may use avoidance as a protective coping mechanism, especially when interacting with the dominant culture. According to several stage theories of racial identity (Cross, 1971; Sodowsky, Kwan & Pannu, 1995; Sue & Sue, 1999) individuals will initially desire to join or assimilate with the dominant group. However, following a period of confusion regarding the dominant culture, a minority group member may discover that assimilation into the dominant group is not possible, resulting in distrust and marginalization. Although the final stages involve gaining an understanding of self and resolution, the distrust of others due to a history of societal maltreatment is theoretically consonant with the negative model of other associated with attachment avoidance. However, due to the small proportion of respondents who identified themselves as minorities in this study, generalizations regarding ethnicity can not be made.

### Religious Commitment and Marital Satisfaction

Analyses investigating religious commitment and marital satisfaction in the total sample indicated that couples with congruent religious commitment levels reported higher marital satisfaction than couples with discrepant religious commitment. This is consistent with other research examining religious congruence showing that the greater the religious congruence in the marital relationship the greater the marital satisfaction (Chintz, 2001; Heaton & Pratt, 1990, Kohn, 2001). Watson et al.'s (2004) results showed that there was a strong similarity in age, religiousness and political orientation of individuals within newlywed dyads married less than

two years. The descriptive characteristics of this sample bolster the idea that individuals are attracted to those who are religiously similar to themselves, as only 19 couples in this study reported a large discrepancy in religious commitment, while 73 couples reported congruent religious commitment. Current findings suggest that people may choose not to enter into a marital relationship with someone who holds vastly differing values regarding religion, and this appears to be especially true for women in the current study.

Wives with congruent religious commitment reported higher marital satisfaction than wives with discrepant religious commitment. Interestingly, this was not found to be true in regards to husband marital satisfaction. These findings suggest that similarity of beliefs plays a more direct role in marital satisfaction for wives than for husbands. Previous research findings regarding gender differences related to religion are mixed. For example, in a newlywed sample Watson et al. (2004) found that women tend to place greater importance on close personal relationships (i.e., love family life, spending time together, relationships/friendships) as compared to husbands. Wives also more highly valued self-respect, equality, independence and religion, while husbands reported wealth as more important. However, other studies found no gender differences related to religious beliefs among unmarried college men and women (Amador, Charles, Tait & Helm, 2005; Shackelford, Schmitt, & Buss, 2004 ). It is possible that different sample make-up contributed to these mixed findings. Based on previous and current findings, gender differences related to religious values may be specific to married couples who are more likely than college students to focus on the importance of establishing a cohesive belief/values system in their new family. Thus, current findings regarding religious congruence may not apply to other populations.

Exploratory analyses revealed that not only is religious commitment congruency related

to marital satisfaction but individual level of religious commitment is associated with marital satisfaction as well. Results indicated that couples who reported high levels of religiosity endorsed significantly higher levels of marital satisfaction than both the moderate and low religious couples. This finding bolsters early research which found this direct relationship between the level of religiosity and marital satisfaction (Craddock, 1991; Flynn, 1987; Heaton & Pratt, 1990; Snow & Compton, 1996). Highly religious individuals may use religion as a coping strategy during times of stress which may provide comfort and in turn affect marital satisfaction. Interestingly, unlike religious congruency, which was only significant for women, both husbands and wives with high levels of religiosity reported higher levels of marital satisfaction as compared to both the moderate and low religious groups. Similarly, Barton (2003) found the gender was not differentially related to religious coping. However, Rosen-Grandon (1998) found that in contrast to highly religious women, men who highly valued religiosity and are satisfied with the level of religiosity in their relationship are not necessarily satisfied in their marital relationship.

Overall, current findings support the notion that religiosity is related to marital satisfaction. Specifically, both husbands and wives with high levels of religious commitment endorsed higher levels of marital satisfaction as compared to their less religious counterparts. In addition, congruency in religious commitment appears to be particularly important for wives, as wives with religious commitment congruent to their husbands reported higher marital satisfaction than wives with discrepant religious commitment from their partner. Contrary to predictions, this finding did not hold true for husbands. Given the mixed findings of the current study and other recent studies, more research is needed to explore potential gender differences in diverse samples.



## Religiosity as a Mediator or Moderator?

In the current study, we used both mediation and moderation analyses to analyze indirect relationships between attachment style, religious commitment and marital satisfaction. First we explored whether religious commitment mediates the relationship between attachment and marital satisfaction to determine whether religious commitment can explain why secure attachment has a positive relationship on marital satisfaction. Contrary to hypotheses, results indicated that attachment anxiety was not directly associated with religious commitment and thus mediation was not supported. However, attachment avoidance was a significant negative predictor of religious commitment for the entire sample. This result partially confirms previous research findings (Byrd & Boe, 2001; Granqvist, 1998; Granqvist & Hagekull, 1999; Granqvist & Hagekull, 2004; Kirkpatrick, 1992; Kirkpatrick & Shaver, 1990), which indicated that attachment style is associated with religiosity. Differences between the current study and previous studies may reflect methodological differences in statistical analyses. Most of the studies referenced above collapsed anxious attachment and avoidance attachment into one category of insecure attachment, thus distinctions between anxious attachment and avoidance attachment were not made. Another difference between the current study and former studies include the sample, as previous studies used primarily a younger unmarried undergraduate population, whereas the current study used an older (Mean Age = 27.26) community sample of married couples. Although a direct link between insecure attachment and religiosity may exist among young unmarried adults who are still exploring their identities, it is possible that the relationship between religiosity and attachment may become more indirect as individuals age and develop mature internal representations of self and others within committed relationships. It is also possible that other factors related to attachment play a larger role in the relationship between

attachment and marital satisfaction. In addition, many of the studies investigating religiosity and attachment (Granqvist, 1998; Granqvist, 2003; Granqvist & Hagekull, 1999; Kirkpatrick, 1997; Kirkpatrick & Shaver, 1990) have included retrospective measures of childhood attachment, which differs considerably from adult romantic attachment examined in the current study.

To further investigate the possibility of mediation, full regression analyses were conducted using avoidance attachment to determine if religious commitment can explain the positive relationship between secure attachment (lack of avoidance) and marital satisfaction. Results of the Sobel z-value indicated that no mediation exists. Indeed, analyses revealed that partner satisfaction is a much larger contributor to individual marital satisfaction than either attachment or religious commitment. In fact 55.8% of wife marital satisfaction was accounted for by partner satisfaction and 37.2% of husband marital satisfaction was accounted for by wife satisfaction.

Moderation analyses were then conducted to test the compensatory hypothesis, which suggests that insecurely attached individuals use God or religion as an attachment figure to compensate for the lack of attachment in their relationship with their significant other (Kirkpatrick, 1992). While mediation addresses how or why one variable is related to another, moderation addresses when or for whom a predictor is more strongly related to an outcome (Frazier, Tix & Barron, 2004). Main effects of the analyses for the total sample revealed that attachment anxiety was inversely related to marital satisfaction. This result is consistent with previous research demonstrating associations between insecure attachment and lower levels of marital satisfaction (Banse, 2004; Foreness, 2003; Fuller & Fincham, 1995; Maclean, 2002). No direct association, however, emerged between attachment avoidance and marital satisfaction for the entire sample. Recent research (Marques, 2006) investigating the role of attachment style and

coping strategies found that preoccupied or anxiously attached individuals had a greater tendency to use confrontive coping (i.e. aggressive efforts) to change a stressful situation while avoidant or dismissing individuals participated more in distancing coping (i.e. cognitive efforts) to detach oneself and minimize the significance of the stressful situation. Additionally, Gottman and Levenson (2002) examined a two-factor model predicting divorce. They found that early divorce can be predicted by high amounts of unregulated negative affect while late divorce can be predicted by high levels of unregulated neutral affect or affectless in marriage. Due to the propensity for more aggressive behaviors and unregulated negative affect, anxious attachment appears to have a more direct negative association with marital satisfaction than avoidance attachment. It may be that the effects of avoidance on marital satisfaction develop slowly over time and the consequences are not fully seen until much later in the marital relationship. Moreover, results of the entire sample indicated that religious commitment was not associated with marital satisfaction and did not act as a moderator in the relationship between either attachment anxiety or avoidance and marital satisfaction.

In contrast to findings for the whole sample, results from analyses conducted separately by gender indicated that for both husbands and wives there was a direct relationship between religiosity and marital satisfaction. These findings are consistent with previous research (Craddock, 1991; Flynn, 1987; Heaton & Pratt, 1990; Snow & Compton, 1996) and results from hypothesis 1 testing religious discrepancy and religious commitment level. In understanding the differences between the whole sample analyses and individual analyses, it is likely that results regarding a direct relationship between religious commitment and marital satisfaction for the whole sample were obscured when partner satisfaction was controlled for in Step 1 of the multiple regression. In individual analyses, partner satisfaction was not controlled for, as the unit

of analyses was the individual. Surprisingly, to date there is a paucity of research which has specifically investigated the association between individual marital satisfaction and partner satisfaction. In general, research regarding individual and partner effects on marital satisfaction; have found individual variables to be more strongly associated with marital satisfaction than partner variables. For example, Whisman, Uebelacker, and Weinstock (2004) found that marital satisfaction was more strongly associated with one's own level of psychopathology (e.g., anxiety and depression) in comparison with the level of psychopathology of the partner, while Robins, Caspi and Terrie (2000) found that marital satisfaction was more strongly associated with one's own personality than one's partner. However, the presence of partner significance in these studies suggests that there are a number of ways in which other variables influence individual level of satisfaction. In addition Whisman, Uebelacker, and Weinstock (2004) found that greater deficits in couple functioning (e.g., depression) had a more significant impact on partner satisfaction than lesser deficits (e.g., anxiety). It may be that in the study of religious commitment and marital satisfaction, partner satisfaction is a more powerful predictor of individual satisfaction than religious commitment and that partner satisfaction may be a better indicator of general couple functioning, thus having a greater association with marital satisfaction. To date there are few studies which specifically address individual and partner effects of religiosity on marital satisfaction (Rosen-Grandon, 1998; Watosn et al., 2004). Rather, much of the current research has investigated gender differences at the individual level when investigating religious commitment's association with marital satisfaction (Edgell, Becker & Hofmeister, 2001; Heaton & Pratt, 1990; Kvale & Ferrell, 1988; Miller & Hoffman, 1995).

Results also indicated that, for husbands, there was no direct association between attachment anxiety or attachment avoidance and marital satisfaction. In contrast, analyses

indicated that both attachment avoidance and attachment anxiety are associated with marital satisfaction for wives. These findings are consistent with earlier research by Fuller and Fincham (1995) whose findings indicated that wives' marital satisfaction was positively correlated with secure attachment and negatively correlated with avoidant attachment scores. However, no direct association between attachment and husbands' marital satisfaction was found. Fuller and Fincham (1995) also investigated attachment and affect regulation, finding that secure wives reported fewer anxiety symptoms than both avoidant and ambivalent wives. This finding, however, was not replicated for husbands. There appears to be greater variability in husband anxiety symptoms across the attachment types and it may be that during times of stress husbands' attachment style is less predictive of general anxiety than for wives'. In addition both the current study and the Fuller and Fincham study used a dimensional measure of attachment which has been shown to be a more robust measure in assessing attachment. Taken together, these results suggest that attachment style plays a more direct role in marital satisfaction for women than for men. It appears that feelings of insecurity wives feel within themselves may directly affect the feelings of security and satisfaction within the marital relationship. However, other research has shown a direct relationship between attachment and marital satisfaction for both husbands' and wives'. For example, Barse (2004) found that for both husbands' and wives' the secure attachment type was associated with higher marital satisfaction while the fearful and preoccupied types were negatively associated with marital satisfaction. Due to the inconsistent findings regarding the role gender plays in the relationship between attachment and marital satisfaction, it would be helpful to replicate direct associations and further investigate possible indirect associations in the relationship between attachment and marital satisfaction.

Among men in this sample religiosity moderated the association between anxious

attachment and marital satisfaction, though it did not moderate the association between avoidant attachment and marital satisfaction. Results indicated that for husbands the relationship between anxious attachment and marital satisfaction may differ at different levels of religious commitment (i.e. this is the definition of an interaction). In other words, religious commitment may more positively affect marital satisfaction under conditions of high religious commitment as compared to conditions of low religious commitment. However, this interaction effect was limited to the moderate and low levels of anxious attachment in husbands. Follow-up analyses plotting the means for marital satisfaction and attachment anxiety indicated that at high levels of anxious attachment no moderation occurs. In fact, marital satisfaction remains the same for husbands with high levels of attachment anxiety, regardless of whether husbands endorse high, moderate, or low levels of religious commitment. Thus it appears that religious commitment may contribute to increased marital satisfaction among secure or moderately secure men. However, findings do not fully support the compensatory hypothesis because religious commitment does not have an ameliorating effect for insecure men with high levels of attachment anxiety. This finding suggests that highly anxious men may be more prone to marital dissatisfaction regardless of religious commitment levels.

Contrary to the previous results, analyses indicate that for men, religiosity does not moderate the relationship between attachment avoidance and marital satisfaction. It is possible that individuals who are more avoidantly attached choose not to seek out religion. Researchers investigating religion and attachment have generally conceptualized God as an attachment figure (Brigegard & Granqvist, 2004; Byrd & Boe, 2004; Granqvist, 1998; Granqvist & Hagekull, 1999; Granqvist & Hagekull, 2003; Kirkpatrick, 1992; Kirkpatrick & Shavert, 1990; Sim & Loh, 2003; Tenelshof, 2000). Recent research by McDonald, Beck, Allison and Norsworthy (2005)

confirmed this conceptualization. The researchers found that individuals who reported coming from homes that were emotionally cold (consistent with the dismissing attachment style) exhibited higher levels of avoidance or intimacy in their relationship to God and individuals reporting coming from a overprotective, rigid or authoritarian home (consistent with the fearful attachment style) were associated with higher levels of both avoidance of intimacy and anxiety over lovability in relationship to God. Given Bartholomew and Horowitz's (1991) description of the dismissing avoidant type as having a positive view of self while also having a negative view of others, it is not surprising that avoidant individuals would view God negatively and have little use for religion. Consequently, because avoidant individuals are less likely to participate in religion, religious commitment would be less likely to interact with attachment avoidance in relation to marital satisfaction.

Interestingly, for wives, religiosity does not moderate the relationship between attachment and marital satisfaction. While both religious commitment and attachment style are significantly related to women's marital satisfaction, they did not interact in any systematic way. This finding may be due to the greater importance women generally place on both religiosity and personal relationships (Watson et al., 2004), such that each independently contributes to women's marital satisfaction.

#### Exploratory Analyses: Partner Satisfaction as a Mediator

Exploratory analyses investigating the possibility of partner satisfaction mediating the relationship between religious commitment and marital satisfaction was confirmed for the whole sample, as well as for both husbands and wives. It is possible that religious commitment makes a significant contribution to partner satisfaction. In fact statistical analyses show that for the current sample 11% of wife marital satisfaction is accounted for by husband religious

commitment and 5.8% of husband marital satisfaction is accounted for by wife religious commitment. This religious commitment may be interpreted by the spouse as commitment to the marital relationship and the nuclear family. It is likely that participating in religious activity, especially with one's spouse, may allow individuals to feel closer to one another thus is indirectly associated with marital satisfaction. A recent historical overview of the criteria for marital and family success has shown that both intimacy and religion are two characteristics of successful long-term marriages (Billingsley et al., 2005). In addition, religious research has shown that intimacy with God contributes to greater sense of overall well-being (Wong-McDonald & Gorsuch, 2004).

In summary, analyses testing the possible indirect relationship between attachment and marital satisfaction indicated no support for mediation. It appears that religious commitment is unable to explain why secure attachment is positively associated with marital satisfaction. However, partial support for moderation was found for husbands. Moderation analyses also indicated that attachment anxiety and attachment avoidance are differentially associated with marital satisfaction by gender. For men, attachment anxiety plays a more indirect role in marital satisfaction in that it interacts with religious commitment. However, for women, it appears that both attachment anxiety and attachment avoidance play a more direct role in relation to marital satisfaction. Finally, exploratory analyses revealed that partner satisfaction is a large contributor to the overall variance in individual marital satisfaction and mediates the relationship between religious commitment and marital satisfaction.

### Strengths and Limitations

The use of couple versus individual data is a strength of this study. Couple data allows for comparisons not only between genders, but also between couples. The clearly defined



dimension of religious commitment and the use of psychometrically sound instruments are other strengths of this study. Limitations of this study include various aspects of the sample and experimental procedures. First, the small sample size of discrepant couples makes any conclusions tentative at best. In addition, the sample was predominantly Caucasian, which renders findings regarding ethnic minority status inconclusive and generalization to other ethnic groups inadvisable. The high educational attainment of the sample may have influenced findings as education often positively affects the psychological and physical health of individuals (Jones, Livson & Peskin, 2005; Kubzansky, Berkman, Glass, & Seeman, 1998). Research has indicated that educational attainment and current work experiences positively affect marital stability (Tzeng & Mare, 1995).

An additional limitation of this study was the use of volunteers as participants. Those who volunteer tend to be psychologically healthier than nonparticipants (Waite & Hillbrand, 1998), which may have skewed the results of marital satisfaction and reported attachment style for this sample. Another limitation in the experimental procedures is the use of self-report instruments, which can lead to biased responding.

### Future Research

The field of psychology has come full circle in terms of its interest in religion and spirituality and the influence of these factors on mental health. Renewed interest in the field of religiosity and spirituality has led researchers to investigate a multitude of factors related to these two domains. Future research needs to clearly define religiosity and its inclusive elements, such as prayer, church attendance, religious affiliation, religious orientation, and religious commitment. As a relatively new term in the psychological literature, religious commitment also requires a universal definition.

Most of the current research on religious commitment has investigated associations between religious commitment and one's physical and psychological health (Baetz, Larson, Marcous, Bowen, & Griffin, 2002; Murrell, 2004; Prasad, 2003). Further research is needed on the role of religious commitment within the marital relationship. Future research on discrepant religious commitment within marriages should include qualitative measures, in addition to quantitative methods. For example, personal interviews with couples would be useful to investigate the amount of marital distress couples report due to discrepant religious commitment levels. For couples who report little marital distress as a result of differing religious commitment levels, an investigation of the factors which couples identify as contributing to low distress would also be important.

Additional research is also needed to explore religious commitment in association with attachment style. Future research might examine specific aspects of religiosity that are related to romantic attachment style, especially for secure-insecure dyads. Finally, the current study warrants replication with similar samples as well as samples characterized by more diversity in terms of ethnicity, age and duration of marriage.

### Clinical Implications

Results of the present research have important implications for three developmental transitions within the marital relationship: cohabitating/premarital couples, newlywed couples, and couples with children. Results from this study of religious commitment discrepancies and marital satisfaction are beneficial to premarital counselors, marital counselors, and clergy as they guide couples through the marital process. The low number of couples with discrepant religious commitment levels suggests that religious homogamy in religious commitment is an important factor in mate selection. Results also indicate that for those couples who do differ in religious

commitment levels, marital satisfaction can still be achieved for husbands. However, results indicate wives tend to place a higher emphasis on similar religious commitment within the marital relationship and this congruency is directly associated with wife marital satisfaction. Understanding the process of how couples with discrepant religious commitment levels achieve marital satisfaction, would be extremely beneficial for those who work with newlywed and married couples with children. Premarital counselors, marital counselors, and clergy could then teach this process of negotiation as they seek to help couples achieve marital satisfaction.

Results of the current study highlight the use of religion as an important component in individuals' life and the direct association to marital satisfaction. Results regarding religiosity as a compensatory tool can be used by counselors and clergy as one method for helping married couples in which insecure attachment is affecting satisfaction within the marriage. Specifically, if insecure attachment presents in an anxious form, religion may be a useful tool for reducing husband's attachment anxiety within the marital relationship. However, results from this study would indicate that for husbands with high levels of anxiety attachment, religion or religious coping may not be effective. It may be that other behavioral coping strategies are preferable. In addition, results of the current study indicate that the use of religion as a coping strategy may not be useful for women and husbands who endorse attachment avoidance. Future research should be conducted to address how couples might cope with attachment avoidance within the marital relationship. For those individuals who place a priority on faith in their lives the role of religion should be addressed by counselors and clergy within the counseling process.

### Conclusion

In conclusion, results of the current study corroborate some previous research while contradicting others. Specifically, results from this study regarding the direct relationship

between religious commitment and marital satisfaction were consistent with previous findings. Results revealed that religious commitment is an important factor in marital satisfaction, both congruency in religious commitment and level of religious commitment. Follow-up analyses revealed that religious congruence is significantly related to higher marital satisfaction for wives but not for husbands. High religious commitment level was associated with higher marital satisfaction as compared to moderate or low religious commitment and this finding was true for both husbands and wives.

Contrary to previous findings, results indicated that religiosity was not directly associated with attachment style. This result contradicts previous research findings (Byrd & Boe, 2001; Granqvist, 1998; Granqvist & Hagekull, 1999; Granqvist & Hagekull, 2004; Kirkpatrick, 1992; Kirkpatrick & Shaver, 1990), which indicated that attachment style is associated with religiosity. However previous research used younger college samples. Therefore, it is possible that the relationship between religiosity and attachment may become more indirect as individuals age and develop mature internal representations of self and others within committed relationships. Future research investigating the variables of attachment and religiosity should continue to focus on married couples across the life span.

The exploration of the indirect association of religious commitment on attachment and marital satisfaction has to date been unexplored. Results revealed that religiosity does not mediate this relationship but does moderate the relationship for husbands. Specifically, religious commitment interacts with attachment anxiety in contributing to marital satisfaction for men, who have low and moderate levels of anxiety. These findings are an important contribution to the existing literature and future research should continue to examine the interrelationships between attachment, religiosity and marital satisfaction.

APPENDIX  
RESEARCH CONSENT FORM

**UNIVERSITY OF NORTH TEXAS COMMITTEE FOR  
THE PROTECTION OF HUMAN SUBJECTS**

**RESEARCH CONSENT FORM**

Date:

Title of Study: Psychological factors related to early couple functioning

Principal Investigator: Shelley A. Riggs, Ph.D. , Assistant Professor  
University of North Texas  
Department of Psychology

940-565-2672  
riggs@unt.edu

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the proposed procedures. It describes the procedures, benefits, risks, and discomforts of the study. It also describes your right to withdraw from the study at any time. It is important for you to understand that no guarantees or assurances can be made as to the results of the study.

**Purpose of the study and how long it will last:**

The purpose of this research is to examine the relative importance of various individual factors to aspects of couple functioning. If you agree to participate by signing this form, you will complete a battery of paper-and-pencil instruments. The data collection will take approximately 60-90 minutes.

**Description of the study including the procedures to be used:**

You have chosen to participate in a study investigating individual and couple functioning. You will review the purpose and procedures of the study and have the opportunity to ask questions about the study and your participation. After the consent forms are signed, you and your partner will independently complete the questionnaires. After all the data have been collected, you may request a copy of the consent form and a list of counseling resources.

**Description of procedures/elements that may result in discomfort or inconvenience:**

Although not expected, it is possible that you may experience some discomfort as a result of the questions asked in the paper-and-pencil instruments. If excessive discomfort is experienced when completing the paper-and-pencil instruments, you may choose to stop answering questions at any time without penalty. The researchers will try to prevent any problem that could happen because of this research, but the study may involve risks to the participant which are currently

**Research Consent Form -Page 1 of 3 \_\_\_\_\_ Participant's initials**

**UNIVERSITY OF NORTH TEXAS  
RESEARCH CONSENT FORM (Continued)**

unforeseeable. Let the researchers know if there is a problem and they will help you. However, UNT does not provide medical services or financial assistance for injuries that might happen because you are taking part in this research. If you feel the need to discuss your discomfort with a counselor, the researcher will provide you with a list of counseling resources in the community.

**Benefits to the subjects or others:**

A direct benefit to you is that at the completion of the study a summary of the results will be mailed to you upon request. The indirect benefit of participating in the study will be your contribution to ongoing efforts to learn more about the individual psychological factors that are related to couple adjustment and/or dissolution. The knowledge gained in this study will enhance our understanding of factors that contribute to couple functioning and dysfunction and will offer practical information to marriage and family counselors that can usefully be applied to clinical intervention and prevention efforts.

**Confidentiality of research records:**

All information will be kept confidential by the investigators to the extent that is allowed by law. A number of steps will be taken to minimize the risk of loss of confidentiality. Codes, rather than names, will be used on all instruments and in the final report. You should not write your name anywhere on any of the questionnaires. Only the principal investigator and research assistants will have access to the questionnaires. The consent forms will be kept separate from the self-report instruments, which will be stored in a locked filing cabinet in the principal investigator's laboratory until October 2010. At that time, all paper-and-pencil instruments will be shredded. The data will be used for training and research purposes only. It is anticipated that the results of the study will be presented at conferences and published in a psychological journal and/or book. Names and other identifying information will not be included in any presentation or publication.

**Review for protection of participants:**

This research study has been reviewed and approved by the UNT Committee for the Protection of Human Subjects (940) 565-3940.

RESEARCH SUBJECTS' RIGHTS: I have read or have had read to me all of the above.

The research assistant has explained the study to me and answered all of my questions. I have been told the risks or discomforts and possible benefits of the study.

Research Consent Form -Page 2 of 3 \_\_\_\_\_ Participant's initials

**UNIVERSITY OF NORTH TEXAS  
RESEARCH CONSENT FORM (Continued)**

I understand that I do not have to take part in this study, and my refusal to participate or my decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop my participation at any time.

In case there are problems or questions, I have been told I can call or email Dr. Shelley Riggs, whose contact information appears at the top of this form.

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I have been told I will receive a copy of this consent form.

\_\_\_\_\_  
Subject's Signature Date

**For the Investigator or Designee:**

I certify that I have reviewed the contents of this form with the person signing above, who, in my opinion, understood the explanation. I have explained the known benefits and risks of the research.

\_\_\_\_\_  
Researcher's Signature Date

Check here if you give your permission to be contacted by the Principal Investigator for a follow-up study related to couple relationship development and functioning. List below a permanent address and phone number where you might be reached in approximately 2 years.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Check here if you would like to receive a summary of the results of this study and list below the address to which the summary should be sent

\_\_\_\_\_  
\_\_\_\_\_

Check here if you do NOT wish to receive a copy of the results of the study.

**Research Consent Form -Page 3 of 3**

APPROVED BY THE UNT IRB  
FROM 8/16/04 TO 8/15/05  
*[Signature]*



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