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FACTORS THAT INFLUENCE THE ASSOCIATION BETWEEN
ADULT ATTACHMENT AND MARITAL SATISFACTION

by

Daniel LeRoy Hatch

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

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ABSTRACT

Factors that Influence the Association Between
Adult Attachment and Marital Satisfaction

by

Daniel LeRoy Hatch, Doctor of Philosophy

Utah State University, 2008

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Department: Psychology

Adult attachment theory offers a promising conceptual framework for understanding the psychological and contextual factors that contribute to marital satisfaction. A consistent association has been found between adult attachment dimensions and marital satisfaction. The current study examined several mediating mechanisms that may explain the relationship between adult attachment dimensions and marital satisfaction. Specifically, relationship expectations, four types of responses to accommodative dilemmas (exit, neglect, voice, and loyalty), and three forms of empathy (empathic concern, perspective taking, empathic personal distress) were hypothesized to mediate the relationship between adult attachment and marital satisfaction.

Self-report data were collected from both partners of 193 heterosexual, married couples. The attachment dimension of avoidance for husbands and wives was consistently associated with each couple member's respective marital satisfaction. Attachment anxiety was never directly associated with either husbands' or wives' marital

satisfaction. Wives' marital satisfaction was explained by their own relationship expectations and exit responses. Additionally, wives' marital satisfaction was explained by their husband's relationship expectations, exit responses, empathic perspective taking, and loyalty responses. Husbands' marital satisfaction was explained by their own relationship expectations, exit responses, neglect responses, voice responses, loyalty responses, and empathic perspective taking. Results are discussed in light of current theories of adult attachment and marital satisfaction.

(169 pages)

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Daniel LeRoy Hatch

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CHAPTER I

INTRODUCTION

Healthy marriage has been associated with many positive physical health outcomes. For instance, married men and women are less likely than singles to suffer from long-term chronic illnesses or disabilities (Waite & Gallagher, 2000). In addition, marriage has been associated with positive mental health outcomes. For example, Marks and Lambert (1998) found that married individuals reported better overall well-being compared to singles. While married individuals exhibit better health than the unmarried, it is not the case that any marriage is better than no marriage at all when it comes to these health benefits (Umberson, Williams, Powers, Liu, & Needham, 2006; Williams, 2003). Indeed a great deal of research has found that marital discord, divorce, or separation leads to very poor psychological health and ultimately poor physical health outcomes (e.g., Horwitz, White, & Howell-White 1996; Waite & Gallagher). Thus, having a satisfying marriage is essential to receive the benefits that have been associated with marriage.

Adult attachment theory offers a promising conceptual framework for understanding the psychological and contextual factors that contribute to marital satisfaction (Collins & Read, 1990; Hazan & Shaver, 1987). Attachment research has established an association between adult attachment and marital satisfaction (Kobak & Hazan, 1991; Murray, Homes, & Griffin, 2000; Senchak & Leonard, 1992). Previous research has found a consistent, strong association between insecure attachment characteristics and poorer marital satisfaction, while slightly weaker associations have

consistently linked secure attachment characteristics and greater marital satisfaction (Carnelly, Pietromonaco, & Jaffee, 1994; Gerlsma, Buunk, & Mutsaers, 1996; Hollist, 2005; Lussier, Sabourin, & Turgeon, 1997; Meyers & Landsberger, 2002).

Relatively few studies have examined factors that influence the relation between adult attachment style and marital satisfaction. Researchers have found that factors such as negative affectivity, positive and negative emotion regulation, psychological distress, depression, and perceived support all impact the relationship between adult attachment and marital satisfaction (Carnelly et al., 1994; Gerlsma et al., 1996; Hollist, 2005; Lussier et al., 1997; Meyers & Landsberger, 2002). However, a broader understanding of the positive factors that play a role in the relationship between adult attachment and marital satisfaction, instead of just factors that threaten this relationship, could more clearly illuminate the important factors necessary to realize a satisfying relationship and further clarify the mechanics of the relationship between adult attachment and marital satisfaction.

Based on past research, the current study examines indirect links between adult attachment and marital satisfaction, with a range of positive or prorelationship behaviors and attitudes as intermediary variables in the relationship. Past research has examined negative behaviors or relationship characteristics that may diminish or hinder the theorized protective role of secure attachment in relationship development. However, few studies have looked at factors associated with healthy relationships, or positive behaviors in which couples engage that are associated with increased marital satisfaction and may clarify the link between attachment and marital outcomes. The current study examined the role of expectations, met or unmet, and their role in the link between attachment and

marital satisfaction. Additionally, the current study assessed both adaptive responses to accommodative dilemmas and destructive responses to accommodative dilemmas as potential factors in the relationship between adult attachment and marital satisfaction. Previous research has called these responses prorelationship behaviors or a couple members' willingness, or the lack thereof, to put the needs of their relationship above their own needs. Finally, the role of empathy in the relationship between adult attachment and marital satisfaction was analyzed. The study was designed to analyze three mediators: relationship expectations, accommodative responses, and aspects of empathy as potential mediators that explain the relationship between adult attachment and marital satisfaction. Thus it was predicted that avoidant and anxious attachment dimensions would be associated with each couple member's own and their spouse's relationship expectations, the four types of accommodative responses, and the three aspects of empathy. In turn, each of the mediators was hypothesized to be associated with each couple member's marital satisfaction.

CHAPTER II

REVIEW OF THE LITERATURE

Healthy marriage has been associated with many positive outcomes (Umberson, et al., 2006; Waite & Gallagher, 2000; Williams, 2003). However, despite the overwhelming support for the positive outcomes associated with marital relationships, recent research has shown that marital quality plays an important role. While the married exhibit better health than the unmarried, it is not the case that any marriage is better than no marriage at all when it comes to these health benefits (Umberson et al.; Williams). The quality of the marital relationship is also linked to these positive health outcomes. Thus, while marital relationships seem to be important regarding many positive health outcomes, it is the quality of these relationships that seem to play a more significant role in predicting the positive outcomes associated with marriage. Furthermore, at an intuitive level, those individuals who are in satisfying marital relationships are much less likely to break up these relationships (Karney & Bradbury, 1995).

Understanding more about what contributes to marital satisfaction seems to be important in order to take advantage of the positive outcomes associated with marriage, as well as a potential factor to limit divorce and the problems associated with it. Adult attachment theory is one of the most promising conceptual frameworks for understanding the psychological and contextual factors that contribute to marital satisfaction. Grounded in developmental psychology, psychoanalysis, and evolutionary psychology, attachment theory has impacted theory and research in diverse areas of psychology including developmental, clinical, and social psychology (Alexandrov, Cowan, & Cowan, 2005).

Without providing a broad overview, a brief general background will highlight important aspects of the attachment theoretical framework.

Basic Tenets of Attachment Theory

Attachment theory developed from Bowlby's (1973) observations of young children separated from their caregivers. Bowlby noticed that when the separation between the caregiver and the child occurred, a predictable sequence of actions took place. First, the child protested and actively sought out the caregiver. With prolonged separation, the child experienced a state of despair or sadness, followed by detachment and a disregard of the caregiver if he/she returned (Hazan & Shaver, 1994). As a result of his observations, Bowlby developed a theory of infant--caregiver attachment and its survival significance for the child in the face of separation.

A basic assumption of attachment theory suggests that infants cannot provide protection and care for themselves. As a result, infants have evolved behaviors that function to maintain proximity to a protector or caregiver. These behaviors, called an attachment system, are to promote the safety and survival of infants. These evolved behaviors, designed by natural selection, form a behavioral system that satisfies an infant's basic social and survival needs (Fraley, 2002; Kirkpatrick, 1998). Adult attachment theorists suggest that these same evolved behaviors are later co-opted for romantic relationships to further reproduction and the survival of the species (Kirkpatrick).

A behavioral system, in this case the attachment behavioral system, consists of the behaviors that an infant performs that facilitate close physical and, later,

psychological proximity of a caregiver (Hazan & Shaver, 1987). A strong attachment provides the infant with three main functions: proximity to the attachment figure, a secure base from which exploration can occur, and a safe haven to turn to for comfort, support, and reassurance (Hazan & Shaver, 1987, 1994). Disruption of any of these functions leads to a predictable response from infants, as was previously discussed. With small children and infants, proximity needs to be physical. However, as children mature, the main functions of the attachment system become less dependent on physical proximity and more dependent on psychological proximity or “felt security” (Shaver & Hazan, 1988). Based on infants’ histories of experiences with their primary caregivers, they learn what to expect from them and to adjust their own behavior to match their caregivers.

Expectations, formed from experience, shape infants’ mental representations or working models of their relationships (Hazan & Shaver, 1994). This working model provides a schema for children of themselves and their caregivers, which is used to predict future caregiver, and ultimately romantic partner, availability and responsiveness. This internal working model provides children with information about themselves and their caregivers, and forms the foundation for beliefs about whether or not they merit a response from their caregivers and whether or not their caregivers are likely to be responsive (Bowlby, 1973). Adult attachment theory implies that this internal working model will guide current and future thoughts, feelings, and behavior regarding close relationships (Shaver & Hazan, 1987).

Essentially, the aggregation of experiences a child shares with a caregiver boils down to answering the question “Can I count on my attachment figure to be available and

responsive when needed?" (Hazan & Shaver, 1994, pg. 5). The three possible answers to this question--yes, no, and maybe--make up what Ainsworth called secure, avoidant, and anxious/ambivalent attachment styles. An infant who maintains proximity with his or her caregiver, and who uses the caregiver as a secure base for exploration and a safe haven for comfort, is characterized as having a secure attachment style. Caregivers of securely attached infants are typically responsive and available to infants. In the laboratory, in the caregiver's absence, secure infants become distressed but are comforted upon the return of the caregiver and able to explore the room in their presence (Hazan & Shaver). The anxious/ambivalent-attached caregiver is characterized as inconsistent or alternately intrusive and unresponsive to the infant's needs. In the laboratory, anxious/ambivalent infants appear angry, anxious, and too preoccupied to take part in exploring their new environment. Finally, the avoidantly attached caregiver is characterized as unresponsive and unavailable to the infant's needs. Avoidantly attached infants appear not to be distressed by separations from their caregivers, and avoid contact when their caregivers return (Hazan & Shaver). Infant/toddler attachment styles have corresponding later implications for securely and insecurely attached adults. Insecure or secure internal working models formed in infancy, are theorized to ultimately shape adults' expectations of romantic and marital relationships.

Adult Attachment

Despite some basic similarities, adult attachment differs from infant attachment in several important ways. First, the nature of the relationship changes from a complimentary association where the caregiving comes solely from the parent, to a

reciprocal relationship where each partner at times is both provider and receiver of care (Hazan & Shaver, 1994). Parents' roles as primary providers of attachment functions in their children's attachment relationships naturally change and become secondary as children enter adulthood. During adolescence, peers and romantic partners begin to emerge as important sources of attachment need fulfillment. The relationships with peers and romantic partners are theorized as a reflection of the adolescent's cumulative experiences with their caregivers and are characterized as either secure or insecure (Furman & Wehner, 1994). Needs for proximity, secure base, and a safe haven, previously met by primary caregivers are hypothesized to transfer gradually to romantic partners. Experiences of security and safety with early attachment figures (i.e., parent figures) provide the framework for the development of adult attachment styles in later friendships and romantic relationships (Fraley & Shaver, 2000; Hazan & Shaver, 1987).

While the primary caregiver still plays an important role in meeting attachment needs, indeed caregivers have set the lifelong pattern, over time the romantic partner becomes the prominent figure in meeting most of the attachment needs. Typical adolescent and later adult attachment relationships involve the integration of four behavioral systems; attachment, affiliation, caregiving, and sexuality (Fraley & Shaver, 2000; Furman & Wehner, 1994; Hazan & Shaver, 1987).

Thus, the attachment relationship moves from the level of external, observable interactions and behaviors to internally represented beliefs and expectations. These beliefs and expectations are based on the internal working model from previous parent-child experiences. Early in life, an infant's internal working model was managed by external behaviors. If an infant or toddler felt threatened in a particular situation, he/she

would engage in behaviors that would bring the caregiver physically closer. However, in adolescence and adulthood the emphasis moves from physical proximity or physical security to psychological proximity or felt security.

Although physical proximity remains important, for the adult the proximity becomes largely figurative and felt, rather than physically being near their partner. Felt security is described as the confidence either member of a couple feels that the partner will be available and responsive to their needs, and represents an individual's internal working model. Because attachment theory is the foundation for the other behavioral systems, it tells us what those needs will be: security, caregiving, affiliation, and reproductive opportunities (Hazan & Shaver, 1994). The dynamics of close relationships can be understood in terms of the functioning of these systems.

Hazan and Shaver's seminal article on adult attachment laid the groundwork for future adult attachment research (1987). Hazan and Shaver proposed that the attachment model could be conceptualized and adapted to capture the range of romantic love experiences. Their work outlined several parallels between infant-caregiver attachment and adult romantic attachment, including a desire to maintain close physical proximity, reliance on the attachment figure for comfort, and viewing the attachment figure as a source of security in times of stress (Hazan & Shaver). Additionally, as applied to adult relationships, attachment theory would suggest a connection between infant relationships and adult relationships. For example, individuals who had responsive, trusting relationships as a child should have similar relationships in adulthood. These individuals also should seek out others who meet and confirm these expectations (Kirkpatrick & Hazan, 1994). In contrast, attachment theory would suggest that individuals who did not

have responsive and trusting relationships with their caregivers would have similar relationships in adulthood, or might avoid relationships altogether. Both groups behave in a manner to confirm and perpetuate their beliefs about others (Clark & Pataki, 1996).

Hazan and Shaver (1987) found support for four different hypotheses about romantic love and attachment. First, the adults in their sample had a similar frequency of the three attachment styles as previous research has shown in infancy; roughly 60% of the population are securely attached, 15% are anxious/ambivalent, and 25% avoidant (Campos, Barrett, Lamb, Goldsmith, & Stenberg, 1983). Second, based on the three attachment styles, respondents that fell into each category described their most important romantic relationship differently. Secure respondents described their most important love experience as essentially happy, friendly, and trusting. Avoidant respondents characterized their relationships by fear of intimacy, mistrust, and withdrawal. Anxious/ambivalent respondents portrayed their love experience as involving obsession, desire for reciprocation and union, emotional highs and lows, and extreme sexual attraction and jealousy (Hazan & Shaver). Third, participants developed an internal mental model of beliefs about the course of romantic love. As was predicted, different attachment orientations yielded different mental models. Secure respondents described the progression of a relationship as more positive, consistent, and long-lasting. Avoidant respondents described love relationships as rare or inconsistent. Anxious/ambivalent respondents described love relationships as occurring frequently but never lasting long. Finally, Hazan and Shaver found that the participants' descriptions of early experience were related to their current attachment style.

Research supports various tenets of attachment theory as a conceptualization of adult romantic relationships (e.g., Collins & Read, 1990; Fraley, 2002; Shaver & Hazan, 1988; Sheperis, Hope, & Ferraez, 2004; Simpson, & Rholes, 1998). First, participants with an insecure attachment style demonstrate more negative beliefs about the self and a lower sense of self-worth, lower social self confidence, and lack of assertiveness. In addition, insecurely attached individuals have a less favorable view of the world; they tend to view people as less altruistic, complex, and difficult to trust or understand (Collins & Read). Finally, insecurely attached individuals were more likely to have a relationship style characterized as obsessive, dependent or manic (Cohn, Silver, Cowan, Cowan, & Pearson, 1992; Sheperis et al.).

Measurement Issues in Adult Attachment

Hazan and Shaver (1987) established a basic framework for future studies to follow and elaborate. They provided the initial evidence that argues for attachment style as a useful framework to describe adult romantic relationships. Since then, a great deal of research has focused on expanding and enhancing this conceptualization and its finer points. Many assessments of adult attachment frequently use the three adult attachment style categories described by Hazan and Shaver. However, some researchers now believe that analyzing dimensions of attachment best captures adult attachment representations. For instance, Collins and Read (1990) developed an adult attachment measure that examines three dimensions of adult attachment, discomfort with closeness, discomfort depending on others, and anxiety about abandonment. Other researchers noticing differences in the avoidant attachment style, proposed the now familiar two-dimensional,

four-category model of adult attachment (Bartholomew & Horowitz, 1991; Brennan, Clark, & Shaver, 1998). The two dimensions are an individual's internal working model of self and model of others, either of which can be positive or negative.

Secure individuals are characterized by positive models of both self and others; they are neither anxious about abandonment nor avoidant in their behavior. A positive model of others and a negative model of self characterize preoccupied individuals, defined as a mixture of anxiety and interpersonal approach (non-avoidance; Brennan et al., 1998). Individuals with positive models of self and negative models of others are dismissing individuals, who demonstrate a combination of avoidant behavior and an apparent lack of anxiety about abandonment. Finally, fearfully avoidant individuals are those who have negative models of both self and others, which combines anxiety about abandonment with avoidant behavior.

In an attempt to combine the best attributes of previous attachment measures (e.g., dimensional aspects) as well as to create a common measure for future studies, Brennan and colleagues formed an attachment measure assessing the dimensions of avoidance and anxiety (1996). Crossing the two attachment dimensions of avoidance and anxiety yields four different attachment types (Bartholomew & Horowitz, 1991; Brennan et al.). Avoidant attachment is divided into two subtypes; individuals who are dismissing of attachment (i.e., low anxiety and high avoidance) are defined as dismissing avoidant, and those who are fearful of attachment (i.e., high anxiety and high avoidance) are defined as fearful avoidant. Secure attachment describes individuals with low avoidance and low anxiety, and preoccupied attachment (termed anxious ambivalent attachment in

early studies) describes those individuals who are low on avoidance and high on anxiety (Gallo & Smith, 2001).

Attachment Style and Marital Satisfaction

Many studies have established a strong association between adult attachment and marital satisfaction. However, a closer review of the research regarding the relationship between adult attachment and marital satisfaction reveals that the best predictor of poorer marital satisfaction is insecure attachment, with a slightly weaker relationship between secure attachment and better marital satisfaction. There are several general shortcomings associated with the attachment marital satisfaction literature. First, there are a variety of different attachment measures used by each of the researchers. This can make comparison between studies challenging and generalizations to the population as a whole somewhat limited. In addition, it appears that researchers tend to favor dimensional measures of attachment as opposed to categorical measures used by early researchers. As was described earlier, this also makes comparisons difficult.

The inclusion criteria for the articles included in the summary of the literature on the relationship between adult attachment and marital satisfaction was set to include all peer-reviewed journal articles up until 2008, the year when the review was conducted. This search generated a total of 15 articles that specifically investigated adult attachment and its relationship to marital satisfaction. All articles that did not specifically link adult attachment to marital satisfaction were not included. The articles were organized for the subsequent tables by the type of measure used to explain adult attachment.

Table 1 summarizes 9 studies that examined marital satisfaction predicted from each couple member's own attachment. All of the studies in Table 1 used dimensional measures of attachment. Three different measures were used across the 9 studies. First, a 13-item measure developed by Feeney (1994) yields scores on two major dimensions underlying attachment style--comfort with closeness and anxiety over relationships. Second, the Revised Adult Attachment scale, developed by Collins and Read (1990), includes three subscales--close, depend, and anxiety. The close subscale measures an individual's comfort with closeness, the depend subscale measures comfort depending on others and belief that others are dependable, and the anxiety subscale measures fear about abandonment and being unloved. Finally, the Relationship Questionnaire, developed by Bartholomew and Horowitz (1991), yields two dimensions, models of the self and other, which are scored to yield four attachment styles.

Of the nine articles that reported the relationship between adult attachment dimensions and marital satisfaction, seven seemed to be particularly well-designed studies (Butzer & Campbell, 2008; Davila et al., 1998, 1999; Feeney, 1994, 1996, 1999a, 1999b; Kachadourian, Finchen, & Davilla, 2004). These articles all had sufficient sample sizes (100 participants or more) and seemed to avoid major threats to validity (sufficiently stringent alpha, covarying influence of some demographic variables). Furthermore, 3 of the studies (Davila et al.; Kachadourian et al.) used Hierarchical Linear Modeling or an Actor-Partner Interdependence Model (Kashy & Kenny, 2000), which are more appropriate statistics because they better account for the nested relationship between couple members as opposed to a regression analysis, and are likely to be a better measure of the attachment-marital satisfaction association. Three of the studies included

Table 1

Marital Satisfaction Prediction From Each Couple Member's Own Attachment Style

Heading	Heading	Husband's M.S.		Heading	Wife's M.S.		
		<i>r</i>	Beta		<i>r</i>	Beta	
Feeney, 1994	< 10 yrs	H comfort	.27**	.05	W comfort	.30**	.19*
		H anxiety	-.39**	-.24*	W anxiety	-.26**	-.24*
	11-20 yrs	H comfort	.31**	.13	W comfort	.29**	.09
		H anxiety	-.36**	-.25*	W anxiety	-.32**	-.17
	> 20 yrs	H comfort	.26**	.04	W comfort	.38**	.21*
		H anxiety	-.39**	-.27*	W anxiety	-.39**	-.22*
Feeney, 1999a, 1999b	H comfort	.28	.20**	W comfort	.31	.23**	
	H anxiety	-.42	-.35**	W anxiety	-.29	-.16*	
Feeney, 1996	H comfort	.25	.15*	W comfort	.32	.25**	
	H anxiety	-.32	-.22**	W anxiety	-.28	-.13	
Butzer & Campbell, 2008	H avoidant	-.64**		W avoidant	-.73**		
	H anxiety	-.66**		W anxiety	-.71**		
Gallo & Smith, 2001 ^a		<i>r</i> conflict and support			<i>r</i> conflict and support		
	H avoidant	.12	-.29*	W avoidant	.18	-.22*	
	H anxiety	.32*	-.13	W anxiety	.29*	-.27*	
Predicting Marital Satisfaction from Closeness, Depending, Anxiety							
		Correlations for Husband's M.S.			Correlations for Wife's M.S.		
Davila et al., 1998	H close	.21**		W close	.24**		
	H depend	.25**		W depend	-.35**		
	H anxiety	-.22**		W anxiety	-.33**		
Davila et al., 1999 Longitudinal	H close	.18*		W close	.07		
	H depend	.19*		W depend	-.26**		
	H anxiety	-.28*		W anxiety	-.30**		
Marchand, 2004	H close	.26*		W close	.05		
	H depend	.42**		W depend	-.02		
	H anxiety	-.39**		W anxiety	-.39**		
Predicting marital satisfaction from model of self and other							
		Husband's M.S.			Wife's M.S.		
Kachadourian, 2000	H self	.29**		W self	.52**		
	H other	.40**		W other	.28**		

(table continues)

		DAS		QMI		RHS	
		RQ	RSQ	RQ	RSQ	RQ	RSQ
Summer, 2004 ^b	Self	.27**	.23**	.32**	.22*	.30**	.15**
	Other	.28**	.32**	.20**	.21*	.20**	.24**

Note. DAS, dyadic adjustment scale; QMI, quality of marriage index; RAM, relationship attribution measure; RHS, relationship happiness scale; RQ, relationship questionnaire; RSQ, relationship scale questionnaire.

^aMarital Satisfaction the Gallo & Smith study measured with the constructs conflict and support.

^bCombined sample controlled for gender and relationship length. Based on percentage of males and (76%) females in the sample.

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

in the current analysis had noteworthy limitations. All 3 had small sample sizes that could have influenced results (Gallo & Smith, 2001; Marchand, 2004; Sumer & Cozzarelli, 2004). In addition, one of the studies (Sumer & Cozzarelli) used a sample of which the majority of participants were not married, and instead measured relationship satisfaction as opposed to marital satisfaction. Finally, the last study only sampled women (Marchand).

None of the studies controlled sufficiently for demographic variables that might have impacted the results. For instance, only two of the studies controlled for relationship length (Feeney, 1994; Sumer & Cozzarelli, 2004). Relationship length is likely to have a significant impact on the marital satisfaction as research has shown a curvilinear relationship between marital satisfaction and relationship length. In addition, having children is another likely variable that may influence marital satisfaction and none of the current articles examined the impact of children. Thus, the current study will analyze the influence of marital length and whether or not couples had children as factors that may influence both attachment and marital satisfaction.

Several interesting trends emerged from reviewing the results across studies. When predicting husbands' marital satisfaction, comfort was positively and anxiety negatively related to a husband's own marital satisfaction; however, husbands' own anxiety appeared to have the stronger relationship to marital satisfaction relative to their levels of comfort (Butzer & Campbell, 2008; Davila et al., 1998, 1999; Feeney, 1994, 1996, 1999; Gallo & Smith, 2001; Kachadourian, Fincham, & Davila, 2004; Marchand, 2004; Sumer & Cozzarelli, 2004). This suggests that husbands' anxiety about being abandoned or unloved is generally more strongly associated with perceptions of marital quality than comfort getting close or allowing others to get close, although both aspects were associated with husbands' marital satisfaction.

When predicting wives' marital satisfaction, comfort was positively and anxiety negatively related to wives' marital satisfaction. However, wives' comfort getting close to others and allowing others to get close was slightly more consistently associated with their own marital satisfaction than was anxiety about abandonment or being unloved. Measuring attachment in a different way, two of three studies found that the construct of wives' comfort depended on others, and one study found that wives' comfort with closeness was positively correlated with wives' marital satisfaction (Davila et al., 1998, 1999; Marchand, 2004), and all three of these studies found that wives' anxiety was related to their own marital satisfaction. Taken as a whole, it seems that wives' comfort with closeness and depending, as well as wives' anxiety about relationships, are all consistent factors associated with wives' marital satisfaction.

In summary, general trends found in Table 1 suggested that both of the attachment dimensions of comfort and anxiety are moderately associated with husbands'

and wives' marital satisfaction. Furthermore, the slightly stronger predictor for husbands was their own attachment anxiety, with aspects of secure attachment (closeness and depend) also moderately associated with husband marital satisfaction. For wives, the dimensions associated with secure attachment style along with anxiety about being abandoned were most strongly associated with wife's marital satisfaction. Specifically, both comfort with depending on others and comfort with closeness in some studies, and a positive model of both self and others in other studies were the dimensions associated with secure attachment that predicted wife's marital satisfaction. In addition, anxiety about being abandoned was associated with wife's marital satisfaction, with the dimensions associated with secure attachment as slightly stronger predictors.

Table 2 summarizes studies that examined the association between marital satisfaction and attachment style assessed with continuous ratings of the various attachment labels. These measures provide information about the relative extent to which participants endorse each attachment type, rather than a single categorical classification. The measures were Hazan and Shaver's (1987) forced choice, Bartholomew and Horowitz's (1991) four factor Relationship Questionnaire, and Carver's (1997) Measure of Attachment Qualities--a 14-item measure patterned after Bartholomew and Horowitz's Relationship Questionnaire. Using measures that yield attachment style labels may ease interpretation because results can be tied back to theoretical expectations for each attachment style. Dimensions of attachment behavior (e.g., comfort and anxiety) describe aspects of secure and insecure attachment styles, but individually are not easily linked to an attachment style. Using the secure and insecure attachment labels seems to facilitate applicability because the bulk of the attachment literature (Carnelly et al., 1994; Collins

Table 2

Marital Satisfaction by Attachment Style (all Independent and Dependent Variables were Continuous)

Study	Correlations predicting own marital satisfaction		
	Attachment style	Women	Men
Meyers et al., 2002	(Sampled only with women)		
	Secure	.28*	
	Avoidant	-.35*	
	Ambivalent	-.26*	
Hollist & Miller, 2005	Secure	.06	.08
	Avoidant	-.16*	-.17**
	Ambivalence-worry	-.42**	-.47**
	Ambivalence-merger	-.33**	-.23**
Banse, 2004	Secure	.43**	.37**
	Fearful	-.46**	-.42**
	Preoccupied	-.44**	-.51**
	Dismissing	-.40**	-.26**
Lussier et al., 1997	Scores were reported as Beta weights	.17*	-.03
	Secure	-.29*	-.29*
	Anxious/ambivalent	-.13*	-.13*
	Avoidant		
Carnelly et al., 1994	Scores were reported as Beta weights (only women)	-.55*	
	Avoidant	-.32*	
	Preoccupied		

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

& Read, 1990; Kobak & Hazan, 1991) and current literature (Banse, 2004; Hollist, 2005; Lussier et al., 1997, Meyers & Landsberger, 2002), discusses attachment behavior using secure and insecure labels rather than the dimensions that were discussed in Table 1.

Despite these advantages current researchers believe that dimensional measures of

attachment are more appropriate because they capture attachment characteristics in a continuous measure that is a more precise measure of each couple member.

All of the studies that examined the relationship between attachment style and marital satisfaction using adult attachment labels seemed to be adequately designed studies. However, there were several sampling characteristics that make generalization and comparison problematic. For instance, only three of the studies (Banse, 2004; Hollist & Miller, 2005; Lussier et al., 1997) had sufficient sample sizes (250-450); the remaining two (Carnelly et al., 1994; Meyers & Landsberger, 2002) had sample sizes of 73 and 49, making generalizations and comparison problematic. Of the five studies, there were three different languages used by participants, English, German, and French. This indicates that there are likely significant cultural differences between each of the samples that could influence marital satisfaction. Finally, two of the studies used samples of participants that were 35 years or older (Hollist & Miller; Meyers & Landsberger). These studies are helpful because they provide information specific to particular population; however, because the studies were representative of unique populations it makes them more difficult to generalize their results.

In addition, several of the studies did not control for potential demographic variables that might have impacted the results. As was discussed previously in the studies summarized in Table 1, none of the studies included in Table 2 controlled sufficiently for relationship length and parenting status. Thus, the current study will analyze the influence of marital length and whether or not couples had children as factors that may influence both attachment and marital satisfaction.

Further analysis of Table 2 reveals several important patterns of findings. First, the insecure (fearful avoidant, dismissing avoidant, and preoccupied or anxious/ambivalent) attachment styles tend to have the most consistent and strongest negative associations with marital satisfaction for husbands and wives. For husbands, of the insecure attachment styles, avoidant attachment had the weakest associations (all small correlations) with marital satisfaction, while the ambivalent style showed the strongest associations. For wives, fearful and preoccupied attachment styles had the strongest association with wives' own marital satisfaction. Perhaps the most interesting finding was the inconsistent results that were found in the relationship between secure attachment and marital satisfaction (Carnelly et al., 1994; Gerlsma et al., 1996; Hollist, 2005; Lussier et al., 1997; Meyers & Landsberger, 2002). Two of the five studies (Hollist; Lussier et al.) did not find a significant relationship between secure attachment and marital satisfaction. It is difficult to make broad assumptions about the relationship between secure attachment and marital satisfaction based on these two studies; however, the inconsistencies found seem to represent a trend that insecure attachment styles are a better predictor of marital satisfaction. Although secure attachment is still influential on marital satisfaction, it appears to be just slightly less than insecure attachment dimensions.

Additionally, one demographic trend was identified among the various studies in Table 2. Two of the five studies in the table had samples that were relatively older (average age 48 years) compared to the other three (average age 29 years) samples. Interestingly, the two older samples were two of the three studies that found an inconsistent relationship between secure attachment and marital satisfaction. There are a

number of reasons why this could be the case. Certainly, the addition of children changes the dynamics of the relationship. Changing responsibilities and priorities, as well as the developmental influence of relationship length, may impact associations between secure attachment and relationship quality. Future research will need to control for the potential influence of age, relationship length, and parenting status as additional factors that could account for the inconsistency in the association between secure attachment and marital satisfaction.

The studies included in Table 3 examined spousal marital satisfaction predicted from partners' attachment styles or dimensions. These studies all seem to have been well designed. For instance these studies controlled for potential extraneous variables (e.g., included both couple members in the analysis and controlled for age), and all had adequate sample sizes. However, sample characteristics of several of the studies make comparisons difficult. For instance, the French-Canadian sample from the Lussier and colleagues (1999) study contained an undisclosed percentage of participants from local mental health clinics. It is likely that participants from mental health clinics influence attachment dimensions and marital satisfaction outcome variables. Additionally, as was previously discussed, the cultural make-up of the samples in the seven studies represents three distinct cultures. Although the diverse cultural make-up of the samples speaks to the widespread applicability of attachment theory, it makes comparisons difficult because cultural factors may influence outcomes.

In general, the most consistent finding was for one individual's anxiety to have the largest negative impact on the other spouse's marital satisfaction. Additionally, two studies used the attachment categories and found that husbands' preoccupied and

Table 3

Correlation Predicting Women's or Men's Marital Satisfaction from Partner's Attachment Style

Study	Heading	Husband's M.S.		Heading	Wife's M.S.	
		<i>r</i>	Beta		<i>r</i>	Beta
Feeney, 1994	< 10 yrs					
	W comfort	.24*	.09	H comfort	.17	.01
	W anxiety	-.42**	-.30**	H anxiety	-.26**	-.14
	11-20 yrs					
	W comfort	-.29**	.08	H comfort	.38**	.23
	W anxiety	-.30**	-.18	H anxiety	-.33**	-.18
> 20 yrs	W comfort	-.37**	.23*	H comfort	.12**	.21
	W anxiety	-.42**	-.25*	H anxiety	-.35**	-.35**
Feeney, 1999a, 1999b	W comfort	.12	.03	H comfort	.22	.12
	W anxiety	-.23	-.14*	H anxiety	-.36	-.30**
Feeney, 1996	W comfort	.19	-.04	H comfort	.12	-.04
	W anxiety	-.23	-.10	H anxiety	-.27	-.15*
Gallo & Smith, 2001 ^a		<i>r</i> conflict and support			<i>r</i> conflict and support	
	W avoidant			H avoidant		
	W anxiety	-.03	.08	H anxiety	.03	-.13
		.19	-.37**		.30*	-.23*
Davila et al., 1998	W close		.16*	H close		.11
	W depend		.29	H depend		-.19*
	W anxiety		-.37	H anxiety		-.14*
Banse, 2004	Partner's attachment style		Women's M.S.		Men's M.S.	
	Secure		.33**		.30**	
	Fearful		-.28**		-.30**	
	Preoccupied		0.31**		-.47**	
	Dismissing		0.33*		-.13*	
Lussier et al., 1997	Secure		.05		-.06	
	Anxious/ambiv		0.38*		-.31*	
	Avoidant		0.17*		-.11	
Feeney, 19974		Husband satisfaction		Wife satisfaction		
	HC * WC		.12	HC + WC		.04
	HC * WA		.27**	HC + WA		.24*
	HA * WC		.10	HA + WC		.11
	HA * WA		-.04	HA + WA		-.06

Note . HC * WC = husbands' comfort by wives' comfort; HC * WA = husbands' comfort by wives' anxiety; HA * WA = husbands' anxiety by wives' comfort; HA * WA = husbands' anxiety by wives' anxiety, all predicting marital satisfaction.

* $p < .04$, ** $p < .01$.

avoidant (fearful, dismissing) attachment was negatively related to wives' satisfaction and wives' fearful and preoccupied attachment was negatively related to husbands' marital satisfaction. Additionally, inconsistent findings were reported for the relationship between secure attachment and marital satisfaction for both husbands and wives, with one study reporting medium-sized correlations and the other small and nonsignificant relationships (Banse, 2004; Davila et al., 1998; Feeney, 1994, 1996, 1999a, 1999b; Gallo & Smith, 2001; Lussier et al., 1997). Predicting one spouse's marital satisfaction from the other spouse's attachment style or dimension seemed to be the relationship with the most inconsistent association between secure attachment and marital satisfaction. Previous tables comparing an individual's own attachment to their own marital satisfaction found fairly consistent moderate relationships between secure attachment and marital satisfaction. However, predicting one spouse's marital satisfaction from the other spouse's attachment showed an inconsistent relationship between secure attachment and marital satisfaction. It seems that negative spousal attachment dimensions predict the other spouse's marital satisfaction better than secure attachment does.

Exploring the Relationship Between Attachment and Marital Satisfaction

Recent research has begun to explore potential pathways in the relationship between adult attachment and marital satisfaction. Generally, researchers have explored positive relationship behaviors and attitudes that are thought to be a function of secure attachment or negative relationship behaviors, that are thought to be a function of insecure attachment, which then predict levels of marital satisfaction. Using mediator

models, researchers have found several factors that clarify the relationship between adult attachment and marital satisfaction. The mediators that these studies have investigated can be organized into positive, constructive relationship behaviors and negative or problematic relationship behaviors.

Researchers have found some support for the hypothesis that constructive communication between partners and forgiveness are positive behaviors that mediate the relationship between attachment and marital satisfaction. For instance, Kachadourian and colleagues (2004) measured attachment models of self and others using a dimensional measure of attachment and assessed the mediating role forgiveness played in the attachment-marital satisfaction association (Bartholomew & Horowitz, 1991). They found that the tendency to forgive accounted for part of the relationship between model of others and relationship satisfaction for husbands. For wives and husbands, although the model of self uniquely predicted relationship satisfaction, the tendency to forgive accounted for part of the relationship between model of self and relationship satisfaction. For individuals with a more negative model of self, the association between models of other and the tendency to forgive was not found. However, for those with a more positive model of self, more positive models of other were associated with a greater tendency to forgive partner transgressions. This suggested that the most secure individuals showed the greatest tendency to forgive (Kachadourian et al.). In addition, Feeney and colleagues (1994, 1996) found partial support for mutually constructive communication, as well as partner responsiveness to distress, as factors that mediate between the dimensional aspects of attachment (i.e., anxiety) and marital satisfaction.

Researchers have also found support for negative affectivity, negative attributions of a spouse's behaviors, and psychological distress as negative mediators of the relationship between attachment models and marital satisfaction. For example, Davila and colleagues (1998) found that the association between comfort with closeness and anxiety about abandonment and marital satisfaction, for husbands and wives, was mediated by negative affectivity. Attachment insecurity was associated with the experience of high levels of negative affect, which was associated with low levels of marital satisfaction. In addition, other researchers have found that negative attributions partially mediate the link between models of self and others and marital satisfaction (Gallo & Smith, 2002; Sumer & Cozzarelli, 2004). A more positive model of the self was associated with a lower level of negative attributions, which in turn contributed to a higher level of marital satisfaction. Models of self and others, however, contributed to marital satisfaction above and beyond attributions (Sumer & Cozzarelli). Finally, Meyers and Landsberger (2002) found support for psychological distress and social support as mediators of the relationship between attachment styles and marital satisfaction. Lower psychological distress mediated the association between secure attachment and marital satisfaction and less social support mediated the relation between avoidant attachment and poorer marital satisfaction (Meyers & Landsberger).

Consistent with the emphasis of recent studies that focused on explaining the mechanisms involved in the relationship between attachment style and marital satisfaction, the present study examines relationship expectations, prorelationship behaviors and empathy as potential mediating factors that further clarify this relationship. Little research has explained the mechanisms through which attachment is related to

marital satisfaction and much of the previous research regarding factors that mediate the relationship between attachment and marital satisfaction has focused on factors that threaten relationships, rather than on behaviors and attitudes that are a part of healthy relationships (Gallo & Smith, 2001; Marchand, 2004; Meyers & Landsberger, 2002; Sumer & Cozzarelli, 2004). Indeed, there seems to be a dearth of studies that focus on factors that facilitate healthy relationships, with many studies examining behaviors and attitudes couples should avoid. In the previous review, of the 11 factors that either partially or fully mediated or moderated the relationship between attachment and marital satisfaction only 3 were related to positive aspects of healthy relationships (communication mutuality, forgiveness, and partner responsiveness). The remaining 8 mediators all were closely related to the regulation of affect or negative aspects of relationships. Relationship expectations, prorelationship behaviors, and empathy are factors that could further explain the mechanisms involved in the relationship between adult attachment and marital satisfaction. All three of these potential mediators are likely to be related to both attachment dimensions and marital satisfaction, and may clarify the association between attachment dimensions and marital satisfaction.

*Marital Expectations as an Adult Attachment-
Marital Satisfaction Mediator*

Current internal working models capture individuals' expectations that their attempts to obtain comfort and security will be successful and that they will experience "felt security." These internal working models can be either optimistic or pessimistic expectations that a romantic partner will consistently meet an individual's needs. Low anxiety and avoidance attachment dimensions create a positive internal working model

and lead to expectations that others are trustworthy, a high value of self, and increased felt security (Collins & Read, 1990). High anxiety and avoidance creates a negative working model and leads to expectations that others are untrustworthy, a low value of self, and various strategies designed to deal with situations that arise when felt security is unattainable (Collins & Read).

Collins and Read (1994) described internal working models as containing four inter-related components: memories of attachment-related experiences; beliefs, attitudes, and expectations about the self and others in relation to attachment; attachment-related goals and needs; and strategies and plans associated with achieving attachment goals. One of the key components of the internal working model is the individual's expectations about their attempts to receive comfort and security. Although the role of expectations in understanding internal working models seems central, little research has directly investigated their impact. Thus, an individual's internal working model of relationships is likely to play a significant role in affecting the development of their relationship expectations. Additionally, an individual's general expectations of a romantic relationship, as well as their perception of whether or not those expectations have been met in their current relationship, likely explain in part, the association between attachment and marital satisfaction.

Links between relationship expectations and marital satisfaction. Many studies support the association between relationship expectations and marital satisfaction (e.g., Kelly & Burgoon, 1991; Vangelisti & Daly, 1997). Two important distinctions regarding relationship expectations exist in this literature. Typically, individuals have expectations of relationships in general, and assessment may involve examining whether

those expectations are being met in their current relationships. For instance, Vangelisti and Daly examined 30 general relationship expectations. Participants rated each of the relationship expectations for their importance and the degree to which their current relationship met these expectations. Additionally, these researchers assessed discrepancies between individuals' relationship expectations and the degree to which those expectations were met, using a formula that weighted the most important expectations more heavily. When important relational expectations were met or exceeded, people tended to evaluate their relationships in more positive ways (Vangelisti and Daly). Additionally, male and female participants did not differ on what expectations they rated as most important (Vangelisti & Daly). However, male and female participants did differ on their self-reported perception of met and unmet expectations. Female participants consistently reported more unmet expectations, relative to male participants. The current study will examine the role expectations play in the relationship between attachment and marital satisfaction by looking at the difference between couple member's scores on each of 30 different expectations.

Links between adult attachment and relationship expectations. Previous research regarding attachment theory suggests relationship expectations should play an important role in the association between attachment style and marital satisfaction. Several aspects of secure and insecure attachment have been associated with categorically different relationship expectations for secure and insecure individuals (Collins & Read, 1990, 1994; Murray et al., 2000). Unfortunately, much of the previous research has assessed attachment style using different measures, making it difficult to discuss attachment style in any but the most general terms. A series of studies showed several aspects of

attachment that predict different relationship expectations for secure versus insecure individuals.

Collins and Read (1990) found that securely attached individuals were more trusting in general, were more likely to believe others were altruistic, and were more likely to see others as dependable. Insecurely attached individuals tended to view others as less altruistic, more complex and difficult to trust (Collins & Read; Murray et al., 2000). Thus, it is expected that those with low anxiety and avoidance attachment dimension scores will have somewhat higher relationship expectations because they view others as generally more trustworthy, dependable, and altruistic. As a result of this general positive view of others, individuals low in anxiety and avoidance attachment dimensions should perceive others as being more likely to consistently meet their needs. In contrast, individuals with high scores on anxiety and avoidance attachment dimensions would have either lower or more unrealistic expectations of their romantic partners because they view others as less trustworthy or more inconsistent (Collins & Read; Murray et al.). Additionally, these individuals would not be confident that romantic partners would meet their marital needs, and thus would have lower marital expectations (Collins & Read).

Insecurely attached individuals or individuals with high anxiety and avoidance attachment scores have been observed to report less self-assurance in social situations, to perceive themselves as colder, less responsive listeners, and to feel less capable of getting others to open up about themselves than securely attached individuals (Collins & Read, 1990; Murray et al., 2000). As a result of this overall sense of social awkwardness individuals who score high on anxiety and avoidance attachment dimensions would be

less efficacious at articulating their relationship expectations, as well as creating the kind of social milieu to get their expectations met. In contrast, research has shown that individuals with low anxiety and avoidance attachment dimensions have a higher sense of self-worth, greater social confidence, and are more expressive (Murray et al.). This would support the notion that securely attached individuals would be effective in articulating their relationship expectations, as well as capable of creating the kind of social milieu where their expectations are more likely to be met.

Finally, Frazier, Byer, Fischer, Wright, and LeBard (1996) found that individuals seek out partners with similar attachment styles. In their study, each participant was presented with nine profiles of potential romantic partners, each representing one of three attachment styles. They found that individuals of each attachment style are most attracted to individuals of the same style. Individuals with one attachment style seek out, and are typically in relationships with, partners who have a similar attachment style. This would support the notion that secure and insecurely attached individuals seek out partners who confirm their romantic relationship expectations. Thus, because insecurely attached individuals seek out other insecurely attached partners they have low relationship expectations and over the course of the relationship these low expectations get confirmed. In contrast, given that securely attached individuals seek out secure partners they are likely to have higher relationship expectations and, over the course of the relationship these high relationship expectations are more likely to be confirmed.

High and low expectations of relationships are likely to correspond with dimensional measures of attachment (Brennan et al., 1998). Secure and preoccupied attached individuals share a lower level of the avoidance attachment dimension that

indicates an adequate level of trust of other people. However, since individuals with preoccupied attachment style also are high in the attachment dimension of anxiety, they are more likely to have overly stereotyped or unrealistic relationship expectations, whereas securely attached individuals, because they are low in both anxiety and avoidance attachment dimensions would be more likely to have high relationship expectations that are more consistently met (Collins & Read, 1990; Murray et al., 2000). In contrast, dismissing and fearful avoiding individuals share a higher level of the avoidance dimension of attachment. A higher level of the avoidant attachment dimension is theoretically linked to lower relationships expectations--the belief that others will not be available and responsive during times of need. It may not be salient whether low relationship expectations are met or unmet, the negative relationship expectations generate a form of "self-fulfilling prophecy," which generates less positive relationships experiences and poorer marital satisfaction.

Relationship expectations as a mediating mechanism. For the current study, it is hypothesized that low avoidance and low anxiety will be associated with consistently fulfilled relationship expectations which will be associated with the highest degree of marital satisfaction (Kobak & Hazan, 1991). In addition, low attachment dimension scores on anxiety and avoidance are expected to be associated with their partner's relationship expectations and are hypothesized to be associated with consistently fulfilled partner expectations. The consistently fulfilled partner expectations are hypothesized, in turn, to predict better marital satisfaction.

Individuals with high levels of the attachment dimensions of anxiety or avoidance are likely to have either high relationship expectations that are consistently unfulfilled or

low expectations that become a sort of self-fulfilling prophecy that is consistently supported. Either of these two scenarios will be linked with the lowest degree of marital satisfaction (Collins & Read, 1990; Murray et al., 2000). In addition, high attachment dimension scores on anxiety and avoidance are expected to be associated with their partner's relationship expectations and are hypothesized to be associated with more unfulfilled partner expectations. More unfulfilled partner expectations are hypothesized, in turn, to predict poorer marital satisfaction.

Accommodative Responses as an Adult Attachment-Marital Satisfaction Mediator

Additional factors that may play a role in the relationship between attachment style and marital satisfaction are accommodative responses. Past research has described accommodative responses as conduct that puts the needs of an individual's relationship ahead of his or her own personal interests (Wieselquist, Rusbult, & Foster, 1999). Given the basic tenets of attachment theory, securely attached individuals are more likely to engage in adaptive accommodative responses than those individuals who are insecurely attached (Gaines et al., 1997). In addition, research has found that individuals who engage in adaptive accommodative responses are more likely to be satisfied with their relationships (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991; Wieselquist et al., 1999). Thus, engaging in adaptive and avoiding destructive accommodative responses is likely to be one of the mechanisms that explain the relationship between attachment style and marital satisfaction.

When one partner in a relationship behaves in a potentially destructive manner, the other partner may choose to respond in kind or choose a more constructive,

prorelationship route. Researchers have called these types of scenarios “accommodative dilemmas” (Gaines et al., 1997). The manner in which couples negotiate these interactions is crucial to maintaining an enduring and satisfying marriage (Rusbult, Bissonnette, Ariaga, & Cox, 1998). Inevitably, throughout the course of close marital relationship there will be situations in which one partner or the other will be less than courteous (e.g., being thoughtless, yelling at a partner, not spending enough time with him or her). In these instances, individuals may feel inclined to respond to their partners’ negativity in a similar manner, at the expense of their relationship. These scenarios are called accommodative dilemmas because they pit an individual’s personal well-being against the well-being of the relationship. Retaliatory, defensive, destructive reactions typically lead to increasingly hostile, destructive interactions between spouses (Gottman, 1994). Often these destructive interactions can be halted and defused if one partner or the other inhibits their natural tendency to reciprocate negatively and instead engages in one type of prorelationship behavior called an adaptive accommodative response--that is, the individual defuses the situation by inhibiting a destructive response and instead promotes the relationship by responding in an adaptive manner (Gaines et al., 1997; Rusbult, Johnson, & Morrow, 1986a). Adaptive accommodative responses are based on the assumption that, although costly and effortful to the accommodating partner, such behavior promotes couple well-being, and ultimately individual well-being for both couple members as their relationship flourishes (Rusbult et al., 1998).

Links between adult attachment and accommodative responses. There are important parallels between attachment theory and individual responses to an accommodative dilemma. For instance, when a couple is in the midst of such a dilemma,

behavioral responses are highly influenced by attachment style, as accommodative dilemmas likely activate attachment schemas (Wieselquist et al., 1999). In marital relationships, to varying degrees, each individual is dependent on the other; when one spouse behaves in a manner that demonstrates withdrawal of love or approval, the other spouse's attachment schema is activated and influences how the individual is likely to respond (Gaines et al., 1997). The research on accommodative behaviors has found that individuals typically respond to accommodative dilemmas with one of four characteristic reactions, two of which are adaptive for the relationship and two of which are destructive or put the relationship in danger. Not surprisingly, researchers have also found secure attachment to be associated with the two adaptive responses and insecure attachment to be associated with the two destructive responses in accommodative dilemmas (Gaines et al.).

The four characteristic reactions to accommodative dilemmas that have been studied in past research are voice, loyalty, exit, and neglect (Rusbult, Verette, & Whitney, 1991). Voice responses involve active effort to resolve the relationship problem (e.g., discussing the situation, suggesting solutions to the problem). Loyalty responses consist of patiently waiting for conditions to improve (e.g., supporting the partner in the face of criticism, selectively choosing not to respond to criticism, praying for improvement). Exit responses, on the other hand, consist of behaviors that actively harm the relationship (e.g., yelling at a spouse, name calling, threatening to end the relationship). Finally, neglect responses are those behaviors that occur when the individual passively allows conditions to deteriorate (e.g., criticizing my partner for things that are unrelated to the real problem, refusing to discuss matters; Rusbult et al.).

These four responses differ along two dimensions: adaptive versus destructive, and active versus passive. The adaptive accommodative responses of loyalty and voice are considered “prorelationship behaviors” because they both involve behaviors that put the needs of the relationship ahead of the individual’s own self-interests. Exit and neglect are destructive to the relationship because both types of behavior promote retaliation and imply that the relationship is of less importance, whereas voice and loyalty imply a belief that the relationship is important and should come before individual wishes (Rusbult et al.). Furthermore, loyalty and neglect are passive because they are not actively addressing the couples’ problem, whereas voice and exit actively engage both of the couple members in the problem.

Gaines and colleagues (1997) evaluated the relationship between attachment style and the four types of responses to accommodative dilemmas: exit, neglect, loyalty, and voice. Exit and neglect reactions were characteristic of individuals who were identified as avoidant and anxious-ambivalent. However, Gaines and colleagues did not find any significant differences between the two insecure attachment styles with regard to the destructive responses to accommodative dilemmas. In contrast, voice but not loyalty reactions were more likely to be demonstrated by individuals with more secure attachment (Gaines et al.).

From a theoretical perspective, accommodative responses are similar to the caregiving behavioral system of attachment, rendering the caregiving literature base useful in further elaborating the manner in which attachment style accommodative responses. Several studies have examined the relationship between attachment style and caregiving characteristics (Collins & Feeney, 2000; Simpson, Rholes, & Nelligan, 1992).

These authors have characterized caregiving as a mode of giving support to a romantic partner. Their results demonstrated that not everyone is equally skilled at providing support for their partners. For instance, partners who were higher in attachment-related anxiety were poorer caregivers. They provided less instrumental support, were less responsive to the partner's distress, and displayed more negative support behaviors (Collins & Feeney). In addition, Simpson and colleagues found that secure and avoidant individuals differed in how much support was sought and how much support was given as a function of the level of anxiety displayed by their romantic partner. More secure women tended to seek out more support as their level of anxiety increased, whereas more avoidant women tended to seek less support with increasing anxiety. In addition, more secure men tended to offer more support as their partners displayed greater anxiety, whereas more avoidant men were less inclined to do so (Simpson et al.). Interestingly, in nonanxiety provoking situations no differences were found between secure and insecure attachment styles in the manner in which they provided support. The differences between secure and avoidant individuals only appeared in anxiety-provoking situations. Accommodative dilemmas are inherently anxiety-provoking situations so it is likely that it will tap into these important differences.

Links between accommodative responses and marital satisfaction. Marital satisfaction has been positively associated with both adaptive responses to accommodative dilemmas (voice and loyalty) and negatively linked to destructive responses to accommodative dilemmas (exit and neglect; Rusbult et al., 1986a, 1986b, 1991, 1998; Wieselquist et al., 1999). For example, Rusbult and colleagues (1986a) found poorer relationship functioning among couples who reported higher levels of

destructive responses (i.e., exit and neglect). In addition, couple members exhibited greater distress to the degree that they reacted to partners' exit and neglect with voice, and reacted to partners' exit with loyalty; less distress was found among couples who had a tendency to use voice in response to partners' loyalty. Furthermore, couple members who perceived their partners as more consistently using voice and loyalty responses had higher relationship functioning (Rusbult et al., 1986a, 1986b).

Further research has found that the best predictor of relationship functioning, over and above perceptions of one's own accommodative responses, was couple members' perception of their partners' tendencies to engage in prorelationship behaviors (voice and loyalty), as well as not engage in destructive relationship behaviors (exit and neglect), in response to accommodative dilemmas (Rusbult et al., 1998). This suggests that trust in the partner's benevolence and prorelationship tendencies may be most important to marital functioning (Rusbult et al.). In addition, Wieselquist and colleagues (1999) found that prorelationship behavior played a pivotal role in enhancing commitment and trust in close relationships, both of which have been associated with marital satisfaction (Felmlee, Sprecher, & Bassin, 1990; Rusbult, 1983).

Overall a consistent relationship has been found between both adaptive responses to distress as well as destructive responses to distress and marital functioning. It appears that perceptions of destructive responses (exit and neglect) to distress tend to be slightly better predictors of relationship functioning than perceptions of adaptive responses (voice and loyalty), although both have consistently been associated with relationship functioning (Rusbult et al., 1986a, 1986b).

Accommodative responses as a mediating mechanism. It is hypothesized that individuals who are low in both anxiety and avoidance attachment dimensions will be more likely to engage in adaptive relationship behaviors (voice and loyalty) and less likely to engage in destructive relationship behaviors (exit and neglect), which will be associated with marital satisfaction (Gaines et al., 1997; Rusbult et al., 1986a). In addition, low attachment dimension scores on anxiety and avoidance are expected to be associated with partner adaptive responses (voice and loyalty) and less associated with destructive relationship responses by the partner in accommodative dilemmas (Rusbult et al., 1986b, 1998). The prorelationship behaviors are hypothesized, in turn, to predict better marital satisfaction.

While previous research has shown no clear distinction between insecure attachment types with regard to responses to accommodative dilemmas, research has found that insecurely attached individuals are more likely to use destructive relationship responses (exit and neglect) to accommodative dilemmas (Gaines et al., 1997). Thus based on theoretical conceptualizations of the internal working models individuals with high dimensional scores of anxiety and avoidance will be much more likely to overreact with highly defensive behavior to an accommodative dilemma and engage in exit responses or to avoid all types of confrontation and adhere more strictly to a neglect type of response to accommodative dilemmas. These types of response patterns will also be associated with less marital satisfaction. In addition, high attachment dimension scores on anxiety and avoidance are expected to be associated with less adaptive, more destructive partner responses (exit and neglect) and less associated with adaptive relationship responses by the partner in accommodative dilemmas (Rusbult et al., 1986b,

1998). The destructive partner responses are hypothesized, in turn, to predict poorer marital satisfaction.

*Empathy as an Adult Attachment-
Marital Satisfaction Mediator*

An additional factor that may play an explanatory role in the relationship between attachment style and marital satisfaction is couple members' capacity for empathy. Previous research has found support for a relationship between the dimensions underlying both secure and insecure attachment and constructs associated with empathy (Britton & Fuendeling, 2005; Joeireman, Needham, & Cummings, 2001; Perlman, 1999; Posner, 2000). In addition, empathy has been described as an essential ingredient in the maintenance of satisfying romantic relationships (Davis & Oathout, 1987; Long & Andrews, 1990; Mueller & Fiebert, 1988; Perlman; Posner; Rowan, Compton, & Rust, 1995; Schutte, Malouff, & Bobik, 2001; Thomas, Fletcher, & Lange, 1997). Thus, empathy is likely to be a factor that explains the association between attachment style and marital satisfaction.

Empathy has frequently been described in two distinct forms. Hogan (1969) defined empathy as "the intellectual or imaginative apprehension of another's condition or state of mind" (p. 307). This definition implies that empathy is a cognitive role-taking process that relies on understanding the other individual's perspective. In contrast, Mehrabian and Epstein (1972) argued that empathy is an involuntary vicarious emotional response to another individual's emotional state. Davis's (1983) Interpersonal Reactivity Index (IRI) incorporates the cognitive role-taking described by Hogan, as well as the vicarious emotional response described by Mehrabian and Epstein, in the form of two

subscales--perspective-taking and empathic concern. In addition, the IRI adds another construct of empathy, personal distress. Davis defined personal distress as initial attention and emotional response to the situation of another individual; however, for individuals who score highly on the personal distress subscale, their own discomfort with the emotions of others become overwhelming as the situation progresses. Davis described this overwhelming discomfort with another's emotions, or personal distress, as a barrier to being able to empathize with others.

Links between adult attachment and empathy. There are several theoretical reasons that suggest adult attachment should be related to empathy. First, an individual's comfort getting close and comfort depending on others (dimensions of secure attachment) would be the building blocks necessary to create the kind of intimacy in which they could see the world from their partners' perspectives as well as understand how their partners' feel, both key ingredients of empathy (Collins & Read, 1990; Joireman et al., 2001). Furthermore, anxiety and avoidance (dimensions of insecure attachment) are likely to hinder an individual's ability to create the kind of intimacy to get close enough to their partners to be empathetic (Joireman et al.). Finally, dimensions of insecure attachment (anxiety and avoidance) would likely lead to more personal distress which has been linked with the inability to be empathetic (Perlman, 1999; Posner, 2000).

Two recent studies by Joireman and colleagues (2001) found that dimensions of attachment were related to various aspects of empathy, as defined by Davis's IRI (1983). Specifically, greater empathic concern was related to higher scores on the secure attachment dimensions of "comfort with closeness" and "depend on others," as well as

lower anxiety about relationships. In addition, perspective-taking showed similar positive associations with secure attachment dimensions, although the correlations were weaker (Joireman et al.). The second study by Joireman and colleagues, using a different attachment measure (Fraley et al., 2000), found that dimensions related to secure attachment (low anxiety and low avoidance) were associated with positive forms of empathy (perspective-taking and empathic concern). In addition, attachment dimensions related to insecure attachment (high anxiety and high avoidance) were associated with personal distress, a maladaptive form of empathy (Joireman et al.).

Several other researchers, although not primarily investigating attachment and empathy associations, have found a relationship between attachment dimensions and empathy (Britton & Fuendeling, 2005; Perlman, 1999; Posner, 2000). For instance, Britton and Fuendeling found that the anxiety, but not avoidance, dimensions of adult attachment predicted both the personal distress and empathic concern subscales of empathy. In addition, Perlman found that the “comfort with closeness” dimension of adult attachment was positively associated with perspective-taking and that the “depend on others” dimension of adult attachment was linked to the empathic concern subscale of empathy. Finally, Posner, using a categorical measure of attachment, found that securely attached individuals demonstrated higher scores on both emotional and cognitive aspects of empathy. These results seem to suggest that the relationship between adult attachment and empathy is related to the emotional, cognitive, and maladaptive forms of empathy.

Links between empathy and marital satisfaction. A great deal of previous research has described empathy as a key aspect in maintaining satisfying romantic relationships

(Davis & Oathout, 1987; Long & Andrews, 1990; Mueller & Fiebert, 1988; Rowan et al., 1995; Schutte et al., 2001). Empathy is often viewed as a characteristic that facilitates the acquisition, development, and maintenance of mutually satisfying relationships (Davis & Oathout). Furthermore, empathy has been implicated as the basis of positive communication and quality social skills (Davis & Oathout; Schutte et al.). This ability to acquire and maintain relationships is thought to increase an individual's capability to receive social support, as well as enjoy greater marital satisfaction (Davis & Oathout).

Davis and Oathout (1987) examined self-reported empathy ability, as it related to positive relationship behaviors and partner relationship satisfaction. In their model, empathic concern and perspective taking (IRI; Davis, 1983) were positively associated with 14 of 14 positive behaviors measured, which in turn were associated with partners' relationship satisfaction. In a similar study, Long and Andrews (1990) found that dyadic empathy was a significant predictor of marital satisfaction of both husbands and wives. Results indicated that self-reported dyadic empathy only accounted for a fraction of the variance in marital satisfaction. However, a larger portion of the variance was accounted for by spouses' perceptions of their partners' ability to empathize. Specifically, wives' perception of husbands' empathy predicted 50% of wives' marital satisfaction; husbands' perception of wives' empathy predicted 22% of husbands' marital satisfaction (Long & Andrews). In other research, empathic concern has been associated with marital satisfaction for men (Rowen et al., 1995) and Schutte and colleagues (2001) found that emotional intelligence, a construct that captures some elements of empathy, was also associated with marital satisfaction for both partners.

Empathy as a mediating mechanism. To summarize, a consistent relationship has been observed between dimensions of secure attachment (low anxiety and low avoidance) and positive forms of empathy (perspective-taking and empathic concern), as well as between insecure attachment (high anxiety and avoidance) and maladaptive empathy (personal distress; Joireman et al., 2001). Additionally, research has shown a consistent relationship between empathy and marital satisfaction (Long & Andrews, 1990; Rowen et al., 1995; Schutte et al., 2001). However, none of the previous literature has simultaneously examined adult attachment and empathy in the context of romantic relationships, nor has previous research specifically hypothesized empathy as a mediating mechanism in the association between adult attachment and marital satisfaction. The current study hypothesizes that individuals with lower scores on the anxiety and avoidance dimensions of attachment will be more likely and more able to engage in adaptive empathy behaviors (empathic concern and perspective-taking) and less likely to engage in maladaptive empathy behavior (personal distress; Davis, 1983). This pattern of adaptive empathy behaviors will, in turn, be associated with marital satisfaction (Joireman et al.; Long & Andrews). In addition, lower scores on the anxiety and avoidance dimensions of attachment will be associated with their partner's adaptive empathy behaviors (empathic concern and perspective-taking) and less likely to engage in maladaptive empathy behavior (personal distress; Davis). This pattern of adaptive empathy behaviors will, in turn, be associated with the highest degree of relationship satisfaction (Joireman et al; Long & Andrews).

Additionally, higher scores on the anxiety and avoidance dimensions of attachment will be negatively associated with their partner's adaptive empathy behaviors

(empathic concern and perspective-taking) and positively associated with maladaptive empathy behavior (personal distress; Davis, 1983). This pattern of associations between adult attachment dimensions and empathy will be associated with lower marital satisfaction (Joireman et al., 2001; Long & Andrews, 1990). In addition, higher scores on the anxiety and avoidance dimensions of attachment will be negatively associated with their partner's adaptive empathy behaviors (empathic concern and perspective-taking) and positively associated with maladaptive empathy behavior (personal distress; Davis). This pattern of associations between adult attachment dimensions and empathy will be associated with lower marital satisfaction (Joireman et al.; Long & Andrews).

Summary and Hypotheses

A consistent relationship has been observed between the adult attachment dimensions of anxiety and avoidance and marital satisfaction. However, little research has explained the mechanisms through which this relationship operates. Thus, the current study examined three different potential mediators of the relationship between adult attachment dimensions of anxiety and avoidance and marital satisfaction: marital expectations, responses to accommodative dilemmas, and three aspects of empathy.

Previous research has shown that there are no clear gender trends for specific dimensions of attachment style predicting either spouse's marital satisfaction. Although the current study's focus is on the mechanisms that explain the relationship between adult attachment dimensions and marital satisfaction, specific gender trends were identified from attachment dimensions for each of the mediators as well as unique links from male and female attachment to marital satisfaction. A total of eight models were tested, one for

each of the four accommodative styles, one for each of the empathy variables, and one for expectation discrepancies. The generic form of the model is presented in Figure 1.

The following hypotheses examine the relationship between adult attachment and marital satisfaction and the manner in which three mediators, expectations, accommodative responses, and empathy, help explain the mechanics of this relationship.

Marital Expectations

Avoidance and anxiety dimensions of attachment will be negatively associated with the extent to which relationship expectations are met in participants' marriages, which will be positively associated with marital satisfaction. In addition, attachment dimension scores on anxiety and avoidance are expected to be negatively associated with their partner's relationship expectations that are hypothesized to be positively associated with marital satisfaction. Attachment dimensions are hypothesized to be associated with their own relationship expectations as well as their partners.

Accommodative Responses

Avoidance and anxiety dimensions of attachment will be negatively associated with voice and loyalty responses and positively associated with exit and neglect responses. The adaptive accommodative responses (voice and loyalty) are hypothesized to be positively associated with marital satisfaction; whereas the destructive accommodative responses (exit and neglect) are hypothesized to be negatively associated with marital satisfaction. In addition, attachment dimension scores on anxiety and avoidance are expected to be inversely associated with their partner's adaptive accommodative responses and positively associated with their partner's destructive

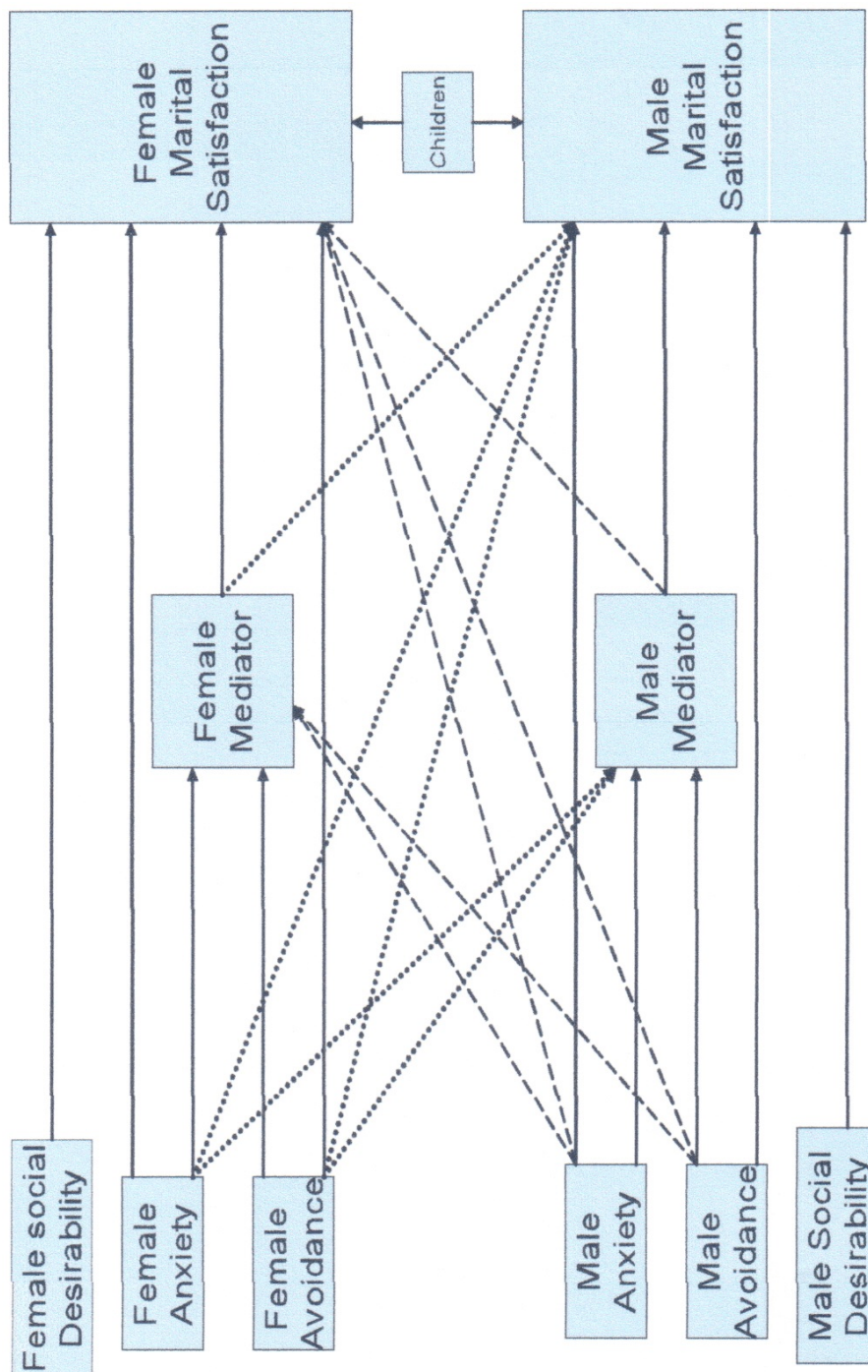


Figure 1. Design explanation of model.

accommodative responses that are hypothesized to be positively and negatively associated with marital satisfaction, respectively. Attachment dimensions are hypothesized to be associated with couple members' own accommodative responses as well as their partners.

Empathy

Avoidance and anxiety dimensions of attachment will be negatively associated with empathic concern and empathic perspective taking and positively associated with empathic personal distress. Empathic concern and empathic perspective taking are then hypothesized to be positively associated with marital satisfaction, whereas empathic personal distress is hypothesized to be negatively associated with marital satisfaction. In addition, attachment dimension scores on anxiety and avoidance are expected to be negatively associated with their partner's empathic concern and empathic perspective taking and positively associated with their partner's empathic personal distress that are hypothesized to be positively and negatively associated with marital satisfaction. Attachment dimensions are hypothesized to be associated with each of their own measures of empathy (empathic concern, empathic perspective taking, and empathic personal distress) as well as their partners' measures of empathy.

CHAPTER III

METHODS

Design

A correlational design was used for the current study, examining the associations among married couple members' dimensions of adult attachment and marital satisfaction. Specifically, marital expectations, responses to accommodative dilemmas, and ability to empathize with a spouse were hypothesized to mediate the relationship between adult attachment and marital satisfaction. Self-report data were collected from both partners of 193 heterosexual, married couples.

Participants

Subjects for the current study were recruited from undergraduate courses and off-campus distance education courses. Married students were asked to fill out the questionnaires themselves with their spouses and unmarried students were asked to recruit a couple they knew to fill out the questionnaire. Students received course credit for their help in collecting the data. This recruitment strategy was employed in an effort to yield a more diverse sample with regard to age, socioeconomic status (SES), and other demographic factors, as distance education students generally were nontraditional students and the couples, in the sample were, on average, older than traditional students. In addition to course credit for students, participating couple members were invited to submit their names and addresses for a drawing for two \$50 prizes.

Participating couples had been married an average of 11 years, with a range from 2 weeks to 56 years. About 55% of participating couples had been married for 5 years or less, 10% between 5 and 10 years, 10% between 10 and 20 years, and 25% of participating couples had been married for 20 years or more. Participating couples had dated each other an average of about 1 year before getting married, with a range from 1 month to 12 years, and 9.3% of female couple members and 12.1% of male couple members reported living together before they were married..

The racial background of female spouses was: 95.4% White, 1.6% Asian, 1% Latino/Hispanic, 1% Navajo, and 1% who did not respond. The average age of female spouses was 33.64 years, and ranged from 19 years to 79 years. The religious affiliation of female spouses was 87% Mormon (members of The Church of Jesus Christ of Latter-day Saints; LDS), 2% Catholic, 1% Protestant, 4% none, and 6% other. Fifty-seven percent of female couple members reported having children; 20% had a child 5 years or younger, 7.8% had a child 12 years or younger, 8.3% had a child 18 years or younger, and 21.3% had children who were 18 years or older.

Sixty-nine percent of the female couple members were employed. Of those who were employed, 30% reported an income of \$20k or less, 28.5% reported an income from \$20k to \$40k, 15.5% reported an income between \$40k and \$60k, 11.4% between \$60k and \$80k, 11.4% reported an income of \$80,000 or more, and 2.1% did not respond. Female couple members were asked to report the type of employment in which they were engaged. Of the female couple members 9.8% were unemployed students or homemakers, 18.7% were employed as unskilled laborers, 18.7% as skilled laborers or

craftsman, and 32.6% as professionals. Overall, 20.2% of the respondents did not answer regarding their current employment status.

Female couple members were also asked to report how much education they had obtained. Of the female couple members 5.7% reported at least a high school diploma, 3.1% stated they had technical school training, 50.8% stated they had attended some college, 33.7% stated they were college graduates, and 4.7% reported obtaining a graduate or postbaccalaureate degree, 2.1% of the respondents did not answer.

The racial background of male spouses was: 93.3% White, 2.6% African-American, .5% Asian, 1% Latino/Hispanic, 1.6% Navajo, .5% other, and .5% missing. The average age of male spouses was 35.56 years, and ranged from 20 years to 80 years. The religious affiliation of male spouses was 86.5% Mormon (LDS), 1.6% Catholic, 2.1% Protestant, 2.1% none, 5.2% other, and 4.2% who did not respond. Fifty-nine percent of male couple members reported having children. Of those who had children, 19.7% had a child 5 years or younger, 8.8% had a child 12 years or younger, 8.8% had a child 18 years or younger, and 21.7% had children who were 18 years or older.

Eighty-nine percent of the male couple members were employed; 24.9% reported an income of \$20,000 or less, 30.6% reported an income between \$20k and \$40k, 17.6% reported an income between \$40k and \$60k, 14% between \$60k and \$80k, and 10.9% reported an income of \$80,000 or more. Male couple members were asked to report the type of employment in which they were engaged. Of the male couple members 6.7% were unemployed or students, 26.4% were employed as unskilled laborers, 28.5% as skilled laborers or craftsman, and 34.2% as professionals. Of the respondents, 4.1% did not respond to the question. Male couple members were also asked to report the

amount of education they had obtained. Of the male couple members, 1.6% reported some high school education, 7.3% reported at least a high school diploma, 3.1% stated they had technical school training, 55.4% stated they had attended some college, 17.1% stated they were college graduates, and 13.5% reported obtaining a graduate or postbaccalaureate degree, and 2.1% of the respondents did not answer.

Measures

Copies of all measures are provided in Appendix A.

Demographic Information

The demographic section assessed race, age, gender, religion, educational attainment, number of years married, number of previous marriages, number of children, and if and how long the couple cohabited before they married.

Adult Attachment

The 36-item Experiences in Close Relationships (ECR) scale was used to assess dimensions and attachment styles of adult romantic attachment (Brennan et al., 1998). This instrument provides a measure of adult attachment and yields scores on two dimensions, anxiety and avoidance. This Likert-type scale requires participants to indicate the degree to which they disagree or agree strongly on the 36 items that reflect the two attachment dimensions. Individuals who score high on the avoidance scale tend to avoid emotional closeness and intimacy, and do not feel comfortable opening up to or depending on their partner. Individuals who score high on the anxiety scale tend to be preoccupied with their romantic relationships, worry about being abandoned, and desire

to be close to their partner. Example items include, “I worry about being abandoned,” and “I am very comfortable being close to romantic partners.” Acceptable alpha levels were found for both the anxiety (Male $\alpha = .88$, Female $\alpha = .89$) and avoidance (Male $\alpha = .90$, Female $\alpha = .94$) subscales. Mean scores were computed for the anxious and avoidant dimensions of attachment for each individual, based on the scoring instructions provided in the Brennan and colleagues’ study.

Marital Expectations

The 30-item Relationship Standards questionnaire (Vangelisti & Daly, 1997) was used to assess husbands’ and wives’ expectations of their marital relationship. This instrument provides a measure of the contrast between marital experiences and marital expectations. Participants read a description of 30 standards for long-term romantic relationships. Each description is followed by two 9-point Likert-type scales. One measures how important they believed the standard is for successful long-term romantic relationships, and the other asked that they rate the extent to which their current relationship reflected the standard. Example items included, “Both people will be willing and able to adapt to the changing needs, demands, and desires of the other,” and “Both people will be willing to talk and be comfortable talking with the other about wants and needs and things that are bothering them; each will be willing to self-disclose feelings and emotions.” The original alpha reliabilities for the two subscales were .91 and .95 (Vangelisti & Daly). Discrepancy scores were calculated for each expectation by subtracting the degree to which participants held each standard from the extent to which they believed each was fulfilled in their relationship. These difference scores were

summed, thus the greater the negative number the more each individual felt that their expectations were not being fulfilled. Acceptable alpha levels were found for both male and female subscales of the discrepancy expectation scores (Male $\alpha = .81$, Female $\alpha = .89$).

Accommodative Responses

The reactions to accommodative dilemmas were measured using a 28-item measure (Gaines et al., 1997; Rusbult et al., 1986) that captures four styles of responding to accommodative dilemmas. Participants rate themselves on each item by using a 9-point Likert-type scale. Sample items include exit strategies where the couple member considers or threatens to end the relationship, “When my partner yells at me or speaks to me in a raised voice, I consider breaking up;” voice strategies where the couple member actively engages the problematic situation, “When my partner is rude and inconsiderate with me, I calmly discuss things with my partner;” loyalty where the couple member remains optimistic in hopes of change but takes no active steps to create it, “When my partner is angry with me and ignores me for a while, I remain loyal and quietly wait for things to get better;” and neglect strategies where the couple member avoids conflict but destructively engages the partner in unrelated ways, “When my partner yells at me or speaks to me in a raised voice, I sulk and try to avoid my partner for a while.” The accommodation subscales were scored by summing the scores for the questions on each of the four subscales (exit, neglect, voice and loyalty). The two subscales are often combined to yield an adaptive subscale (combining loyalty and voice) and a destructive subscale (exit and neglect). Rusbult and colleagues (1991) reported a Cronbach’s alpha

for destructive accommodative reactions of .91 (exit plus neglect) and for adaptive reactions of .78 (voice and loyalty). In the current study, acceptable alpha levels were found for most of the subscales: exit (Male $\alpha = .87$, Female $\alpha = .84$), neglect (Male $\alpha = .78$, Female $\alpha = .74$), voice (Male $\alpha = .78$, Female $\alpha = .72$), loyalty subscale (Male $\alpha = .73$, Female $\alpha = .47$). The low reliability scores for women on the loyalty subscale are consistent with previous research (Rusbult et al.). Obtained alpha levels for the combined adaptive and destructive subscales were also consistent with previous research (destructive: Male $\alpha = .85$, Female $\alpha = .83$, and adaptive: Male $\alpha = .73$, Female $\alpha = .40$).

Empathy

The IRI (Davis, 1983) assessed four components of empathy: empathic perspective taking, empathic fantasy, empathic concern, and personal distress. The perspective taking subscale measures an individual's ability to understand situations from someone else's point of view. The empathic concern subscale measures an individual's tendency to relate to the emotional content of another person. The personal distress subscale measures an individual's discomfort dealing with someone else's emotions. The empathic fantasy subscale measures an individual's tendency to become emotionally involved in fictions or fantasies and was not relevant or used for the current study. Participants rated themselves on each item by using a 5-point Likert-type scale, lower scores indicating more of a particular form of empathy. Sample items include "I sometimes try to understand my friends better by imagining how things look from their perspective" for the empathic perspective taking scale; "I often have tender, concerned feelings for people less fortunate than I" for the empathic concern subscale; and "In

emergency situations, I feel apprehensive and ill-at-ease” for the personal distress subscale. Obtained alpha levels for each of the subscales in the current study were acceptable: empathic concern (Male $\alpha = .76$, Female $\alpha = .69$), perspective taking (Male $\alpha = .76$, Female $\alpha = .76$), and personal distress (Male $\alpha = .72$, Female $\alpha = .74$). The items were scored and averaged in such a way that lower scores represent greater evidence of a particular form of empathy.

Marital Satisfaction

The Dyadic Adjustment Scale (Spanier, 1976) is a 32-item scale that provides reliable and valid measures of global and specific indices of marital satisfaction. Sample items include “How often do you and your mate work together on a project?” and “How often do you kiss your mate?” Scores across items are summed, yielding a theoretical range of 0 to 151. Spanier established a Cronbach’s alpha for the total dyadic adjustment index of .96. Acceptable alpha levels were found each of the marital satisfaction subscales in the current study: overall satisfaction (Male $\alpha = .86$, Female $\alpha = .93$), consensus (Male $\alpha = .74$, Female $\alpha = .87$), satisfaction (Male $\alpha = .81$, Female $\alpha = .88$), cohesion (Male $\alpha = .79$, Female $\alpha = .80$), affectional expression (Male $\alpha = .68$, Female $\alpha = .73$). Spanier (1974) established the dyadic adjustment scale’s validity by comparing the responses of happily married and divorced couples; the two samples were significantly different on every scale.

Social Desirability

A measure of social desirability was included in the study to control for a participant’s tendency to respond to sensitive questions in a positive manner. Questions

about an individual's marital satisfaction are likely to be difficult to answer because of the tendency individuals have to endorse items in response to social or normative pressures instead of providing truthful self-reports. Although researchers still argue about the prevalence of social desirability, there is intuitive reason to believe that couple members may respond overly favorably to questions about their marital satisfaction (Li & Bagger, 2006). In an effort to account for an individual's susceptibility to normative pressures, a measure of social desirability was included in the model used to assess each of the three mediators.

The Balanced Inventory of Desirable Responding (BIDR) version 6 was used to assess participants' tendency to respond overly favorably to questions about their attachment scores and marital satisfaction. The BIDR is a measure consisting of 40 items that reflect two aspects of socially desirable responding: Self-Deceptive Enhancement (SDE) and Impression Management (IM). Individuals with high scores on self-deceptive enhancement believe in their overly positive self-reports, while people with high scores on impression management consciously present themselves in a favorable light. Each subscale is made up of 20 items measured on a 7-point Likert scale ranging from 1 = *not true* to 7 = *very true*. Paulhus (1991) established a coefficient alpha for internal consistency of .83 for the 40 items on the BIDR-6. Sample items include "My first impressions of people usually turn out to be right," and "It would be hard for me to break any of my bad habits." In the current study, acceptable alpha levels were found on the total scale score for the BIDR-6 for males and females (Male $\alpha = .76$, Female $\alpha = .75$). Concurrent validity for the BIDR-6 has been established by a .71 correlation with the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960).

Procedure

Packets containing surveys and other information were distributed in psychology courses or were sent to interested students by email after announcements about the study were posted on class websites. In addition to the surveys, packets contained informed consent forms, a cover letter explaining the purpose of the project and emphasizing the confidential nature of the material and the importance of both spouses completing the measures independently, and a list of potential referrals for any couple members who experienced distress as a result of participating in the study (see Appendix B for copies of the consent form, recruitment letter, and referral sources). Students took the packets home to complete on their own, or delivered the packets to the couples they recruited. Subjects either returned the completed questionnaires and signed consent forms to the student who recruited them or mailed them directly back to the researcher. A telephone contact was also provided to enable the researcher to deal with any queries concerning the materials. Upon completion of the study, couple members were invited to submit their names and addresses if they wished to receive a summary of the results of the study or be contacted in the future for potential follow-up studies.

CHAPTER IV

RESULTS

This section begins with an explanation of descriptive statistics for males and females for all predictor, outcome, and mediator variables of interest. In addition, it covers couple level differences on all variables and correlations between male and female predictor variables and male and female outcome variables. Next, the procedure used for defining the model used in each mediator analysis is described. Finally, analyses addressing each of the three research questions and the subsequent results are presented.

Descriptive and Preliminary Analyses

Descriptive and preliminary analyses included means and standard deviations for males and females for all study variables, as well as paired samples *t* tests examining differences between couple members on each of the study variables. Correlation matrices reported correlations for both female and male couple members between marital satisfaction and all of the predictor variables. Correlations between couple members for all study variables are also reported.

Table 4 contains the means and standard deviations for attachment scores, intermediary variables, marital satisfaction, and the social desirability scale. Descriptive results suggest that all subscale means are in the expected range for a nonclinical, community sample. It was anticipated for this community sample that scores on adaptive measures would be relatively higher and the scores on more maladaptive measures lower, and this was, indeed, what was found. Scores on attachment dimensions of anxiety and

Table 4

Means and Standard Deviations for Males and Females on all Variables

Variables	Range	Females			Males		
		<i>n</i>	Mean	<i>SD</i>	<i>n</i>	Mean	<i>SD</i>
Avoidance	1 - 7	186	2.29	1.11	191	2.50	.92
Anxiety	1 - 7	191	3.08	1.00	191	2.97	.94
Emp. EC	1 - 5	192	1.78	.52	191	2.31	.67
Emp. PT	1 - 5	192	2.54	.66	191	2.58	.66
Emp. PD	1 - 5	192	3.36	.72	191	3.68	.64
Exit	1 - 8	190	1.80	1.16	190	1.77	1.06
Neglect	1 - 8	190	3.83	1.38	190	3.77	1.40
Voice	1 - 8	190	6.32	1.18	190	5.72	1.35
Loyalty	1 - 8	190	5.73	1.31	190	5.95	1.21
Exp. Disc.	-146 - 157	187	-8.65	30.22	189	- 2.95	31.55
MS Overall	0 - 162	190	125.37	16.82	189	125.37	15.39
BIDR	1 - 7	191	4.38	.78	190	4.35	.55

avoidance were generally low, as were the scores on the destructive exit and neglect accommodative responses. Scores on adaptive forms of empathy, marital satisfaction, and the voice and loyalty accommodative responses were all in expected positive directions and beyond the midpoints of the scales. The marital satisfaction scale has a theoretical range of 0 to 162; Spanier (1976) reported a mean global dyadic adjustment score of 114.8 in his sample of married adults. The current sample's overall marital satisfaction mean score of 125 is within one standard deviation of Spanier's mean score.

Table 5 contains information regarding the results of paired samples *t* tests comparing wives and husbands on all predictor and outcome variables. This couple level analysis yielded several interesting results. Significant differences were observed between husbands and wives on five variables. Male couple members generally reported significantly higher scores on the avoidant subscale than their spouses. Women reported

Table 5

Preliminary Paired Sample t-Test Results for All Variables

Variable	Cohen's <i>d</i>	<i>t</i>	<i>df</i>	<i>p</i>
Avoidance	-.183	-2.492	184	.014
Anxiety	.086	1.188	189	.236
Emp. EC	-.713	-9.860	190	<.001
Emp. PT	-.055	-.758	190	.449
Emp. PD	-.336	-4.643	190	<.001
Exit	.030	.407	187	.684
Neglect	.037	.508	187	.612
Voice	.406	5.570	187	<.001
Loyalty	-.122	-1.676	187	.095
Exp. Disc.	-.155	-2.102	183	.037
BIDR	.066	.905	188	.367

* $p < .05$; ** $p < .01$.

higher levels of empathic concern, personal distress in emotion evoking situations, greater use of voice, and more unmet relationship expectations. Table 6 contains information regarding the correlations between spousal marital satisfaction with both male and female predictor variables. Most of the female and male predictor variables were significantly correlated with wives' marital satisfaction. Notably, correlations between scores on wife loyalty responses to wife marital satisfaction were quite weak. Wives' own empathic concern was not significantly linked to marital satisfaction for females, and husbands' personal distress was not linked to wives' marital satisfaction.

Most of the male and female predictor variables were significantly correlated with husbands' marital satisfaction. However, wives' reports of empathic concern, voice, and loyalty were nonsignificantly correlated with husbands' marital satisfaction. Similarly, husbands' reports of empathic concern and personal distress, were not significantly

Table 6

Correlations of Marital Satisfaction with Both Male and Female Predictors

Predictors	Female marital satisfaction	Male marital satisfaction
Female avoidance	-.574**	-.341**
Female anxiety	-.369**	-.236**
Female empathy empathic concern	-.126	-.111
Female empathy perspective taking	-.229**	-.339**
Female empathy personal distress	-.198**	.171*
Female exit	-.508**	-.369**
Female neglect	-.411**	-.297**
Female voice	.277**	.140
Female loyalty	.094	.130
Female expectation discrepancy	.497**	.388**
Male avoidance	-.374**	-.520**
Male anxiety	-.208**	-.262**
Male empathy empathic concern	-.200**	-.148*
Male empathy perspective taking	-.290**	-.328**
Male empathy personal distress	.072	.154*
Male exit	-.399**	-.506**
Male neglect	-.340**	-5.13**
Male voice	.231**	.400**
Male loyalty	.186*	.190**
Male expectation discrepancy	.305**	.396**

* $p < .05$; ** $p < .01$

correlated with their own scores on the overall marital satisfaction scale.

Table 7 contains information regarding the correlations between male and female attachment variables and all of the mediating variables. Interestingly, female and male anxiety was significantly associated with only a few of the spousal mediator variables. Female attachment anxiety was only associated with male exit and neglect. Male anxiety was only associated with female neglect. In contrast, male and female avoidance were

Table 7

Correlations Between Male and Female Predictor Variables

Predictors	Female anxiety	Female avoidance	Male anxiety	Male avoidance
Female empathy Empathic Concern	.143*	.261**	.068	.125
Female empathy Perspective Taking	.270*	.256**	.015	.161*
Female empathy Personal Distress	-.244	-.120	-.124	-.098
Female exit	.403**	.400**	.165*	.232**
Female neglect	.325**	.460**	.136	.238**
Female voice	-.084	-.431**	.069	-.137
Female loyalty	-.039	.047	-.031	.019
Female expectation discrepancy	-.336**	-.339**	.010	-.331**
Male empathy empathic concern	.009	.208**	.095	.236**
Male empathy perspective taking	.053	.185*	.112	.221**
Male empathy personal distress	-.035	-.034	-.227**	-.170*
Male exit	.330**	.297**	.259**	.467**
Male neglect	.157*	.192**	.185*	.514**
Male voice	-.091	-.178*	.004	-.450**
Male loyalty	-.041	-.130	-.041	-.114
Male expectation discrepancy	-.109	-.213**	-.074	-.185*

both associated with most of the spousal mediator variables with only a few exceptions.

Additionally, female and male loyalty was not significantly associated with either attachment dimension for both males and females.

Description of the Models Used in the Path Analysis

Pathways were tested from male and female attachment variables to their own mediator variable and then from their own mediator variable to overall satisfaction for both couple members. The attachment variables were allowed to correlate for both husbands and wives because it is believed that the internal working models contribute to a consistent relationship between the anxious and avoidant dimensions of attachment. Husband and wife marital satisfaction was also allowed to correlate, as were husband and

wife social desirability scores and attachment dimensions. Length of marriage and having children (scored dichotomously--yes/no) were included as control variables for both male and female satisfaction. Previous research has shown that having children and the length of time individuals were married were both negatively associated with couple members' marital satisfaction (Feeney, 1994, 1999). The association between relationship length and having children is thought to exist because as the duration of a couple members marriage lengthens the likelihood that they have children increases (Belsky, Spanier, & Rovine, 1983). Having children has been shown to have a negative association with marital satisfaction (Lawrence, Rothman, Cobb, Rothman, & Bradbury, 2008). Relationship length and having children appear to be similar constructs in the manner that they influence marital satisfaction. Furthermore, length of marriage and having children were found to be highly correlated (-.61). In order to create a more parsimonious model the current study dropped relationship length from the mediator models and included whether or not a marital couple had children as a way to account for links between parenting and marital satisfaction. Both parenting and social desirability were linked to marital satisfaction scores for both husbands and wives in every model. However, because the "having children" variable and the social desirability variable were included only to control for these factors, they were not discussed in the results section.

There were a total of four different indirect pathways each for male and female marital satisfaction that could have developed from the model tested. The first indirect path was from the couple members' attachment variables through their own relationship expectations to their own marital satisfaction. The second indirect path was from a couple members' attachment variables to their spouse's intermediary variable, which in

turn predicts their own marital satisfaction. The third indirect path was from the spouse's attachment variables through the target spouses' intermediary variable to his or her own marital satisfaction. For instance, looking at female marital satisfaction, the third indirect path would be male attachment variables associated with the female mediator predicting female marital satisfaction. Finally, the fourth indirect path was the spouse's attachment variables predicting their spouse's relationship expectations, which then predict the target spouse's marital satisfaction. One example of the fourth mediator model, using female marital satisfaction as the outcome variable, would be male attachment variables associated with the male mediator, which then is associated with female marital satisfaction. In addition, direct pathways were included from each couple members' own attachment variables to their own marital satisfaction and from each couple member's attachment variables to his or her partner's marital satisfaction.

Finally, the standardized coefficients for each of the paths in the model are discussed in terms of their significance, the size of the coefficient, and their indirect effects. Several authors have offered guidelines for the interpretation of standardized correlation coefficients (Cohen, 1988; Garson, 2008). Cohen, for example, has suggested the following interpretations; less than .29 is considered a small coefficient, .3 - .5 is considered a medium-sized coefficient, and anything greater than .5 is considered a large coefficient. Mediating effects were interpreted for pathways that had significant associations from the attachment variables to the mediating variable and from the mediating variable to respective marital satisfaction for each spouse.

Description of Procedure for Testing Model Fit

A range of fit statistics for the models was assessed to determine whether the model being examined provided an adequate fit to the data. All relevant path values, correlations for each variable as well as overall model fit statistics were calculated using AMOS 7.0.

A wide variety of fit indices are available to assess the fit of models to data. For the present study the fit indices that were used follow the recommendations of Bollen and Long (1993) and Kenny (2008) and include the use of the overall chi square value (χ^2), degrees of freedom (df), the chi square to degrees of freedom ratio, the comparative fit index (CFI), the normed fit index (NFI), and the root mean square error of approximation (RMSEA) with its corresponding 90% confidence interval.

The chi square statistic was one of the first indices developed and is reported in most studies as a measure of fit. It is a measure of general model fit, and is viewed as an estimation of how much the implied covariances (based on theory) differ from the sample covariances (derived from the data). A nonsignificant chi square indicated that the hypothesized model is a good fit with the data. The chi square statistic is sensitive to both sample size and deviations from statistical normality. Larger sample sizes (200 or larger) produce larger chi-squares that are likely to be significant and indicate a type I error (Kenny, 2008). Significantly skewed data almost always yield statistically significant findings. Because of the problems associated with the chi square test of general model fit, several researchers have suggested a relative chi square to degrees of freedom model fit (Carmines & McIver, 1981). These researchers suggested that chi square to degrees of

freedom ratios in the range of 3 to 1 or lower are indicative of an acceptable fit between the hypothetical model and the sample data (Carmines & McIver; Marsh & Hocevar, 1985; Wheaton, Muthen, Alwin, & Summers, 1977).

The CFI is a relative fit index. The CFI ranges from 0 to 1, where 0 represents the goodness of fit associated with a null model (one specifying that all the variables are uncorrelated) and 1 represents the goodness of fit associated with a saturated model (a model with 0 degrees of freedom that perfectly reproduces the original covariance matrix; Schumacker & Lomax, 1996). Values for the CFI may range from 0 to 1.0, and a value greater than or equal to .90 is considered representative of adequate fit. Hu and Bentler (1999) recommended using a more stringent cut-off value closer to .95. When interpreting the CFI, a CFI of .90 indicates that the model of interest is a 90% better fit than the null model calculated using the same sample data.

The Bentler Bonett Index or normed fit index (NFI) ranges from 0 to 1. When using the NFI, a 0 represents the goodness of fit associated with a null model or a model specifying that all the variables are uncorrelated, a 1 represents the goodness of fit associated with a saturated model or a model with 0 degrees of freedom that perfectly reproduces the original covariance matrix (Schumacher & Lomax, 1996). Similar to the CFI, values on the NFI range from 0 to 1.0, and a value greater than or equal to .90 is considered representative of adequate fit (Schumacker & Lomax).

The RMSEA is also a measure of the general model fit, but takes into account model complexity and is not as dependent on sample characteristics as the chi square value. Values of less than .06 are indicative of good model fit, while values between .06 and .10 suggest moderate fit. Values exceeding .10 are indicative of poor fit (Raykov &

Marcoulides, 2000). Byrne (1989) also suggested it is important to consider and report 90% confidence interval corresponding to the RMSEA.

Primary Results

Model #1 Attachment Dimensions, Relationship Expectations, and Marital Satisfaction

The estimation of the model yielded a significant chi-square value, $\chi^2 (19, N = 193) = 39.134, p = .013$; however, the chi square to degrees of freedom ratio was 2.060, which is indicative of a good fitting model. The expectation mediator model had an NFI of .925 and a CFI of .956, both of which are above the recommended .9 or higher for good fitting models. The RMSEA for the model was .074 with a 90% confidence interval of .040 - .107, which suggested that the model represented a minimally adequate fit for the data. Additionally, the squared multiple correlations indicated that 46% of female marital satisfaction and 43% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, relationship expectations, and marital satisfaction are reported in Figure 2. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 8 includes the standardized direct and indirect effects for male and female marital satisfaction from each of the attachment dimensions through the relationship expectation mediator. The mediated indirect effects of male and female anxiety and avoidance through relationship expectations on marital satisfaction fell within the small range $< .29$ (see Table 8; Cohen, 1988). Significant mediated paths will be discussed in the following paragraphs.

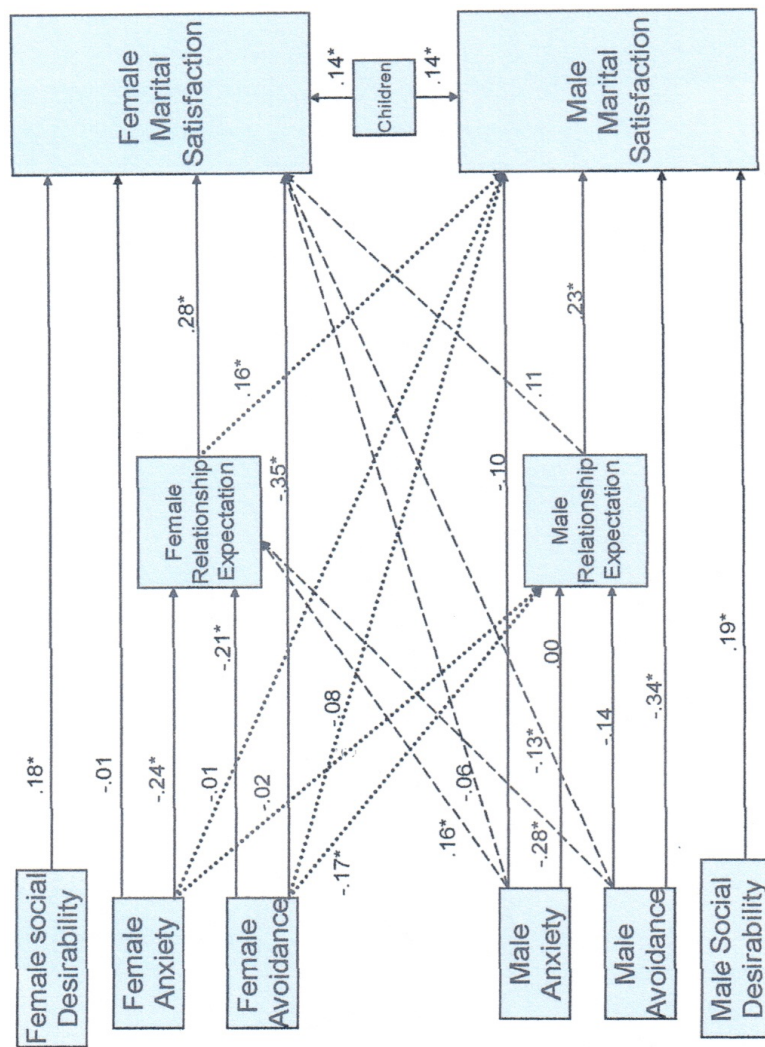


Figure 2. Standardized path coefficients assessing associations among attachment dimensions, relationship expectations, and marital satisfaction.

Table 8

Standardized Direct and Indirect Effects for the Relationship Expectation Mediator

Dimensions	Male relationship expectation	Female relationship expectation	Male relationship satisfaction		Female relationship satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	-.121	.090	-.061	-.022	-.031	.005
Female anxiety	-.085	-.147	-.035	.005	-.061	-.022
Male avoidance	-.156	-.226	-.323	-.069	-.095	-.070
Female avoidance	-.239	-.213	-.121	-.089	-.366	-.078

Overall some interesting patterns of significant associations emerged from the model. Patterns will be described in terms of the four potential indirect pathways for females and males. For female couple members, full mediation was found for the female attachment dimension of anxiety and female relationship expectations predicting female marital satisfaction. Partial mediation was found with a small-sized association for the female attachment dimension of avoidance through female relationship expectations predicting female marital satisfaction, because a medium negative direct effect was found between female avoidance and female marital satisfaction. Because male relationship expectations were not related to female marital satisfaction two of the potential mediator models were eliminated. No mediation was found from male attachment variables predicting male relationship expectations leading to female marital satisfaction. Additionally, no mediation was found from female attachment variables predicting male relationship expectations leading back to female marital satisfaction. Surprisingly, a small but positive association and full mediation was found with the male attachment dimension of anxiety positively associated with female expectations, which then predicted female marital satisfaction. A small partial mediation was found for the male

attachment dimension of avoidance through female relationship expectations predicting female marital satisfaction, because a small negative direct effect was found between male avoidance and female marital satisfaction.

For male couple members, no indirect effects were found for male attachment dimensions as neither anxiety nor avoidance were associated with male relationship expectations. A small direct effect was found between the male attachment dimension of avoidance and marital satisfaction. Small-sized full mediation effects were found between female attachment dimensions of avoidance and anxiety through female relationship expectations predicting male marital satisfaction. A small full mediation effect was found for the male attachment dimension of anxiety through female relationship expectations predicting male marital satisfaction. Partial mediation was found for the male attachment dimension of avoidance through female expectations predicting male marital satisfaction because there was a medium negative direct effect between male avoidance and male marital satisfaction. Finally, a small indirect effect was found for the female attachment dimension of avoidance but not anxiety through male relationship expectations predicting male satisfaction. Neither of the female attachment dimensions were directly associated with male marital satisfaction.

*Model #2 Attachment Dimensions, Exit
Accommodative Dilemma Responses
and Marital Satisfaction*

The estimation of the model yielded a significant chi-square value, $\chi^2 (19, N = 193) = 40.542, p = .003$; however, the chi square to degrees of freedom ratio was 2.134, which is indicative of a good fitting model. The exit mediator model had an NFI of .931

and a CFI of .959, which is above the recommended .9 or higher for good fitting models. The RMSEA for the model was .077 with a 90% confidence interval of .043 - .110, which suggested that the model represented a minimally adequate fit for the data. Additionally, the squared multiple correlations indicated that 48% of female marital satisfaction and 41% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, exit responses, and marital satisfaction are reported in Figure 3. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 9 includes the direct and indirect effects for male and female marital satisfaction from each of the attachment dimensions through the exit mediator. The indirect effects of male and female anxiety and avoidance through exit responses on marital satisfaction fell within the small range, $< .29$ (see Table 9; Cohen, 1988). Significant mediated paths will be discussed in the following paragraphs.

Several interesting findings emerged from the model. Patterns will be described in terms of direct effects on male and female marital satisfaction as well as the four potential indirect pathways for female and males. For female couple members, a small indirect effect was found between the female attachment dimension of anxiety and female exit responses predicting female marital satisfaction. A small-sized partial mediation was found for the female attachment dimension of avoidance through female exit responses predicting female marital satisfaction because of the medium-sized negative direct effect between female avoidance and female marital satisfaction. Because male exit responses were not related to female marital satisfaction, two of the mediator models were eliminated. No mediation was found from male attachment variables

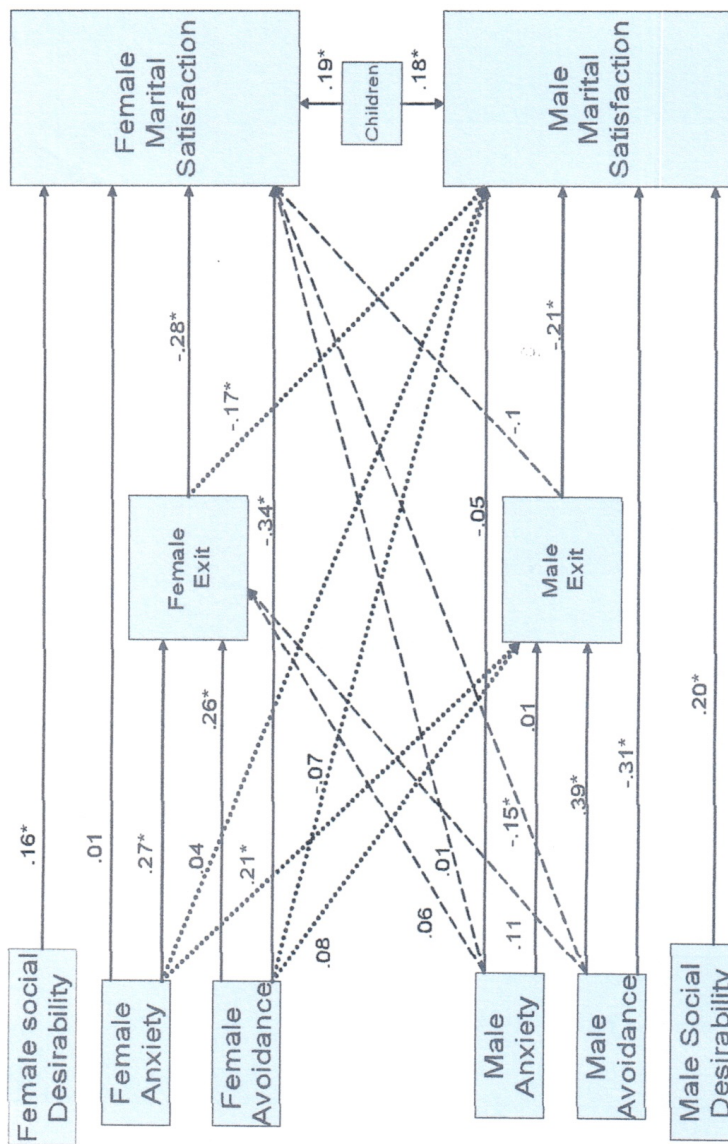


Figure 3. Standardized path coefficients assessing associations among attachment dimensions, exit responses, and marital satisfaction.

Table 9

Standardized Direct and Indirect Effects for the Exit Mediator

Dimensions	Male	Female	Male relationship		Female relationship	
	exit	exit	satisfaction		satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	.096	.058	-.048	-.030	.007	-.025
Female anxiety	.214	.270	.037	-.091	.008	-.095
Male avoidance	.391	.111	-.307	-.101	-.146	-.069
Female avoidance	.084	.264	-.077	-.063	-.337	-.081

predicting male exit responses leading to female marital satisfaction. Additionally, no mediation was found from female attachment variables predicting their husband's exit responses leading back to female marital satisfaction. Additionally, no mediation was found from female attachment variables predicting their husband's exit responses leading back to female marital satisfaction. Finally, because the male attachment variables were not significantly associated with female exit responses no mediation effects were found from male attachment variables through female exit responses to female marital satisfaction. However, a small direct effect was found between male avoidance and female marital satisfaction.

For male couple members, no mediating effects were found for the male attachment dimension of anxiety, as anxiety was not directly or indirectly associated with male marital satisfaction. However, partial mediation was found for the male attachment dimension of avoidance through male exit responses predicting male marital satisfaction, because there was a medium-sized negative direct effect between male avoidance and male marital satisfaction. Small indirect effects were found for the female attachment dimensions of anxiety and avoidance through female exit responses predicting male

marital satisfaction. Additionally, a small full mediation effect was found between the female attachment dimension of anxiety and male exit responses predicting male marital satisfaction. No indirect or direct effects were found between the female attachment dimension of avoidance and male exit responses or male marital satisfaction. Finally, because there was no association between male attachment dimensions and female exit responses, there was no mediator effect from male attachment to female exit responses back to male marital satisfaction.

*Model #3 Attachment Dimensions, Neglect
Accommodative Dilemma Responses
and Marital Satisfaction*

The estimation of the model yielded a significant chi-square value, $\chi^2 (19, N = 193) = 40.459, p = .003$; however, the chi square to degrees of freedom ratio was 2.129, which is indicative of a good fitting model. The neglect mediator model had an NFI of .928 and a CFI of .957, which is above the recommended .9 or higher for good fitting models. The RMSEA for the model was .077 with a 90% confidence interval of .043 - .110, which suggested that the model represented a minimally adequate fit for the data. Additionally, the squared multiple correlations indicated that 43% of female marital satisfaction and 40% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, neglect responses, and marital satisfaction are reported in Figure 4. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 10 includes the standardized direct and indirect effects for male and female marital satisfaction from each of the attachment

Table 10

Standardized Direct and Indirect Effects for the Neglect Mediator

Dimensions	Male neglect	Female neglect	Male relationship satisfaction		Female relationship satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	.033	.032	-.065	-.011	-.012	-.007
Female anxiety	.055	.143	-.020	-.024	-.063	-.020
Male avoidance	.489	.116	-.275	-.134	-.143	-.076
Female avoidance	.033	.380	-.121	-.034	-.380	-.040

dimensions through the neglect mediator. The indirect effects of male and female anxiety and avoidance through neglect responses on marital satisfaction fell within the small range, $< .29$ (see Table 10; Cohen, 1988). Significant indirect paths will be discussed in the following paragraphs.

The pattern of significant associations is described in terms of direct effects on male and female marital satisfaction, as well as the four potential mediator pathways for females and males. Unless otherwise specified, attachment dimensions were positively associated with neglect responses and neglect responses were negatively associated with marital satisfaction. For female couple members no mediation was found between the female attachment dimensions of anxiety and avoidance through female neglect responses predicting female marital satisfaction because female neglect was not significantly associated with female marital satisfaction. However, both female attachment dimensions were associated with female neglect. No mediation was found for the male attachment dimension of anxiety through male neglect responses to female marital satisfaction because male anxiety was not associated with male neglect responses. However, partial mediation was found for the male attachment dimension of avoidance

through male neglect responses to female marital satisfaction because there was a small negative effect from male avoidance to female marital satisfaction. No mediation was found between the male attachment dimensions of anxiety and avoidance through female neglect responses back to female marital satisfaction, because neither male attachment dimension was associated with female neglect and female neglect was not significantly associated with female marital satisfaction.

For male couple members no direct or mediating effects were found for the male attachment dimension of anxiety as male anxiety was not directly or indirectly associated with male marital satisfaction. However, partial mediation was found for the male attachment dimension of avoidance through male neglect responses predicting male marital satisfaction, because there was a medium negative direct effect between male avoidance and male marital satisfaction. No mediation was found for the female attachment dimensions of anxiety and avoidance through female neglect responses predicting male marital satisfaction because female neglect responses were not associated with male marital satisfaction. No mediation was found between the male attachment dimensions of anxiety and avoidance and male neglect responses predicting male marital satisfaction. There were also no direct effects between male attachment dimensions and female neglect responses or between female neglect responses and male marital satisfaction. Finally, because there was no association between female attachment dimensions and male neglect responses there was no mediator effect from female attachment dimensions to male neglect responses back to male marital satisfaction. There was a direct effect between male neglect responses and male marital satisfaction.

Model #4 Attachment Dimensions, Voice Accommodative Dilemma Responses and Marital Satisfaction

The estimation of the model yielded a significant chi-square value, $\chi^2 (19, N = 193) = 36.861, p = .008$; however, the chi square to degrees of freedom ratio was 1.940, which is indicative of a good fitting model. The voice mediator model had an NFI of .930 and a CFI of .961, which is above the recommended .9 or higher for good fitting models. The RMSEA for the model was .070 with a 90% confidence interval of .035 -.104, which suggested that the model represented an adequate fit for the data. Additionally, the squared multiple correlations indicated that 41% of female marital satisfaction and 37% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, voice responses, and marital satisfaction are reported in Figure 5. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 11 includes the standardized direct and indirect effects for male and female marital satisfaction from each of the attachment dimensions through the voice responses mediator. The indirect effects of male and female anxiety and avoidance through voice responses on marital satisfaction fell within the small range, $< .29$ (see Table 11; Cohen, 1988). Significant mediated paths will be discussed in the following paragraphs.

Significant pathways are described in terms of direct effects on male and female marital satisfaction as well as the four potential indirect pathways for female and males. Except for a few specified exceptions, attachment dimensions were negatively associated with voice responses and voice responses were positively associated with marital

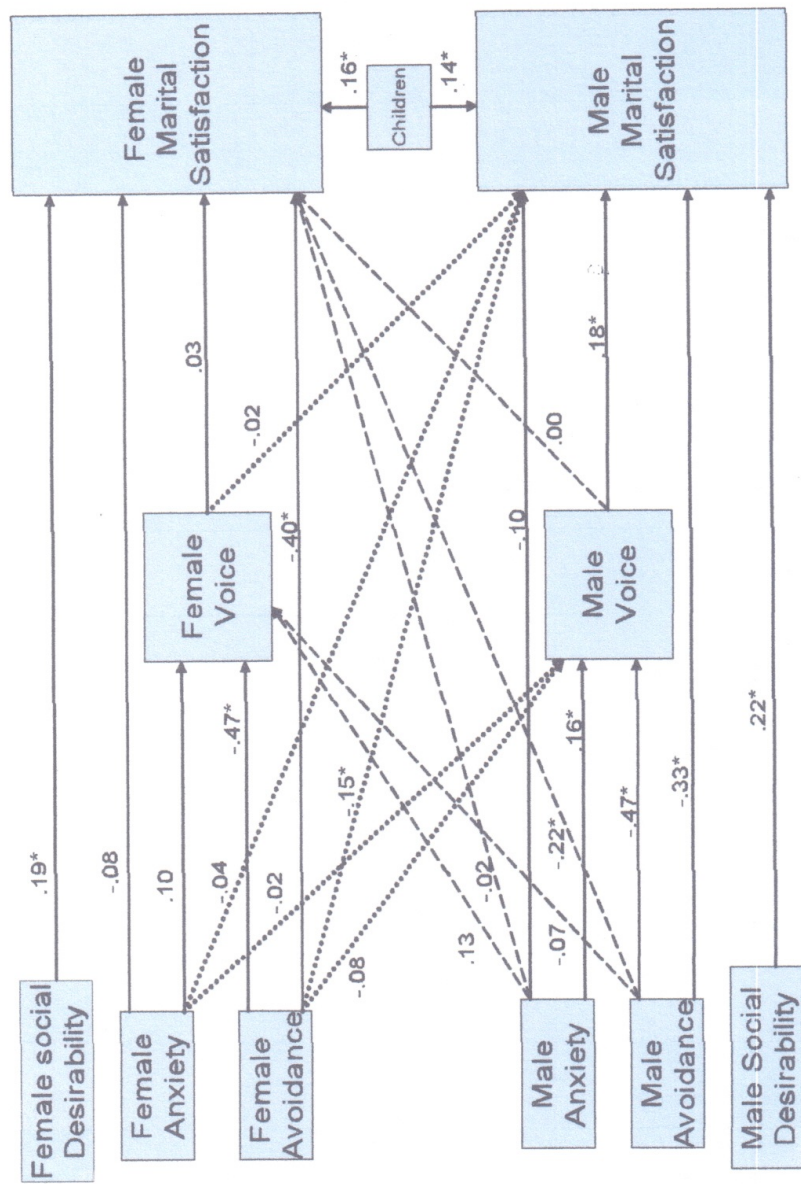


Figure 5. Standardized path coefficients assessing associations among attachment dimensions, voice responses, and marital satisfaction.

Table 11

Standardized Direct and Indirect Effects for the Voice Mediator

Dimensions	Male voice	Female voice	Male relationship satisfaction		Female relationship satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	.158	.130	-.099	.025	-.022	.003
Female anxiety	-.022	.100	-.006	-.006	-.084	.002
Male avoidance	-.467	-.071	-.328	-.081	-.217	-.002
Female avoidance	-.081	-.471	-.148	-.005	-.404	-.012

satisfaction. For female couple members no mediation was found between the female attachment dimensions of anxiety and avoidance through female voice responses predicting female marital satisfaction because female voice was not significantly associated with female marital satisfaction. However, there was a medium direct effect between the female attachment dimension of avoidance and female marital satisfaction as well as between both of the female attachment dimensions and female voice. No mediation was found for the male attachment dimensions of anxiety and avoidance through male voice responses to female marital satisfaction because male voice responses were not associated with female marital satisfaction. However, there was a significant direct effect between male avoidance and female marital satisfaction. No mediation was found between the female attachment dimensions of anxiety and avoidance through male voice responses back to female marital satisfaction because male voice responses were not associated with female marital satisfaction. Finally, no mediation was found between the male attachment dimensions of anxiety and avoidance through female voice responses back to female marital satisfaction because female voice responses were not associated with female marital satisfaction.

For male couple members full mediation was found for the male attachment dimension of anxiety through male voice responses to male marital satisfaction. Partial mediation was found for the male attachment dimension of avoidance through male voice responses predicting male marital satisfaction, because there was a medium-sized negative direct effect between male avoidance and male marital satisfaction. No mediation was found for the female attachment dimensions of anxiety and avoidance through female voice responses predicting male marital satisfaction because female voice responses were not associated with male marital satisfaction. However, a small direct effect was found between the female attachment dimension of avoidance and male marital satisfaction. No mediation was found between the male attachment dimensions of anxiety and avoidance and female voice responses predicting male marital satisfaction because male attachment dimensions were not associated with female voice and female voice was not associated with male marital satisfaction. Finally, because there was no association between female attachment dimensions and male voice responses, there was no mediator effect from female attachment dimensions to male voice responses back to male marital satisfaction.

*Model #5 Attachment Dimensions, Loyalty
Accommodative Dilemma Responses
and Marital Satisfaction*

The estimation of the model yielded a significant chi-square value, $\chi^2 (19, N = 193) = 45.509, p = .001$; however, the chi square to degrees of freedom ratio was 2.395, which is indicative of a good fitting model. The loyalty mediator model had an NFI of .898, which is below the .9 cutoff score and a CFI of .930, which is above the

recommended .9 or higher for good fitting models. The RMSEA for the model was .085 with a 90% confidence interval of .054 - .117, which suggested that the model represented a minimally adequate fit for the data. Thus, the model was analyzed; however, the results should be examined with some caution. The squared multiple correlations indicated that 44% of female marital satisfaction and 39% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, loyalty responses, and marital satisfaction are reported in Figure 6. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 12 includes the standardized direct and indirect effects for male and female marital satisfaction from each of the attachment dimensions through the loyalty responses mediator. The indirect effects of male and female anxiety and avoidance through loyalty responses on marital satisfaction fell within the small range ($< .29$; see Table 12; Cohen, 1988). Significant mediated paths will be discussed in the following paragraphs.

Significant pathways will be described in terms of direct effects on male and female marital satisfaction, as well as the four potential indirect pathways for female and male couple members. Unless otherwise specified, attachment dimensions were negatively associated with loyalty responses and loyalty responses were positively associated with marital satisfaction. For female couple members no mediation was found between the female attachment dimensions of anxiety and avoidance through female loyalty responses predicting female marital satisfaction because female attachment dimensions were not significantly associated with female loyalty responses. However,

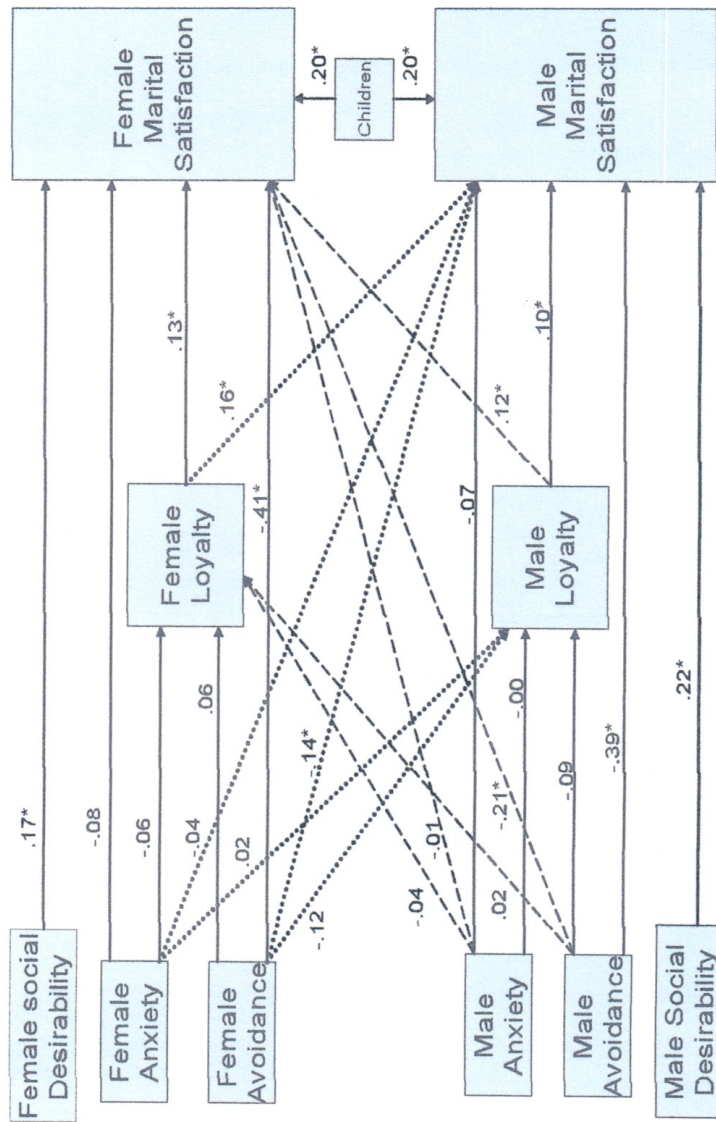


Figure 6. Standardized path coefficients assessing associations among attachment dimensions, loyalty responses, and marital satisfaction.

Table 12

Standardized Direct and Indirect Effects for the Loyalty Mediator

Dimensions	Male loyalty	Female loyalty	Male relationship satisfaction		Female relationship satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	-.002	.130	-.099	.025	-.022	.003
Female anxiety	.023	.100	-.006	-.006	-.084	.002
Male avoidance	-.467	-.071	-.328	-.081	-.217	-.002
Female avoidance	-.081	-.471	-.148	-.005	-.404	-.012

there was a small, but significant direct effect between the female loyalty responses and female marital satisfaction. No mediation was found for the male attachment dimensions of anxiety and avoidance through male loyalty responses to female marital satisfaction because male attachment dimensions were not associated with male loyalty responses. However, there was a small, significant direct effect between male loyalty responses and female marital satisfaction. No mediation was found between the female attachment dimensions of anxiety and avoidance through male loyalty responses back to female marital satisfaction because female attachment dimensions were not associated with male loyalty responses. However, there was a medium-sized direct effect between the female attachment dimension of avoidance and female marital satisfaction. Finally, no mediation was found between the male attachment dimensions of anxiety and avoidance through female loyalty responses back to female marital satisfaction because female attachment dimensions were not associated with female loyalty responses. However, there was a small, significant direct effect between the male attachment dimension of avoidance and female marital satisfaction.

For male couple members, no mediation was found between the male attachment dimensions of anxiety and avoidance through male loyalty responses predicting male marital satisfaction because male attachment dimensions were not significantly associated with male loyalty responses. However, there was a small direct effect between the male loyalty responses and male marital satisfaction. No mediation was found for the female attachment dimensions of anxiety and avoidance through female loyalty responses to male marital satisfaction because female attachment dimensions were not associated with female loyalty responses. However, there was a small direct effect between female loyalty responses and male marital satisfaction. No mediation was found between the male attachment dimensions of anxiety and avoidance through female loyalty responses back to male marital satisfaction because male attachment dimensions were not associated with female loyalty responses. However, there was a medium-sized direct effect between the male attachment dimension of avoidance and male marital satisfaction. Finally, no mediation was found between the female attachment dimensions of anxiety and avoidance through male loyalty responses back to male marital satisfaction because female attachment dimensions were not associated with male loyalty responses. However, there was a small direct effect between the female attachment dimension of avoidance and male marital satisfaction.

Model #6 Attachment Dimensions, Empathic Concern and Marital Satisfaction

The estimation of the model yielded a significant chi-square value. $\chi^2 (19, N = 193) = 34.839, p = .015$; however, the chi square to degrees of freedom ratio was 1.834, which is indicative of a good fitting model. The empathic concern mediator model had an

NFI of .923 and a CFI of .959, which is above the recommended .9 or higher for good-fitting models. The RMSEA for the model was .066 with a 90% confidence interval of .029 -.100, which suggested that the model represented a good fit for the data.

Additionally, the squared multiple correlations indicated that 42% of female marital satisfaction and 35% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, empathic concern, and marital satisfaction are reported in Figure 7. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 13 includes the standardized direct and indirect effects for male and female marital satisfaction from each of the attachment dimensions through the empathic concern mediator. The indirect effects of male and female anxiety and avoidance through empathic concern on marital satisfaction fell within the small range, $< .29$. (see Table 13; Cohen, 1988). Significant mediated paths will be discussed in the following paragraphs.

Results are described in terms of direct effects on male and female marital satisfaction as well as the four potential indirect pathways for female and male couple members. The empathy measure was scored so that lower scores represented more of the characteristic being measured. Thus, unless otherwise specified, higher scores on the attachment dimensions were associated with less empathic concern and empathic concern was associated with greater marital satisfaction. For female couple members, because neither male nor female empathic concern was associated with female marital satisfaction, support was not found for any of the four potential mediator pathways. However, three direct effects were found. The female attachment dimension of avoidance

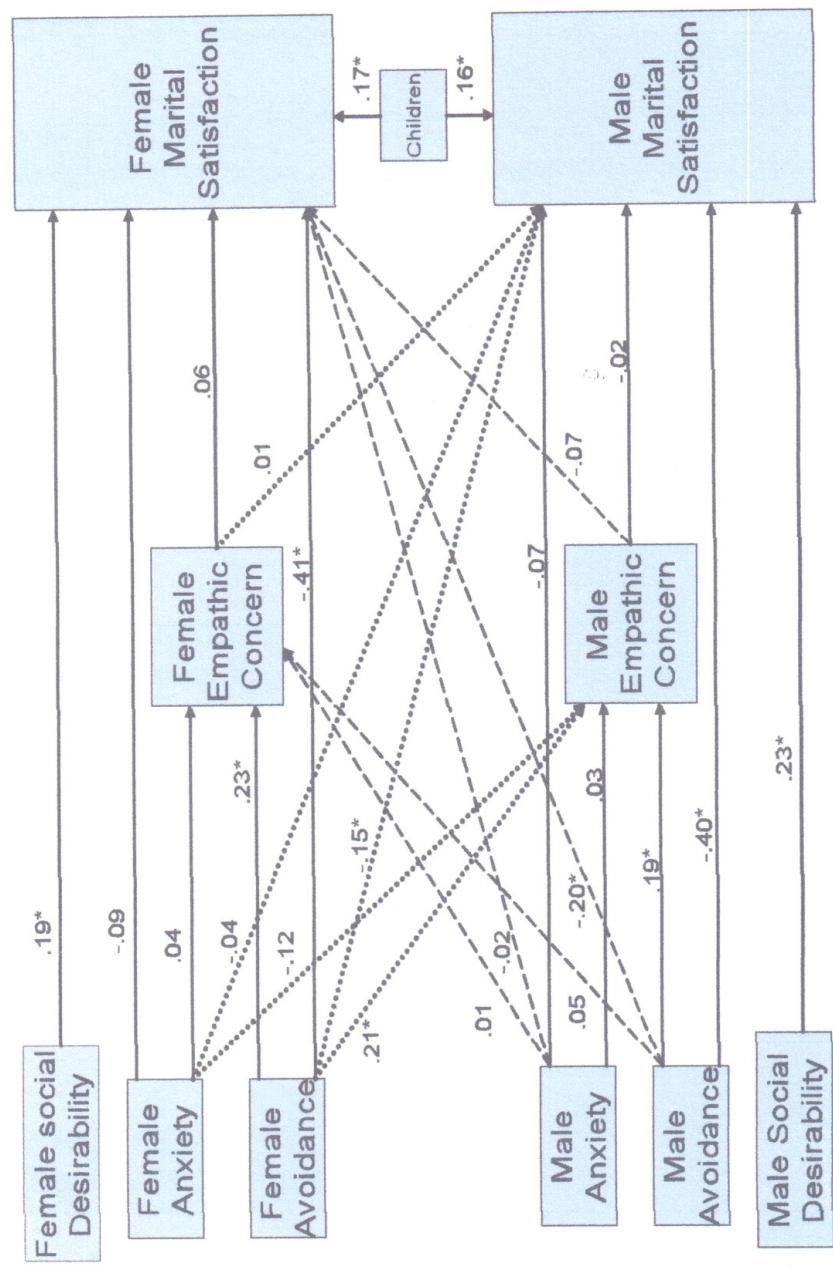


Figure 7. Standardized path coefficients assessing associations among attachment dimensions, empathic perspective taking, and marital satisfaction.

Table 13

Standardized Direct and Indirect Effects for the Empathic Concern Mediator

Dimensions	Male empathic concern	Female empathic concern	Male relationship satisfaction		Female relationship satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	.031	.010	-.072	-.001	-.017	-.002
Female anxiety	-.116	.035	-.044	-.003	-.091	.011
Male avoidance	.189	.050	-.397	-.003	-.203	-.011
Female avoidance	.213	.231	-.149	-.002	-.411	-.002

was related to female empathic concern, the female attachment dimension of avoidance was related with female marital satisfaction, and the male attachment dimension of avoidance was related to female marital satisfaction.

Similar to females, neither female nor male empathic concern was associated with male marital satisfaction, and as a result support for the four potential indirect pathways was not found. However, four direct effects were found. The male attachment dimension of avoidance was related to male empathic concern, the male attachment dimension of avoidance was associated with male marital satisfaction, the female attachment dimension of avoidance was related to male marital satisfaction, and the female attachment dimension of avoidance was related to male empathic concern.

Model #7 Attachment Dimensions, Perspective Taking and Marital Satisfaction

The estimation of the model yielded a significant chi-square value, $\chi^2(19, N = 193) = 52.266, p < .001$; however, the chi square to degrees of freedom ratio was 2.751, which is indicative of an adequately fitting model. The perspective taking mediator model had an NFI of .896, which is below the .9 cutoff score and a CFI of .923, which is

above the recommended .9 or higher for good fitting models. The RMSEA for the model was .095 with a 90% confidence interval of .065 - .173, which suggested that the model represented a minimally adequate fit for the data. The model was analyzed; however, the results should be examined with caution. Additionally, the squared multiple correlations indicated that 43% of female marital satisfaction and 43% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, empathic perspective taking, and marital satisfaction are reported in Figure 8. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 14 includes the standardized direct and indirect effects for male and female marital satisfaction from each of the attachment dimensions through the empathic perspective taking mediator. The indirect effects of male and female anxiety and avoidance through empathic perspective taking on marital satisfaction fell within the small range ($< .29$; see Table 14; Cohen, 1988). Significant mediated paths will be discussed in the following paragraphs.

The pattern of significant pathways is described in terms of direct effects on male and female marital satisfaction as well as the four potential mediator pathways for female and males. The empathy measure was scored so that lower scores represented more of the characteristic being measured. Thus, unless otherwise specified, higher scores on the attachment dimensions were associated with less empathic perspective taking and empathic perspective taking was associated with higher marital satisfaction. For female couple members no mediation was found between the female attachment dimensions of anxiety and avoidance through female empathic perspective taking predicting female

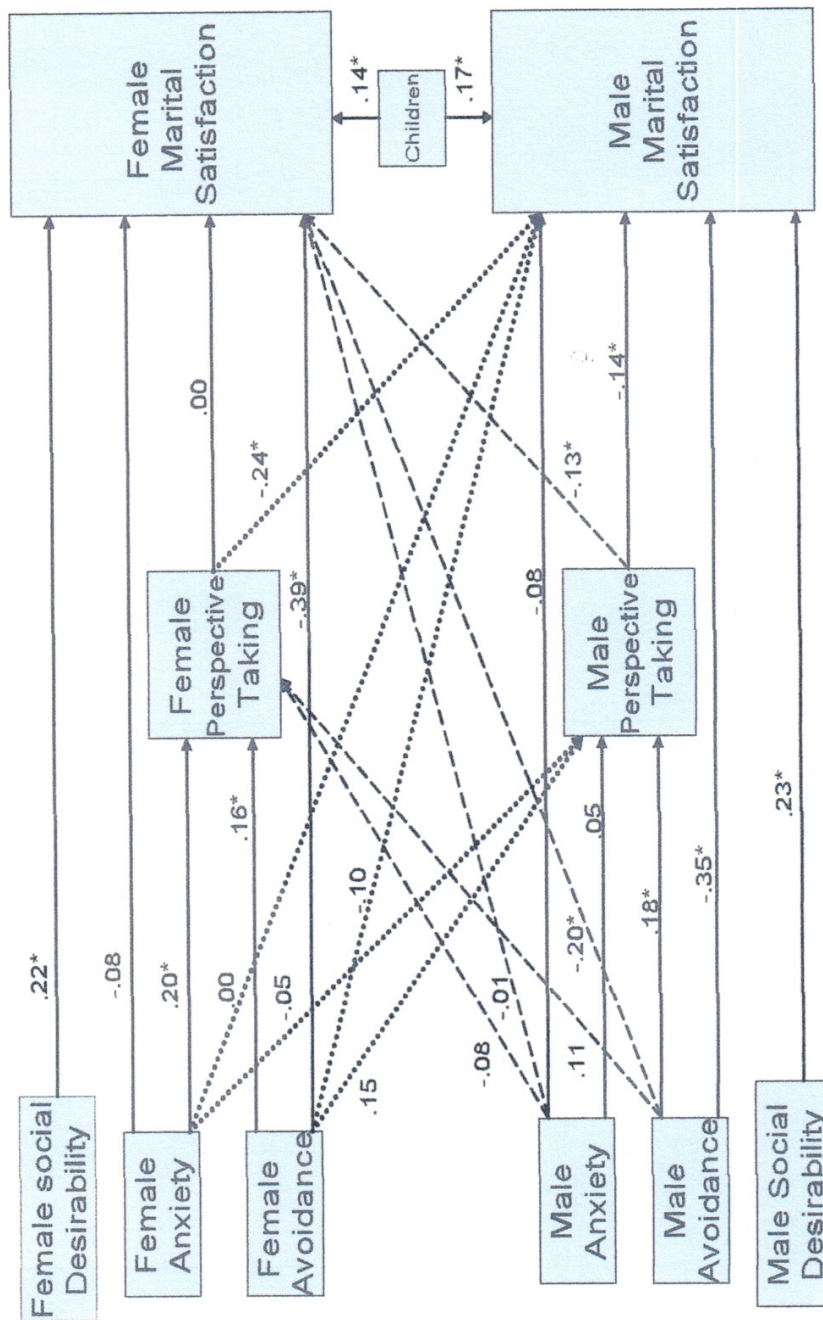


Figure 8. Standardized path coefficients assessing associations among attachment dimensions, empathic perspective taking and marital satisfaction.

Table 14

Standardized Direct and Indirect Effects for the Empathic Perspective Taking Mediator

Dimensions	Male perspective taking	Female perspective taking	Male relationship satisfaction		Female relationship satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	.049	-.078	-.084	.012	-.008	-.006
Female anxiety	-.048	.200	.002	-.042	-.077	.006
Male avoidance	.176	.110	-.349	-.052	-.198	-.023
Female avoidance	.147	.156	-.095	-.059	-.388	-.020

marital satisfaction because female empathic perspective taking was not significantly associated with female marital satisfaction. However, there were small direct effects between the female attachment dimensions of anxiety and avoidance and female empathic perspective taking. Partial mediation was found for the male attachment dimension of avoidance through male empathy perspective taking to female marital satisfaction because the male attachment dimension of avoidance also had a small direct effect on female marital satisfaction. No mediation was found for the other male attachment dimension of anxiety because it was not associated with male empathic perspective taking. No mediation was found between the female attachment dimensions of anxiety and avoidance through male empathic perspective taking back to female marital satisfaction because female attachment dimensions were not associated with male empathic perspective taking. However, there was a medium direct effect between the female attachment dimension of avoidance and female marital satisfaction. Finally, no mediation was found between the male attachment dimensions of anxiety and avoidance through female empathic perspective taking back to female marital satisfaction because

male attachment dimensions were not associated with female empathy perspective taking and female perspective taking was not associated with female marital satisfaction.

However, there was a small direct effect between the male attachment dimension of avoidance and female marital satisfaction.

For male couple members, partial mediation was found between the male attachment dimension of avoidance through male empathic perspective taking predicting male marital satisfaction, because there was a medium direct effect between the male attachment dimension of avoidance and male marital satisfaction. No mediation was found for the other male attachment dimension of anxiety because it was not associated with male empathic perspective taking. A small-sized full mediation was found between the female attachment dimensions of anxiety and avoidance through female empathic perspective taking back to male marital satisfaction. No mediation was found for the male attachment dimensions of anxiety and avoidance through female empathic perspective taking to male marital satisfaction because female attachment dimensions were not associated with female empathic perspective taking. Finally, no mediation was found between the female attachment dimensions of anxiety and avoidance through male empathy perspective taking back to male marital satisfaction because female attachment dimensions were not associated with male empathy perspective taking.

*Model #8 Attachment Dimensions,
Empathic Personal Distress and
Marital Satisfaction*

The estimation of the model yielded a significant chi-square value, $\chi^2 (19, N = 193) = 39.421, p = .004$; however, the chi square to degrees of freedom ratio was 2.075,

which is indicative of a good fitting model. The empathic personal distress mediator model had an NFI of .913 and a CFI of .947, which is above the recommended .9 or higher for good fitting models. The RMSEA for the model was .075 with a 90% confidence interval of .041 -.108, which suggested that the model represented an adequate fit for the data. Additionally, the squared multiple correlations indicated that 42% of female marital satisfaction and 36% of male marital satisfaction was accounted for by the model.

Results of the path analysis testing the associations among adult attachment dimensions of anxiety and avoidance, empathic personal distress, and marital satisfaction are reported in Figure 9. Standardized regression weights are included in the figure for each of the individual paths. Additionally, Table 15 includes the standardized direct and indirect effects for male and female marital satisfaction from each of the attachment dimensions through the empathic personal distress mediator. The indirect effects of male and female anxiety and avoidance through empathic personal distress on marital satisfaction fell within the small range, $< .29$ (see Table 15; Cohen, 1988). Significant mediated paths will be discussed in the following paragraphs.

Results are described in terms of direct effects on male and female marital satisfaction as well as the four potential mediator pathways for female and males. For female couple members no mediation was found between the female attachment dimensions of anxiety and avoidance through female empathic personal distress predicting female marital satisfaction because the female attachment dimension of avoidance was not significantly associated with female empathic personal distress nor was female empathic personal distress associated with female marital satisfaction.

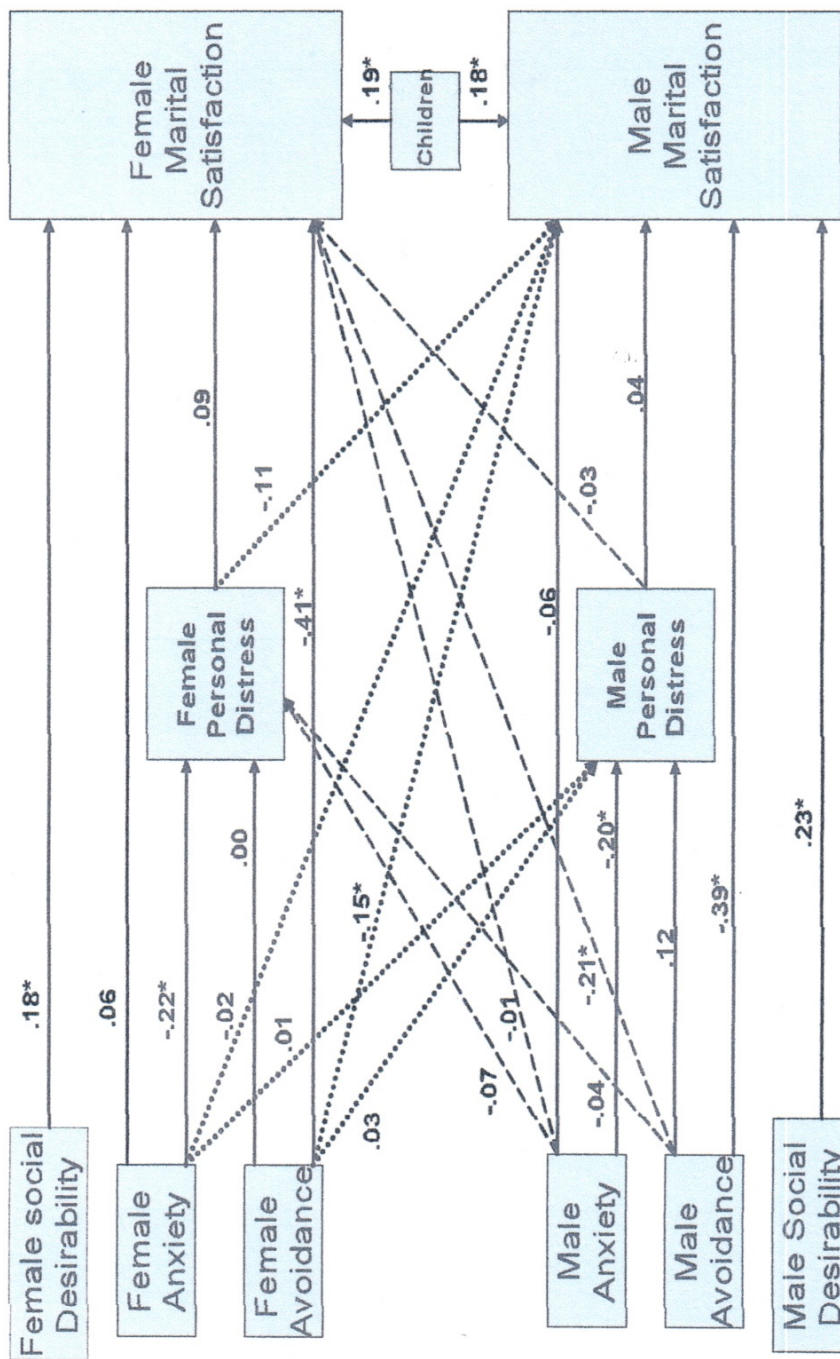


Figure 9. Standardized path coefficients assessing associations among attachment dimensions, empathic personal distress, and marital satisfaction.

Table 15

Standardized Direct and Indirect Effects for the Empathic Personal Distress Mediator

Dimensions	Male perspective taking	Female perspective taking	Male relationship satisfaction		Female relationship satisfaction	
	Direct	Direct	Direct	Indirect	Direct	Indirect
Male anxiety	-.198	-.069	-.057	-.015	-.005	-.013
Female anxiety	.009	-.224	-.017	-.024	-.062	-.019
Male avoidance	-.124	-.043	-.392	-.009	-.209	-.008
Female avoidance	.033	.002	-.150	-.001	-.414	.001

However, there was a small direct effect between the female attachment dimensions of anxiety and female empathic personal distress. Additionally, there was a medium-sized direct effect between the female attachment dimension of avoidance and female marital satisfaction. No mediation was found between the male attachment dimensions of anxiety and avoidance through male empathic personal distress predicting female marital satisfaction because the male attachment dimension of avoidance was not significantly associated with male empathic personal distress, nor was male empathic personal distress associated with female marital satisfaction. However, there was a small direct effect between the male attachment dimension of anxiety and male empathic personal distress. No mediation was found between the female attachment dimensions of anxiety and avoidance through male empathic personal distress back to female marital satisfaction because female attachment dimensions were not associated with male empathic personal distress nor was male empathic personal distress associated with female marital satisfaction. Finally, no mediation was found between the male attachment dimensions of anxiety and avoidance through female empathic personal distress to female marital satisfaction because male attachment dimensions were not associated with female

empathic personal distress and female empathic personal distress was not associated with female marital satisfaction.

For male couple members' no mediation was found between the male attachment dimensions of anxiety and avoidance through male empathic personal distress predicting male marital satisfaction because the male attachment dimension of avoidance was not significantly associated with male empathic personal distress nor was male empathic personal distress associated with male marital satisfaction. However, there was a small direct effect between the male attachment dimensions of anxiety and male empathic personal distress. Additionally, there was a medium-sized direct effect between the male attachment dimension of avoidance and male marital satisfaction. No mediation was found between the female attachment dimensions of anxiety and avoidance through female empathic personal distress back to male marital satisfaction because the female attachment dimension of avoidance was not significantly associated with female empathic personal distress, nor was female empathic personal distress associated with male marital satisfaction. No mediation was found for the male attachment dimensions of anxiety and avoidance through female empathic personal distress back to male marital satisfaction because male attachment dimensions were not associated with female empathic personal distress. Finally, no mediation was found between the female attachment dimensions of anxiety and avoidance through male empathic personal distress to male marital satisfaction because male attachment dimensions were not associated with male empathic personal distress, nor was male empathic personal distress significantly associated with male marital satisfaction.

CHAPTER V

DISCUSSION

Healthy marriage has been associated with many positive outcomes (Umberson et al., 2006; Waite & Gallagher, 2000; Williams, 2003). While married individuals exhibit better health than the unmarried, it is not true that any marriage is better than no marriage when it comes to these benefits (Williams). Thus, while marital relationships seem to be important regarding many positive health outcomes, it is the quality of those relationships that play a more significant role in obtaining the benefits of being in a marital relationship. Adult attachment is one of the most promising conceptual frameworks for understanding the psychological and contextual factors that contribute to marital satisfaction. The purpose of the current study was to examine direct and indirect links between adult attachment and marital satisfaction. Three different mediators were proposed as intermediary variables that could help explain the relationship between adult attachment representations and marital satisfaction: relationship expectations, accommodative responses, and empathy. These three variables were able to explain the mechanisms through which adult attachment influences marital satisfaction with varying degrees of success.

Eight models were developed to explore the relationship between adult attachment and marital satisfaction. The first model examined the mediating effects of relationship expectations; four subsequent models examined the mediating effects of four types of accommodative responses: exit, neglect, voice, and loyalty. The final three models examined the mediating effects of three types of empathy: empathic concern,

perspective taking, and empathic personal distress. The following discussion outlines implications and limitations of results of these eight models that examine the mechanisms that clarify the relationship between adult attachment and marital satisfaction.

Overall Trends and Separate Couple Member Trends

The attachment dimension of avoidance for wives and husbands was always associated with each couple member's own marital satisfaction in every model. Additionally, female attachment avoidance was directly associated with husbands' marital satisfaction in four models and indirectly associated with husband's marital satisfaction in two models (relationship expectations and exit responses). For wives, male avoidance was directly associated with female marital satisfaction in all eight models. Male attachment anxiety was never directly associated with male marital satisfaction and only had one indirect relationship through male voice to male marital satisfaction. Female attachment anxiety was never directly associated with female marital satisfaction and only had two indirect relationships through female relationship expectations and female exit to female marital satisfaction.

These results suggest that attachment avoidance has the strongest and most consistent relationship with marital satisfaction for husbands and wives. Thus, individuals who display dimensions of secure attachment (i.e., willing to discuss problems and concerns with their partners and turn to their partners in times of need), and do not display avoidant attachment behaviors (i.e., do not feel comfortable opening up to a partner and do not find it difficult to depend on a romantic partner) are likely to have

more satisfying relationships. This is consistent with previous research that has found an association between dimensions of attachment avoidance and marital satisfaction (Davila et al., 1998; Gallo & Smith, 2001; Marchand, 2004; Summer & Cozzarelli, 2004).

Surprisingly attachment anxiety proved to be a poor predictor of marital satisfaction. Previous research found that the anxiety attachment dimension was a consistent and dominant predictor, often times more so than the avoidant attachment dimension (Davila, 1999; Feeney, 1994, 1996, 1999a). However, the studies that most consistently found anxiety to be a better predictor than avoidance all used the same measure (Feeney, 1994, 1996, 1999b). Nonetheless, the majority of the literature found that the anxiety attachment dimension was strongly associated with marital satisfaction, which stands in sharp contrast to the results of the current study that found anxiety to be a relatively poor predictor of marital satisfaction (Davila et al., 1998, 1999; Feeney; Gallo & Smith; Marchand; Summer & Cozzarelli). It is unclear why anxiety proved to be a poorer predictor of marital satisfaction in the current study. Further review of recent literature found one study that used a revised version of the attachment measure used in the current study. Results of that study found strong negative correlations between anxiety and marital satisfaction, $r = -.66$ for wives, and $r = -.71$ for husbands (Butzer & Campbell, 2008). One possible explanation of the current results is that the mediators that were chosen in the current study could have accounted for the unique influence of anxiety on marital satisfaction. Additionally, given that the participants in the current study reported somewhat higher levels of marital satisfaction, it is possible that a sample with a broader range of marital functioning would better capture the anxiety attachment dimension.

Links Among Attachment Dimensions, Relationship Expectations, and Marital Satisfaction

The model examining relationship expectations as a potential mediator provided an interesting picture of male and female marital satisfaction. The results of the model suggest that, for females and males, adult attachment has, in some cases, an indirect association with marital satisfaction mediated through relationship expectations, and in other cases, a direct association. These results lend partial support to the original hypothesis that attachment dimensions are associated with marital satisfaction to the extent that they are associated with fulfilled relationship expectations.

The relationship expectations model had seven significant pathways that demonstrated small indirect effects between attachment dimensions, relationship expectations, and marital satisfaction. Interestingly six of the seven pathways went through female relationship expectations and predicted both wives' and husband's marital satisfaction. The lone indirect effect that went through male relationship expectations ran from female attachment avoidance to male relationship expectations predicting male marital satisfaction. Thus, in this model female relationship expectations demonstrated the most consistent links with both wives' and husbands' marital satisfaction.

For female couple members, full mediation and a small indirect effect was found for female attachment anxiety through relationship expectations to marital satisfaction. Experiencing high levels of anxiety about being abandoned or losing their partners is potentially linked to the extent to which their expectations are being met. Perhaps

relationship anxiety makes one's partner uncomfortable and therefore less likely to fulfill relationship expectations. Alternatively, attachment anxiety may engender unrealistic expectations and perceptions of the partner as unsupportive and unavailable. Consistent with this idea, previous research suggests that high anxiety is associated with a negative internal working model and is related to expectations that others are untrustworthy (Collins & Read, 1990). Thus, it is plausible that wives' anxiety about their relationship's outlook could create the kind of social milieu in which their expectations are more difficult to meet.

Partial mediation and a small indirect effect was found for female attachment avoidance through female relationship expectations predicting female marital satisfaction, because a medium negative direct effect was found between female avoidance and female marital satisfaction. High avoidance limits the amount of positive contact that can occur between couple members. If individuals high in attachment avoidance prefer not to show their partners how they feel, are not comfortable opening up, and do not turn to their partner in times of need, it is possible that it would be hard for them to feel like their relationship expectations are being met because they are not building intimacy with their partners (Collins & Read, 1990; Murray et al., 2000). This is consistent with previous research that found that insecure attachment dimensions were associated with less responsive listening and "colder" interactions that potentially could generate a form of "self-fulfilling prophecy," which is associated with less positive relationship experiences and poorer marital satisfaction (Frazier et al., 1996; Murray et al.).

The presence of significant direct associations between attachment avoidance and female marital satisfaction also shows that avoidant attachment and relationship expectations have unique associations with marital satisfaction. This finding suggests that female attachment avoidance and female relationship expectations are independent constructs. Although they overlap conceptually and empirically, they account for unique variation in marital satisfaction.

Surprisingly, a small, indirect, positive association and full mediation was found with the male attachment dimension of anxiety positively associated with female expectations that then predicted female marital satisfaction. One possible explanation for this phenomenon is that male attachment anxiety fosters more husband-to-wife contact between couple members, because worry about the relationship pushes husband couple members to want to interact in ways that ensure that the relationship will last. Thus, it may be that husbands who experience some unease about the stability of their relationships are more willing to meet their wives' expectations.

Although still considered a small indirect effect, of all of the indirect effects found for husbands and wives, male avoidance through female relationship expectations predicting wives' marital satisfaction was the largest (-.092). These results suggest that husbands who do not share feelings, and avoid getting close to their spouses may fail to fulfill their wives' expectations, which is associated with less female marital satisfaction. This is consistent with previous research by Collins and Read (1994) that found that individuals with insecure dimensions of attachment were perceived as colder, less responsive listeners.

For male couple members, no mediating effects were found for male attachment dimensions as neither anxiety nor avoidance were associated with male relationship expectations. This was somewhat surprising considering the female pattern. It is unclear why male attachment dimensions were not associated with the fulfillment of male relationship expectations. That being said, the current results found that female attachment avoidance is one of the factors that had a small indirect effect on male marital satisfaction through male relationship expectations. These results suggest that wives who prefer not to be too close to their partners may be less capable of fulfilling their husband's relationship expectations. This is not surprising considering successful fulfillment of many of the relationship expectations would involve a fair amount of intimacy (e.g., Both people will feel comfortable and at ease with the other; Both people will be able to rely on the other; Each will offer security and dependability for the other). These results are consistent with previous research that found that securely attached individuals viewed others as more trustworthy, dependable, and altruistic which likely would make it easier for both couple members to get their expectations met (Kobak & Hazan, 1991).

In addition, the relationship expectation model found a small, indirect, full mediation effect between the female attachment dimensions of avoidance and anxiety through female relationship expectations predicting male marital satisfaction. This cross-spouse pattern is consistent with previous research by Davila and colleagues (1998), who found a similar pattern of spousal influence. The results suggest that female couple members who are less anxious about the permanence of their relationship and are willing

to connect emotionally with their partners are likely to have more fulfilled relationship expectations, which is associated with increased husband marital satisfaction.

A similar phenomenon was found from male attachment dimensions to female relationship expectations predicting male marital satisfaction. It is possible that having a wife whose expectations are being met increases her satisfaction and the husband's satisfaction because it creates a sense of efficacy for the husband. It also seems to speak to the overall context of the relationship. Husbands who feel secure about the longevity of their relationship (low anxiety) and are comfortable creating intimacy (low avoidance) are likely fulfilling their wives' relationship expectations because they are able to create the kind of social milieu where expectations are met, which is connected with their own relationship satisfaction (Collins & Read 1990; Murray, 2000).

Links Among Attachment Dimensions, Accommodative Responses and Marital Satisfaction

Destructive Accommodative Responses

Aside from the medium-sized direct effect between both couple members' attachment avoidance and their own marital satisfaction, the exit accommodative response model had six significant pathways that demonstrated small indirect effects. Interestingly four of the six indirect pathways predicted either husbands' or wives' marital satisfaction through wives' exit responses. In contrast, the neglect model had two important pathways that demonstrated significant, small, indirect effects. Both of these pathways ran from male attachment avoidance through male neglect to both wives' and husbands' marital satisfaction. Thus, in a broad sense it appears that wives' exit

responses best predict husbands' marital satisfaction and husbands' neglect responses best predict wives' marital satisfaction.

These results are consistent with previous research that has found interesting gender differences in similar factors that are associated with marital satisfaction. This research focused on the effects of the de-escalation of negative affect. For example, husbands were most likely to de-escalate low-intensity negative affect that was associated with wives' marital satisfaction (Gottman, 1994). Neglect responses to accommodative dilemmas are examples of low-intensity negative affect. Thus, consistent with previous research, the current results found that husbands' low-intensity negative affect (neglect responses) was associated with less marital satisfaction for their wives. In contrast, previous research has shown that wives were more likely to de-escalate high intensity negative affect, which was associated with a more satisfying marital relationship (Gottman, 1998). Exit responses are examples of high intensity negative affect that is not being actively de-escalated. Again, this is consistent with the current results; wives' high intensity negative affect (exit responses) was associated with less marital satisfaction for their husbands.

In addition, these results are similar to and extend previous research that has looked at gendered pattern of communication called the Female-Demand/Male-Withdraw pattern (Christensen, 1990; Gottman, 1994). This research illustrates a phenomenon where couples, who are in a negative affect laden environment, tend to adopt typical patterns of behavior. Female couple members tend to pursue and try to overly emotionally engage their partners, whereas male couple members have a tendency to "withdraw" emotionally and work to limit any contact. The current results highlight this

phenomenon and are descriptive of the types of behaviors that female and male couple members use to play out the demand/withdraw pattern of behavior. Wives who engage in exit responses and men who engage in neglect responses may be playing out the female “demand” for emotional engagement and the male “withdrawal” from emotional engagement. These findings have important implications for marital therapists.

One of the central tasks for marital therapists is to illustrate the process that couples use when they argue and to facilitate ways in which they can communicate more constructively. The current findings have implications for marital therapists in two ways. First, understanding the relationship between female attachment anxiety and avoidance and female exit responses as well as the connection between male avoidance and male neglect responses provides insight to the therapist about the internal working models from which their clients are working. Use of this information has the potential to help therapists create an environment in session, as well as outside of session where couple members’ inherent feelings of anxiety about the stability of the relationship and avoidance of intimacy can be addressed in a setting of mutual trust.

Second, marital therapists often explain the communication process that occurs for the couple when their communication breaks down. Therapists who are familiar with this research could add information about how attachment representations develop and their associations with the specific ways that each couple member is communicating-- specifically, the ways that couple members engage in exit and neglect responses. Often times, developing insight into the manner in which couple members argue and communicate ineffectively is a first step for the couple to begin changing the way that

they interact. Explaining some of the developmental roots of their behavior from an attachment perspective could facilitate this process.

Adaptive Accommodative Responses

Somewhat surprisingly, the adaptive accommodative responses only had two significant indirect effects. Male attachment avoidance was partially mediated through male voice responses predicting male marital satisfaction and male attachment anxiety was fully mediated through male voice responses predicting male marital satisfaction. Otherwise, neither of the adaptive accommodative responses (loyalty or voice) had any significant indirect effects on marital satisfaction for either couple member.

One of the interesting observations in the relationship between the two male attachment dimensions and male voice responses was that male avoidance was negatively associated with male voice, while male anxiety was *positively* associated with male voice. Because scores on the anxiety dimension were generally quite low, this suggests for men that perhaps a moderate amount of concern about abandonment actually facilitates a more assertive and respectful response to accommodative dilemmas. This seems related to and consistent with previous results of the current study that found a positive relationship between male anxiety and fulfillment of female relationship expectations. Some concern about the relationship not lasting (i.e., attachment anxiety) is linked to the fulfillment of female relationship expectations and may facilitate male couple members to adopt more proactive, respectful responses to accommodative dilemmas.

Although intuitively it makes sense that a moderate amount of concern about abandonment would influence an individual to respond to a potentially destructive situation (the accommodative dilemma) in a more respectful, adaptive way it is somewhat inconsistent with previous literature. However, as was discussed previously, research examining the links between attachment dimensions and accommodative responses is sparse (Gaines et al., 1997). The empirical connection between attachment dimensions and accommodative responses was based on the relationship between attachment dimensions and caregiving behaviors (Collins & Feeney, 2000). Although the attachment dimension and caregiving literature has been helpful in empirically supporting the link between attachment dimensions and accommodative responses it is possible that the relationship between attachment anxiety and voice responses is unique and independent of previous literature. Although this relationship is interesting, it is still in need of confirmation from subsequent studies but represents a potentially fruitful line of future research.

The results of the loyalty mediator analysis suggest that, for females and males, adult attachment did not have any indirect association with marital satisfaction through loyalty accommodative responses. These results do not support the original hypothesis that attachment dimensions are associated with marital satisfaction to the extent that it is associated with loyalty responses. Neither husband nor wife attachment dimensions were associated with their own loyalty responses. It would appear that the nature of selectively choosing not to respond to destructive interactions (loyalty) is not related to concern about abandonment (anxiety) and discomfort with intimacy (avoidance). It may be that loyalty responses are most often used in accommodative dilemmas that are only mildly

destructive and do not directly activate an individual's attachment dimensions. Situations that do not sufficiently activate an individual's attachment dimensions would limit the influence of attachment dimensions and could be one explanation for the nonsignificant findings. This argument is difficult to support as other results from the current study found that attachment dimensions were associated with theoretical constructs in the expected directions (i.e., relationship expectations). Additionally, the loyalty measure had low reliability scores, thus the results could be a function of measurement error. Future studies are needed to corroborate and expand upon the current findings.

Nonetheless, significant associations were found between male and female attachment avoidance and marital satisfaction as well as male and female loyalty responses and marital satisfaction. These findings are consistent with previous findings of the current study. Individuals who are adept and comfortable connecting with their partners are likely to have more satisfying marital relationships (Feeney, 1999; Marchand, 2004). Additionally, the partners of individuals who are comfortable discussing concerns with their partners, who turn to their spouses for comfort and reassurance, are likely to have satisfying relationships (Banse, 2004; Davila et al., 1998). Finally, engaging in loyalty responses like supporting a spouse in the face of criticism and praying for an improved relationship has been associated with increased marital satisfaction (Rusbult et al., 1991).

Links Among Attachment Dimensions, Aspects of Empathy, and Marital Satisfaction

The results of both the empathic concern and empathic personal distress models suggest that, for females and males, adult attachment did not have any indirect association with marital satisfaction through these two aspects of empathy. These results do not support the original mediator hypothesis that attachment dimensions are associated with marital satisfaction to the extent that they are associated with either empathic concern or empathic personal distress. Although the attachment dimension of avoidance was associated with empathic concern for females and males, and attachment anxiety was associated with empathic personal distress for males and females, neither female nor male empathic mediators were associated with marital satisfaction.

It was surprising that empathic concern and empathic personal distress were not associated with marital satisfaction, particularly since a great deal of literature has found associations between empathy and marital satisfaction (e.g., Davis & Oathout, 1987; Perlman, 1999). However, because empathic concern and empathic personal distress are relatively new constructs of empathy it is possible that these aspects of empathy are not as highly related to marital satisfaction. Additionally, given the community sample that was used in the current study perhaps a sample with a broader range of marital functioning would discover a relationship between aspects of empathy and marital satisfaction that is more consistent with previous literature. Future studies could clarify this question.

In contrast to empathic concern and empathic personal distress, the empathic perspective taking model had four significant pathways that demonstrated small indirect effects on both male and female marital satisfaction. Both female attachment dimensions were associated with female perspective taking and predicted husbands' marital satisfaction. Similarly, male attachment avoidance was associated with male perspective taking and predicted wives' marital satisfaction. The last significant pathway ran through male attachment avoidance and perspective taking to husbands' marital satisfaction. Thus, in the current model one spouse's perspective taking appeared most strongly linked to the other spouse's marital satisfaction.

Traditionally, one of the focuses of marital therapy has been on facilitating each partner's effectiveness and comfort understanding their spouse's perspective and communicating this understanding to each other. These skills are often called empathic and active listening skills, the basis of which is founded upon empathy. Thus, initially, it was surprising that empathic personal distress and empathic concern were not related to either couple member's marital satisfaction. However, previous research has shown that some aspects of empathic and active listening skills are not always significantly associated with marital satisfaction (Gottman, 1994; Jacobson & Addis, 1993). This literature concluded that there are important features of empathy and active listening skills that make a difference in marital satisfaction and other features that do not. An individual's ability to understand his or her spouse's perspective appears to be one of several important inter-related components associated with marital satisfaction (Shadish, Montgomery, & Wilson, 1993). This was consistent with the results of the current study that found that empathic perspective taking, as opposed to empathic concern and

empathic personal distress, was related to both spouses' marital satisfaction. These results offer a promising outlook for marital therapists.

One reason for this promising outlook is the “teachability” of empathic perspective taking. An important characteristic of empathic perspective taking is that it is a cognitive skill that makes it more amenable to teaching. Questions from the perspective taking questionnaire illustrate the cognitive nature of this form of empathy, for instance: “I sometimes try to understand my friends better by imagining how things look from their perspective.” In contrast, empathic concern and empathic personal distress are more visceral and perhaps instinctive forms of empathy that makes them more difficult to teach to couple members. These examples: “I often have tender, concerned feelings for people less fortunate than me,” or “I sometimes feel helpless when I am in the middle of a very emotional situation,” demonstrate the more instinctive aspects of these constructs. Thus, the fact that empathic perspective taking is a more cognitive dimension of empathy is promising because it is likely a skill that therapists can more readily teach to couple members.

Finally, understanding the relationship between attachment dimensions and empathic perspective taking could be helpful for therapists as they work to teach this skill to couple members. Recognizing that couple members who have higher avoidant attachment dimensions may also have difficulty being able to see their spouses' perspectives could indicate where a therapist needs to work with the couple. Helping couple members establish trust with one another is an important aspect of couple's therapy. One way to overcome deficits of avoidant attachment representations is for couple members to have corrective emotional experiences. These experiences initially

can occur in the therapeutic environment, but must be perpetuated outside of the therapeutic setting. One skill that could help facilitate interpersonal trust is empathic perspective taking. Future research could scrutinize links between perspective taking, adult attachment and common interventions in marital therapy.

Summary, Limitations, and Future Directions

Overall the attachment dimension of avoidance was the most consistent and strongest predictor of husband and wife marital satisfaction. Additionally, one spouse's avoidant attachment dimension was a consistent predictor of the other spouse's marital satisfaction. Of the mediators assessed, female relationship expectations had the most consistent pattern of association with both wives' and husbands' marital satisfaction. For the destructive accommodative responses female exit responses best predicted husbands' marital satisfaction and male neglect responses best predicted wives' marital satisfaction. For the adaptive accommodative responses only male voice responses mediated the husband attachment-marital satisfaction relationship. Otherwise, neither of the adaptive mediators (loyalty or voice) had any significant indirect effects on marital satisfaction. Finally, both the empathic concern and empathic personal distress mediators played no role in the attachment-marital satisfaction relationship for husbands or wives. However, empathic perspective taking appeared to be influential in predicting the other spouse's marital satisfaction.

There were several demographic variables that had an impact on the generalizability of results of the study. Although the sample obtained may adequately represent northern Utah, making generalizations to other populations could be

problematic. The percentage of individuals who are of the LDS faith in northern Utah is disproportionate to the rest of the state and to the rest of the nation. Thus, future research could replicate the current study with a more religiously diverse or representative sample. Additionally, ethnic minority populations were not well represented in the sample, and, thus, generalization to any minority group is problematic. Finally, future research could explore the impact of socioeconomic status (SES) on the adult attachment marital satisfaction relationship. Although the current study had a broad range of participant SES it did not directly examine the impact of financial strain on marital functioning. It is likely that financial strain would play a moderator role between adult attachment and marital satisfaction. Overall, obtaining a sample that is more representative of a national sample would lead to results that are more descriptive.

In addition, aspects of social desirability were significantly related to marital satisfaction. It is possible that specific tenets of the Mormon (LDS) faith had an impact on the relationship between high social desirability and marital satisfaction. For members of the LDS church there is a strong cultural norm to strive for healthy marriages, this is one of the fundamental tenets of the religion. Because the majority of the participants in the current study were LDS, it is possible that the relationship between social desirability and marital satisfaction is a reflection of the cultural pressure from that particular norm. It seems likely that the current sample would be similar to other homogeneous religious groups since a belief in strong marriages is a fairly universal principle of many religions. Nonetheless, future research would need to clarify the generalization of the current results to other religious samples.

One significant limitation of the current study is that it is a cross-sectional research design. Cross-sectional research provides only a brief snapshot of the adult attachment–marital satisfaction relationship. A longitudinal research design would provide a better representation of the reciprocal relationship between attachment dimensions and marital satisfaction. In the current study attachment dimensions were used to predict marital satisfaction but it is likely that, across time, marital satisfaction would have an influence on dimensions of attachment. Indeed this is the premise of how insecure attachment changes over time. “Corrective emotional experiences” provided by spouses have been shown to slowly influence and ultimately change insecurely attached individuals to develop a more secure internal working model (Fraley, 2002). Thus, future research could look at the reciprocal relationship between adult attachment and marital satisfaction along several points of time in a longitudinal research design.

Another variable that had a limiting effect on the sample was the lack of diverse marital functioning. The large majority of the current sample reported very satisfied marital relationships. This could have had a direct impact on the results of the study. Obtaining a sample that represented a broader range of marital functioning would potentially make for a far richer interaction with all of the variables in the study. One of the surprising findings of the current study was that the anxiety attachment dimension was not associated with marital satisfaction and played only a minor role in the mediator relationships that were found. It seems possible that a sample of broader marital functioning, specifically a sample with more dissatisfied and distressed couples, would have picked up on the negative aspects of the anxiety attachment dimension.

Another limitation of the current study was related to the reliability of the accommodative measure. One of the scales in the accommodation measure had a very poor alpha coefficient. In the current study, the loyalty response was associated with marital satisfaction but neither of the attachment dimensions for husbands and wives. The low reliability score on the loyalty subscale makes it difficult to settle on why the attachment scores were not associated with the loyalty response. It could be that there is no empirical relationship between the two, or it could be attributed to the poor quality of the measure. The low reliability score seems to be a problem with the measure, as several other studies reported a low alpha score for the loyalty subscale (Rusbult et al., 1986a, 1991, 1998). In the literature there are a variety of different measures that look at the loyalty response. Future research should consider an alternative scale that demonstrates adequate reliability and validity.

Alternatively, a revision of the current accommodative measure could be a productive line of future research. The premise of the accommodative scales appears to be consistent with attachment and marital satisfaction literature. However, given the low reliability scores associated with the loyalty scale further revision could be necessary. One potentially rich vein of future research that could help to identify ways to strengthen the loyalty scale would be qualitative research that asks couple members to describe the conditions under which loyalty responses occur. Qualitative research that focuses on loyalty responses could provide a more accurate and consistent overall accommodative measure.

This study provides important information about marital satisfaction and the behaviors that can enhance it. The current study found that relationship expectations,

accommodative responses, and empathic perspective taking were some of the mechanisms through which adult attachment dimensions are associated with marital satisfaction. The current research provides important information to therapists, community organizations, and educators who work directly with couples that are trying to achieve more satisfying relationships. Interventions, educational programs, and spouses who take into consideration information from this study will be able to enhance marital relationships in meaningful ways. The clear and consistent relationship between the avoidance attachment dimension and marital satisfaction provides a framework from which future studies can explore the mechanisms through which adult attachment dimensions are associated with marital satisfaction. Future research could continue to explore the mechanisms that explain the attachment representation-marital satisfaction relationship. For instance, it would be interesting to explore connections between adult attachment theory and systems theory or other clinical literature research about marital satisfaction and marital relationships. Connecting the conceptual framework of attachment theory with some of the clinical theory and practice about marital relationships could be a rich and practical vein of research. One way this could be accomplished, as was demonstrated by the current study, is through the use of mediator models.

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APPENDICES

Appendix A:
Measures

Title of Measure

Instructions: The following statements are about how you feel in romantic relationships. For this measure we are interested in how you experience relationships in general, and not just in your current relationship. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale.

For example, a rating of 1 indicates that you disagree strongly, a rating of 4 indicates a neutral or mixed rating, and a rating of 7 indicates agree strongly.

Disagree strongly		Neutral/mixed		Agree strongly
1	2	3	4	5
				6
				7

- 1. I prefer not to show a partner how I feel deep down.
- 2. I worry about being abandoned.
- 3. I am very comfortable being close to romantic partners.
- 4. I worry a lot about my relationships.
- 5. Just when my partner starts to get close to me I find myself pulling away.
- 6. I worry that romantic partners won't care about me as much as I care about them.
- 7. I get uncomfortable when a romantic partner wants to be very close.
- 8. I worry a fair amount about losing my partner.
- 9. I don't feel comfortable opening up to romantic partners.
- 10. I often wish that my partner's feelings for me were as strong as my feelings for him/her
- 11. I want to get close to my partner, but I keep pulling back.
- 12. I often want to merge completely with romantic partners, and this sometimes scares them away.
- 13. I am nervous when partners get too close to me.
- 14. I worry about being alone.
- 15. I feel comfortable sharing my private thoughts and feelings with my partner.
- 16. My desire to be very close sometimes scares people away.
- 17. I try to avoid getting too close to my partner.
- 18. I need a lot of reassurance that I am loved by my partner.
- 19. I find it relatively easy to get close to my partner.
- 20. Sometimes I feel that I force my partners to show more feeling, more commitment.
- 21. I find it difficult to allow myself to depend on romantic partners.
- 22. I do not often worry about being abandoned.
- 23. I prefer not to be too close to romantic partners.
- 24. If I can't get my partner to show interest in me, I get upset or angry.
- 25. I tell my partner just about everything.
- 26. I find that my partner(s) don't want to get as close as I would like.
- 27. I usually discuss my problems and concerns with my partner.
- 28. When I'm not involved in a relationship, I feel somewhat anxious and insecure.
- 29. I feel comfortable depending on romantic partners.
- 30. I get frustrated when my partner is not around as much as I would like.
- 31. I don't mind asking romantic partners for comfort, advice, or help.
- 32. I get frustrated if romantic partners are not available when I need them.

- ___33. It helps to turn to my romantic partner in times of need.
- ___34. When romantic partners disapprove of me, I feel really bad about myself.
- ___35. I turn to my partner for many things, including comfort and reassurance.
- ___36. I resent it when my partner spends time away from me.

The following statements ask about your thoughts and feelings in a variety of situations. For each item, indicate how well it describes you by choosing the appropriate number on the following rating scale. When you have decided on your answer, write it in the blank next to the item number. **READ EACH ITEM CAREFULLY BEFORE RESPONDING.** Answer as honestly as you can.

For example, a rating of 1 indicates that the item describes you very well, and a rating of 5 indicates that the item does not describe you well.

Describes me					Does not
very well					describe me well
1	2	3	4		5

- ___ 1. I Often have tender, concerned feelings for people less fortunate than me.
- ___ 2. I sometimes find it difficult to see things from the “other guy’s point of view”
- ___ 3. Sometimes I don’t feel very sorry for other people when they are having problems
- ___ 4. In emergency situations, I feel apprehensive and ill-at-ease.
- ___ 5. I try to look at everybody’s side of a disagreement before I make a decision.
- ___ 6. When I see someone being taken advantage of, I feel kind of protective towards them.
- ___ 7. I sometimes feel helpless when I am in the middle of a very emotional situation.
- ___ 8. I sometimes try to understand my friends better by imagining how things look from their perspective.
- ___ 9. When I see someone get hurt, I tend to remain calm.
- ___ 10. Other people’s misfortunes do not usually disturb me a great deal.
- ___ 11. If I’m sure I’m right about something, I don’t waste much time listening to other people’s arguments.
- ___ 12. Being in a tense emotional situation scares me.
- ___ 13. When I see someone being treated unfairly, I sometimes don’t feel very much pity for them.
- ___ 14. I am usually pretty effective in dealing with emergencies.
- ___ 15. I am often quite touched by things that I see happen.
- ___ 16. I believe that there are two sides to every question and try to look at them both.
- ___ 17. I would describe myself as a pretty soft-hearted person.
- ___ 18. I tend to lose control during emergencies.
- ___ 19. When I’m upset at someone, I usually try to “put myself in his shoes” for a while.
- ___ 20. When I see someone who badly needs help in an emergency, I go to pieces.
- ___ 21. Before criticizing somebody, I try to imagine how I would feel if I were in their place.

Read and rate the following relationship expectations. You will rate each relationship expectation **TWICE**. First rate how important you believe each expectation is for the overall success of relationships in general. Then rate how well your spouse in your current relationship is meeting the expectation.

Very Little
1 2 3 4 5 6 7 8 9
Very Much

Importance for relationships in general	Spouse in my current relationship
_____ 1. Both people will be willing and able to adapt to the changing needs, demands, and desires of the other.	1. _____
_____ 2. Neither person will reveal personal data about the other to people not involved in the relationship.	2. _____
_____ 3. The two people will acquire possessions together and will presume to jointly share and own them.	3. _____
_____ 4. Each person will respect the other's rights; neither will presume upon the other. Each will allow the other his or her "own space" when desired.	4. _____
_____ 5. For both people, the relationship will be more important than jobs, friends, others, etc. The relationship will be a central part of their lives.	5. _____
_____ 6. The two people will be emotionally and physically faithful to each other.	6. _____
_____ 7. Each person in the relationship will significantly affect the other	7. _____
_____ 8. Both people will abide by the various explicit and implicit contracts, rules, agreements, and arrangements the two have made with each other.	8. _____
_____ 9. The two will spend much time together	9. _____
_____ 10. Both people will feel comfortable and at ease with the other. There will be no need for pretensions or image consciousness. Both will be comfortable "letting their hair down" in the other's presence.	10. _____
_____ 11. Both people will know and accept the other's faults and strengths; neither will take advantage of the other's weaknesses.	11. _____
_____ 12. Both people will respect each other, provide credit where due, not be condescending or demeaning toward each other, not "put each other down."	12. _____
_____ 13. Both people will show one another that they like and love each other.	13. _____
_____ 14. The two people will share similar plans, goals, and aspirations for the relationship.	14. _____
_____ 15. Both people will believe their relationship to be different from other relationships. It is a unique and special relationship – not like others.	15. _____
_____ 16. Both people will be able to rely on the other; each will offer security and dependability for the other.	16. _____

Very Little								Very Much
1	2	3	4	5	6	7	8	9
Importance for relationships in general								Spouse in my current relationship
_____	17. Both people in the relationship will fill certain roles. He will do X; She'll do Y. The roles will complement each other.							17. _____
_____	18. The two people will be physically intimate with each other.							18. _____
_____	19. Both people will be willing to talk and are comfortable talking with the other about wants and needs and things that are bothering them; each will be willing to self-disclose feelings and emotions.							19. _____
_____	20. The two people will go and be together; neither will leave the other alone or behind.							20. _____
_____	21. Others will recognize and know the two people as a couple.							21. _____
_____	22. Both people will be able to cope with problems, arguments, fights, discord, and disasters associated with the other and the relationship without sacrificing the relationship.							22. _____
_____	23. Both people will know the other well enough to comfortably predict the other's likes, dislikes, and actions.							23. _____
_____	24. Both people will be honest with the other. Neither person will lie to the other on important matters; each will be trustworthy.							24. _____
_____	25. Both people will be committed to each other and their shared relationship.							25. _____
_____	26. Each person will attempt to please and satisfy the other, make the other feel good, be helpful and unselfish.							26. _____
_____	27. The two people will be emotionally tied to each other. Each will feel love for the other.							27. _____
_____	28. Each person will help the other become accepted in his or her circle of friends and relatives and each will accept the other's friends and relatives.							28. _____
_____	29. The relationship will be fun and enjoyable.							29. _____
_____	30. The two people will mesh; they won't strongly disagree on major values and issues and they'll complement each other's tastes and needs.							30. _____

Accommodation Styles

This questionnaire is designed to measure the accommodation style you use when relating with your intimate partner. Please read the questions carefully and place a number, using the rating system below which best describes how you communicate with your partner on the line beside each question.

I never do this				I sometimes do this				I always do this
1	2	3	4	5	6	7	8	9

- ___ 1. When I'm unhappy with my partner, I consider breaking up.
- ___ 2. When my partner says something I don't like, I talk to him/her about what's upsetting me.
- ___ 3. When we have problems in our relationship, I patiently wait for things to improve.
- ___ 4. When I'm upset with my partner I sulk rather than confront the issue.
- ___ 5. When I'm angry at my partner, I talk to him/her about breaking up.
- ___ 6. When my partner and I have problems, I discuss things with him/her.
- ___ 7. When I'm upset about something in our relationship, I wait awhile before saying anything to see if things improve on their own.
- ___ 8. When I'm really bothered about something my partner has done, I criticize him/her for the things that are unrelated to the real problem.
- ___ 9. When we have serious problems in our relationship, I take action to end the relationship.
- ___ 10. When I am unhappy with my partner, I tell him/her what's bothering me.
- ___ 11. When my partner hurts me, I say nothing and simply forgive him/her.
- ___ 12. When I'm upset with my partner, I ignore him/her for awhile.
- ___ 13. When I'm irritated with my partner, I think about ending the relationship.
- ___ 14. When things aren't going well between us, I suggest changing things in the relationship in order to solve the problem.
- ___ 15. When my partner and I are angry with each other, I give things some time to cool off on their own rather than take action.
- ___ 16. When I'm really angry, I treat my partner badly (for example, by ignoring him/her or saying cruel things).
- ___ 17. When we have problems I discuss ending our relationship.
- ___ 18. When my partner and I are angry with one another, I suggest a compromise solution.
- ___ 19. When there are things about my partner that I don't like, I accept his/her faults and weaknesses and don't try to change them.
- ___ 20. When we have a problem in our relationship, I ignore the whole thing and forget about it.
- ___ 21. When things are going really poorly between us, I do things to drive my partner away.
- ___ 22. When we've had an argument, I work things out with my partner right away.
- ___ 23. When my partner is inconsiderate I give him/her the benefit of the doubt and forget it.
- ___ 24. When I'm angry at my partner, I spend less time with him/her (for example, I spend more time with my friends, watch a lot of television, work longer hours etc.).
- ___ 25. When I'm dissatisfied with our relationship, I consider seeing other people.

I never do this		I sometimes do this					I always do this	
1	2	3	4	5	6	7	8	9

- ___ 26. When we have serious problems in our relationship I consider getting advice from someone else (friends, parents, or counselor).
- ___ 27. When we have troubles, no matter how bad things get I am loyal to my partner.
- ___ 28. When my partner and I have problems, I refuse to talk to them about it.

Life Experience Survey

Listed on the next pages are a number of events, which sometimes bring about change in the lives of those who experience them.

Please respond **ONLY** to those events, which you have experienced in your life over the last 12 months. **Leave blank those events you have NOT experienced in the last 12 months.**

For each event that you have experienced, please indicate the extent to which you found the event either having a positive or negative impact on you life. For example, a rating of -3 indicates an extremely negative impact, a rating of zero indicates neither a positive nor a negative impact, and a rating of +3 indicates an extremely positive impact.

Extremely Negative			No Impact			Extremely Positive
-3	-2	-1	0	+1	+2	+3

1. ____ Marriage
2. ____ Detention in jail or comparable institution
3. ____ Death of a spouse
4. ____ Major change in sleeping habits (much more or much less sleep)
5. Death of a close family member.
 - a. ____ Mother
 - b. ____ Father
 - c. ____ Brother
 - d. ____ Sister
 - e. ____ Grandmother
 - f. ____ Grandfather
 - g. ____ Other (specify)
6. ____ Major change in eating habits
(much more or much less food intake)
7. ____ Foreclosure on mortgage or loan
8. ____ Death of a close friend
9. ____ Outstanding personal achievement
10. ____ Minor law violations (traffic tickets, disturbing the peace, etc.)
11. ____ Male: Wife/girlfriend's pregnancy
12. ____ Female: pregnancy
13. ____ Changed work situation (different work responsibility)
14. ____ New job

Extremely Negative			No Impact			Extremely Positive
-3	-2	-1	0	+1	+2	+3

15. Serious illness or injury of close family member:

- a. ____ Father
- b. ____ Mother
- c. ____ Brother
- d. ____ Sister
- e. ____ Grand Father/Mother
- f. ____ Mate
- g. ____ Other (specify)

- 16. ____ Sexual difficulties
- 17. ____ Trouble with employer
- 18. ____ Trouble with in-laws
- 19. ____ Major change in financial status
- 20. ____ Major change in closeness of family members
- 21. ____ Gaining a new family member (through birth, adoption, etc.)
- 22. ____ Change in residence
- 23. ____ Marital separation from mate
- 24. ____ Major change in church activity (increased or decreased attendance)
- 25. ____ Marital reconciliation with mate
- 26. ____ Major change in number of arguments with mate
- 27. ____ Male: change in wife/girlfriend's work outside the home
- 28. ____ Female: change in husband/boyfriend's work
- 29. ____ Major change in usual type and/or amount of recreation
- 30. ____ Borrowing more than \$10,000 (buying home or business, etc.)
- 31. ____ Borrowing less than \$10,000 (buying car, school loan, etc.)
- 32. ____ Being fired from a job
- 33. ____ Male: wife/girlfriend having abortion
- 34. ____ Female: having an abortion
- 35. ____ Major personal illness or injury
- 36. ____ Major change in social activities (increase or decrease in participation)
- 37. ____ Major change in living conditions of Family
- 38. ____ Divorce
- 39. ____ Serious injury or illness of close friend
- 40. ____ Retirement from work
- 41. ____ Son or daughter leaving home
- 42. ____ Ending of formal schooling
- 43. ____ Separation from spouse
- 44. ____ Engagement
- 45. ____ Breaking up with boyfriend/girlfriend

Extremely Negative			No Impact			Extremely Positive
-3	-2	-1	0	+1	+2	+3

46. ____ Leaving home for the first time

47. ____ Reconciliation with spouse

Other recent experience which have had an impact on your life: list and rate

48. _____

49. _____

50. _____

BIDR Version 6

Using the scale below as a guide, write a number beside each statement to indicate how much you agree with it.

1	2	3	4	5	6	7
Not True			Somewhat True			Very True

- ___ 1. My first impressions of people usually turn out to be right.
- ___ 2. It would be hard for me to break any of my bad habits.
- ___ 3. I don't care to know what other people really think of me.
- ___ 4. I have not always been honest with myself
- ___ 5. I always know why I like things.
- ___ 6. When my emotions are aroused, it biases my thinking.
- ___ 7. Once I've made up my mind, other people can seldom change my opinion.
- ___ 8. I am not a safe driver when I exceed the speed limit.
- ___ 9. I am fully in control of my own fate.
- ___ 10. It's hard for me to shut off a disturbing thought.
- ___ 11. I never regret my decisions.
- ___ 12. I sometimes lose out on things because I can't make up my mind soon enough.
- ___ 13. The reason I vote is because my vote can make a difference.
- ___ 14. My parents were not always fair when they punished me.
- ___ 15. I am a completely rational person.
- ___ 16. I rarely appreciate criticism
- ___ 17. I am very confident of my judgments.
- ___ 18. I have sometimes doubted my ability as a lover.
- ___ 19. It's all right with me if some people happen to dislike me.
- ___ 20. I don't always know the reasons why I do the things I do.
- ___ 21. I sometimes tell lies if I have to.
- ___ 22. I never cover up my mistakes.
- ___ 23. There have been occasions when I have taken advantage of someone.
- ___ 24. I never swear.
- ___ 25. I sometimes try to get even rather than forgive and forget.
- ___ 26. I always obey laws, even if I'm unlikely to get caught.
- ___ 27. I have said something bad about a friend behind his or her back.
- ___ 28. When I hear people talking privately, I avoid listening.
- ___ 29. I have received too much change from a salesperson without telling him/her.
- ___ 30. I always declare everything at customs.
- ___ 31. When I was young I sometimes stole things.
- ___ 32. I have never dropped litter on the street.
- ___ 33. I sometimes drive faster than the speed limit.
- ___ 34. I never read sexy books or magazines.
- ___ 35. I have done things that I don't tell other people about.
- ___ 36. I never take things that don't belong to me.

1 2 3 4 5 6 7
Not True Somewhat True Very True

- 37. I have taken sick-leave from work or school even though I wasn't really sick.
- 38. I have never damaged a library book or store merchandise without reporting it.
- 39. I have some pretty awful habits.
- 40. I don't gossip about other people's business.

Dyadic Adjustment Scale

Most people have disagreements in their relationships. Please indicate below the amount of agreement or disagreement between you and your partner for each item on the following list.

- 5 = Always agree
- 4 = Almost always agree
- 3 = Occasionally disagree
- 2 = Frequently disagree
- 1 = Almost always disagree
- 0 = Always disagree

- ___ 1. Handling family finances
- ___ 2. Matters of recreation
- ___ 3. Religious matters
- ___ 4. Demonstration of affection
- ___ 5. Friends
- ___ 6. Sex relations
- ___ 7. Conventionality (correct or incorrect behavior)
- ___ 8. Philosophy of life
- ___ 9. Ways of dealing with in-laws
- ___ 10. Aims, goals, and things believed important
- ___ 11. Amount of time spent together
- ___ 12. Making major decisions
- ___ 13. Household tasks
- ___ 14. Leisure time interests
- ___ 15. Career decisions

Please indicate below approximately how often the following items occur between you and your partner.

- 1 = All the time
- 2 = Most of the time
- 3 = More often than not
- 4 = Occasionally
- 5 = Rarely
- 6 = Never

- ___ 16. How often do you discuss or have you considered divorce, separation, or terminating our relationship?
- ___ 17. How often do you or your mate leave the house after a fight?
- ___ 18. In general, how often do you think things between you and our partner are going well?
- ___ 19. Do you confide in your mate?
- ___ 20. Do you ever regret that you married?
- ___ 21. How often do you and your partner quarrel?
- ___ 22. How often do you and your mate "get on each other's nerves?"

23. Do you kiss your mate?

Every Day	Almost every day	Occasionally	Rarely	Never
4	3	2	1	0

24. Do you and your mate engage in outside interests together?

All of them	Most of them	Some of them	Very few	None of them
4	3	2	1	0

How often would you say the following events occur between you and your mate?

1 = Never

2 = Less than once a month

3 = Once or twice a month

4 = Once a day

5 = More often than once a day

___ 25. Have a stimulating exchange of ideas

___ 26. Laugh together

___ 27. Calmly discuss something

___ 28. Work together on a project

There are some things about which couples sometimes agree and sometimes disagree. Indicate if either item below caused difference of opinions or problems in your relationship during the past few weeks. (circle yes or no)

Yes No 29. Being too tired for sex

Yes No 30. Not showing love

31. The numbers on the following line represent different degrees of happiness in your relationship. The middle point, "happy," represents the degree of happiness of most relationships. Please circle the number that best describes the degree of happiness, all things considered for your relationship.

0	1	2	3	4	5	6
Extremely Unhappy	Fairly Unhappy	A little Unhappy	Happy	Very Happy	Extremely Happy	Perfectly Happy

32. Please circle the number of one of the following statements that best describes how you feel about the future of your relationship.

5 I want desperately for my relationship to succeed, and *would go to almost any length* to see that it does.

4 I want very much for my relationship to succeed, and *will do all that I can* to see that it does

3 I want very much for my relationship to succeed, and *will do my fair share* to see that it does.

2 It would be nice if my relationship succeeded, but *I can't do much more than I am doing now* to make it succeed.

- 1 It would be nice if it succeeded, but *I refuse to do any more than I am doing* now to keep the relationship going.
- 0 My relationship can never succeed, and *there is no more that I can do to keep the* relationship going.

Demographic Information Form

1. Gender: Male Female
2. Age: _____
3. Which category or categories best describe your racial background? (check all that apply)
- White Hispanic/Latino
- African American Native American
- Asian Other (please describe)
- _____

If you selected more than one category, with which racial background do you most identify?

4. Religious Affiliation:
- LDS
- Catholic
- Protestant
- Jewish
- Baptist
- Other (please specify _____)
- None

5. How important is religion to you?
- Very important Fairly important
- Fairly unimportant not important at all
- Don't know Not applicable

6. How would you describe where you live?
- Urban (city)
- Suburban (subdivision)
- Rural (country)

7. What is your average yearly income?
- Less than \$20,000
- \$20,000 - \$40,000
- \$40,000 - \$60,000
- \$60,000 - \$80,000
- \$80,000 or more

8. How would you describe your income?
- Not enough to live on
- Barely enough to live on
- Sufficient for our needs
- More than we need

9. *What is your parents' marital status?*

- Married to each other
 Divorced or separated from each other*
 Never married to each other.
 Widowed
 Other

*If divorced or separated, how long have they been divorced? _____yrs.

10. *How much schooling have you obtained?*

- Some High School
 High School Graduate
 Technical School
 Some College
 College Graduate
 Graduate or Professional School (e.g., MS, PhD, MD)

11. *Are you currently employed outside the home?*

Yes No

*If YES, how many hours per week?

- 1-15
 16-30
 31-45
 46-60
 more than 60

12. *What is your occupation?*

13. *How long have you been married?*

14. *How long did you date or consider yourself a couple before you were married?*

15. Do you have any children?

___ Yes

___ No

If yes how many? _____

What are their ages?

First ___

Second ___

Third ___

Fourth ___

Fifth ___

Sixth ___

Seventh ___

Eighth ___

16. Did you live together before you were married?

___ Yes

___ No

If so, for how long? _____

Appendix B:
Couple Packet

November 5, 2006

Dear participant,

We greatly appreciate your willingness to participate in our study on marital relationships. This study will investigate factors that influence marital quality. The information gathered from the study will be very beneficial to therapists involved in marital therapy as well as individuals and other social service organizations that are interested in increasing satisfaction in marital relationships. With your help, this research can provide valuable and much needed information. Of course, you do not have to have the perfect marriage in order to participate in this study. In fact, we are very interested in learning from couples who have experienced challenges in their relationships.

Enclosed you will find an Informed Consent form that gives you more information about our study. Briefly, participation involves a 30-45 minute time commitment to fill out the questionnaires. As compensation for participating in this study, you or the student who gave you the questionnaires will receive credit in their class. In addition, all participants will be placed in a drawing for two \$50 prizes. We anticipate that the drawing will take place in February, 2007. We suggest that you read the enclosed consent form carefully and decide if you would like to be a part of this research.

If you agree to participate, you must sign the enclosed Informed Consent form and include it with your questionnaire in the envelope provided. It is very important that we receive your signed consent form with your answers or we will not be able to use your information. To ensure your privacy, please make sure you seal your completed questionnaire in the enclosed envelope and sign your name across the seal before returning it to the student. If you choose you are welcome to discuss your answers with one another after you have completed the survey and sent it back to us. We request, however, that you complete your surveys in private, without consulting each other. After collecting the surveys, the student who is earning credit in his or her course can return the envelope to his or her instructor or bring it to us directly at Renee Galliher, Department of Psychology, Education and Human Services Building, Room 495. Students will be asked to put their names on a separate list to ensure that they get the course credit.

Once again, we appreciate your help with our research. If you have any concerns or questions about this study or your involvement, please contact Dr. Renee Galliher or Daniel Hatch.

Sincerely,

Renee V. Galliher, Principle Investigator
(435) 797-3391

Daniel Hatch, Research Assistant
(435) 797-8254

Enclosures: Informed consent forms, Survey questionnaires, Envelopes, List of referral sources

ID #: _____

INFORMED CONSENT FORM Adult Attachment and Marital Satisfaction

Introduction/Purpose: Graduate student Daniel Hatch and Professor Renee Galliher in the Department of Psychology at Utah State University are conducting a research study. We would like you and your spouse to be in the study because we want to understand more about what impacts the quality of marriages. We want to learn how your perceptions, attitudes, and feelings affect your relationship with your spouse. About 200 couples will participate in this research study.

Procedures: You are being asked to complete a questionnaire survey which should take about 30-45 minutes. You will fill out forms that will ask you questions about your own and your spouse's behaviors, attitudes, and experiences in your marriage.

Risks: There are no anticipated immediate or long range social, economic, or physical risks associated with participation in this research. Some participants may feel uneasy letting researchers know about their personal life, thoughts, and attitudes. Remember that all of the information that you tell us will be kept private. Individual answers will not be identified in any report of the results. In addition, you can choose not to answer sensitive questions on the forms. In rare cases, completing these forms may generate questions or concerns about the quality of their marriage for some couple members. While we anticipate that most couple members will find completing the survey to be informative and interesting, we have included a list of referral and information sources for couples who may feel that they need help with their marriage as a result of participating in this study.

Benefits: We hope that you will find this study to be interesting. Your information will help us learn more about what makes marital relationships successful. It will also help teachers, clergy, counselors, and policy makers in their work with married couples.

Explanation and Offer to Answer Questions: This study will assess a variety of factors that are thought to influence marital satisfaction. We are interested in marriages of all types, so you do not have to have an ideal marriage to participate. In fact, we are genuinely interested in the relationships of couples who have experienced significant challenges in their relationships. If you have more questions, you can also contact the student investigator, Daniel Hatch at hatchdanny@yahoo.com or the Primary Investigator, Professor Renee Galliher, at either Renee.Galliher@usu.edu or 435-797-3391.

Incentives: As compensation for participating in this study, you or the student who gave you the questionnaires will receive credit in their class. In addition, all participants will be placed in a drawing for two \$50 prizes. The drawing is scheduled to take place in February, 2007.

INFORMED CONSENT FORM
Adult Attachment and Marital Satisfaction

Voluntary Nature of Participation and Right to Withdraw without Consequences: Being in this research study is entirely voluntary. You can refuse to be involved or stop at any time without penalty.

Confidentiality: Consistent with federal and state rules, survey answers will be kept private. Only Daniel Hatch and Professor Galliher will be able to see the original data. All information will be kept in locked filing cabinets in a locked room at Utah State University. Your name will **not** be used in any report about this research and specific answers will not be shared with anyone else. Data from this study may be used for five years by our research team before it is destroyed. When the research has been completed, a newsletter with the general results will be available if you are interested.

IRB Approval Statement: The Institutional Review Board for the protection of human subjects at Utah State University has approved this research project. If you have any questions or concerns about your rights you may contact the IRB at (435)797-0567.

Copy of Consent: You have been given two copies of the informed consent. Please sign both copies and keep one for your files. Return the other signed consent form to the researchers with your completed survey packet.

Investigator Statement: I certify that information about this research study has been provided to the individual by me or my research staff. The individual understands the nature and purpose, the possible risks and benefits associated with participation in the study, and has been provided with the opportunity to contact the researchers with questions.

Signature of PI and Student Researcher:

 Renee V. Galliher, Ph.D., Principal Investigator
Renee.Galliher@usu.edu
 Telephone: (435) 797-3391

 Daniel Hatch, Student Researcher
hatchdanny@yahoo.com

Consent: By signing below I agree to participate in this study.

 Signature of Participant

 Date

 Print Name

INFORMED CONSENT FORM
Adult Attachment and Marital Satisfaction

When the study is completed, we will be drawing the names of two couple members to receive \$50 prizes. Also, we would like to send you a newsletter outlining the results. Finally, we are interested in contacting participants in two years in an effort to assess how marital relationships develop over time. If you would like to receive a summary of the results of the study or if you are willing to be contacted for further research, please provide your name, address, email and phone number below.

††† I would like to receive a summary of the results of the study.

††† I would like to be contacted in the future to be asked about participating in other studies

___ I *only* want my contact information to be used for the drawing for the prize money.

Name: _____

Email: _____

Address: _____

Phone Number: _____

Where can I go for help?

Every one experiences difficulties in their relationships from time to time. After completing this questionnaire, you may feel you need to turn to someone for help with your relationship or other problems. Below is a list of resources in the Logan community and Utah.

Utah State University services

USU Community Psychology Clinic,

EDUC 413, (435)797-3401

USU Counseling Center,

SC 306, (435)797-1012

USU Marriage and Family Therapy Clinic,

493 N 700E, (435)797-7430

USU Academic Resource Center, Taggart Student Center, Room 305, (435)797-1128

Resources in Cache County

Mt. Logan Clinic, 246 E 1260 N, (435)750-6300

Lifespan, 95 W 100 S, (435)753-0272

CAPSA Community Abuse Prevention Services Agency, (435)753-2500

Bear River Mental Health,

90 E 200 N, (435)752-0750

Low income Resource

The link below is a statewide link for county mental health services

<http://www.dsamh.utah.gov/locationsmap.htm>

Utah and National Resources

Utah Domestic Violence Line at 1-800-897-LINK (5465)National Domestic Violence

Hotline www.ndvh.org or at 1-800-799-SAFE (7233) or at TTY 1-800-787-3224.

Utah State Mental Health and Substance Abuse Agency

Mark I. Payne, Director

Division of Substance Abuse and Mental Health

Department of Human Services

120 North 200 West, Room 209

Salt Lake City, UT 84103

Phone: 801-538-3939

Fax: 801-538-9892

E-mail: jchilton@utah.gov

Internet: www.dsamh.utah.gov

The Center for Mental Health Services

Lori Cerrar, Executive Director

Allies With Families

450 E. 1000 No. #311

No. Salt Lake, Utah 84054

Phone: 801-292-2515

Fax: 801-292-2680

Toll-free: 877-477-0764

E-mail: awfamilies@uswest.net**The National Alliance on Mental Illness NAMI Utah**

309 East 100 South

Salt Lake City, UT 84111

Phone: 801-323-9900

Fax: 801-323-9799

Toll-free: 877-230-6264

E-mail: education@namiut.orgInternet: www.namiut.org**Statewide Emergency Services**

Crisis Line Numbers

Box Elder County	(435) 452-8612
Cache County	(435) 752-0750
Central Utah	(877) 386-0194
Davis County	(801) 773-7060
Four Corners	Call 911, page on-call worker
Heber Valley	(801) 318-4016
Northeastern Utah	(435) 828-8241
Salt Lake County	(801) 261-1442
Southeastern Utah	(800) 502-3999
Southwestern Utah	(435) 634-5600
Utah County	(801) 373-7393
Weber County	(801) 625-3700
Police, 911	
Hospital Emergency Room	

Clinical Experience

- 2007- present **University Counseling Center, Pre-doctoral Intern**
 University of Utah, APA Accredited
Responsibilities include: individual, group, and couples therapy, crisis intervention, outreach, assessment, teaching courses in psychology, and supervision of graduate student therapists.
Supervisor: Frances Harris, Ph.D.
- 2006- 2007 **Clinical Psychology Practicum, Therapist**
 Utah State University, Psychology Community Clinic
Responsibilities: Intakes, report writing, individual therapy.
Supervisor: Scott DeBerard, Ph.D.
- 2004 -2007 **Family Institute of Northern Utah, Therapist**
 Latino Men's Domestic Violence Group and Individual and Couple's Therapy
Responsibilities included: Intakes, report writing, planning and implementing group process and therapy, individual and couples therapy, all with Spanish speaking clients.
Supervisors: Laural Carter M.F.T. and Carolyn Barcus, EdD
- 2005 -2006 *Center for Persons with Disabilities, Clinical Services Intern*
 Utah State University, Center for Person's with Disabilities
 Responsibilities included: Act as case coordinator for clients receiving services, administer psycho-educational assessments, work with a multi disciplinary team, and integrative report writing.
 Supervisor: Pat Truhn, Ph.D.
- 2004 - 2005 **Counseling Psychology Practicum, Therapist**
 Utah State University, Student Counseling Center
Responsibilities included: Intakes, report writing, individual therapy, and group therapy.
Supervisors: LuAnn Helms, Ph.D., Dave Bush, Ph.D., and Kathy Stott, M.S.
- 2004 **Fibromyalgia Group, Therapist**
 Utah State University
Responsibilities included: group therapy/ psycho-education, and relaxation exercises.
Supervisor: Susan L. Crowley, Ph.D.; Scott DeBerard, Ph.D.

- 2003-2004 **School Psychology Practicum, Therapist**
Utah State University, Center for Person's with Disabilities
Responsibilities included: Intakes, evaluations, assessments, report writing, psycho-education.
Supervisor: Pat Truhn, Ph.D.
- 2003 *Clinical Psychology Practicum, Therapist*
Utah State University, Psychology Community Clinic
Responsibilities included: conduct individual counseling of adult clients
Supervisor: Susan L. Crowley, Ph.D.
- 2002 - 2003 **Counseling Psychology Practicum, Therapist**
Utah State University, Psychology Community Clinic
Responsibilities included: Intakes, evaluations, assessments, report writing, individual therapy, and couples therapy.
Supervisor: Susan L. Crowley, Ph.D.

Teaching Experience

- 2008 **Career Development, Instructor**
University of Utah, Salt Lake City, UT
Responsibilities included: Lecturing, development of course material, grading, and office hours
- 2007 **Introduction to Multicultural Issues, Co-Instructor**
University of Utah, Salt Lake City, UT
Responsibilities include: Group discussion, panel invitation and group facilitation, grading, office hours.
- 2004 - 2006 **Psychology 1010: Introductory Psychology, Instructor**
Utah State University, Logan, UT
Responsibilities included: Lecturing, development of course material, grading, and office hours.
Instructor of record for courses taught during summer sessions in 2004, 2005 and Spring 2006.

2004 - 2005 **Statistics 2800, Graduate Teaching Assistant**

Utah State University, Logan, UT

Responsibilities included: Office hours, professor support (grading and creating tests, coordination of tutors, tutors meeting) and specialty lectures

Supervisor: Renee Galliber, Ph.D.

2003 **Psychology 1010: Introductory Psychology, Graduate Teaching Assistant**

Utah State University, Logan, UT

Responsibilities included: Office hours, professor support (grading, grade entry), discussion groups, conducting lab meetings, and specialty lectures.

Supervisor: Scott Bates, Ph.D.

Research Experience

2003-2005 *Strong Latino Marriage Study*

Utah State University, Department of Family, Child, and Human Development

Investigation of the characteristics of healthy Latino marriages.

Responsibilities include: Conducting qualitative interviews in Spanish and qualitative analysis of married Latino couples.

Supervisor: Linda Skoglund Ph.D.

2002-2004 *Adolescent Couples Lab*

Utah State University, Department of Psychology

Investigation of several aspects of adolescent romantic relationships.

Responsibilities include: Supervise undergraduate research assistants, assist with development of study procedure and methods, coordinate graduate/ undergraduate lab members' work, data collection, data entry, analysis.

Supervisor: Renee Galliber Ph.D.

2000-2002 *Future Touch Program*

Weber State University, Department of Psychology

Intervention designed to aid inner-city Latino children in Math and Reading skills.

Responsibilities included: Tutoring Math and Reading skills, social skills training for children, and data collection.

Supervisors: Eric Amsel Ph.D., Professor Maria Parrilla de Kokal

Publications

Skogrand, L., Singh, A., & **Hatch, D. L.** (2006). The role of religion in Latino marriages. *The International Academy for Marital Spirituality* 12, 178-188.

Hatch, D. L. & Galliher, R. V. (2006). *Predicting intercourse experience in adolescent romantic couples from individual couple members' dating and sexual histories.* Manuscript in preparation.

Hatch, D.L., & Skogrand, L. (2006). *The importance of La Familia in Latino marriages.* Manuscript in preparation.

Skogrand, L., **Hatch, D.L.**, & Singh, A. (2005). Understanding Latino families, Implications for family education (fact sheet). Utah State University Cooperative Extension Website: <http://extension.usu.edu/cooperative>

Professional Presentations

Sexton, M.B., **Hatch, D.L.**, Platt, L.F., & Paulson, A.A. (November, 2007). The influence of religious affiliation on treatment retention. Poster presented at the Utah Counseling Center Conference, Park City, UT.

Hatch, D. L. & Galliher, R. V. (March, 2006). Testing romantic relationship factors as moderators of the association between adolescent intercourse experience and depressive symptoms. In S. Miller-Johnson (Chair), *Adolescent Romantic Relationships and Risk-Taking Behaviors.* Paper Symposium to be presented at the Biennial Meeting of the Society for Research on Adolescence, San Francisco, CA.

Hatch, D. L. & Galliher, R. V. (March, 2006). Testing moderators of the association between adolescent intercourse experience and negative psychological outcomes. Poster to presented at the Biennial Meeting of the Society for Research on Adolescence, San Francisco, CA.

Skogrand, L., **Hatch, D.L.**, Singh, A., & Rosenband, R. (November, 2005). Strong Marriages in Latino Culture. Poster presented at the National Council on Family Relations, Phoenix, Arizona

- Skogrand, L., **Hatch, D.L.**, Singh, A., & Rosenband, R. (June, 2005). Strong Marriages in Latino Culture. Presentation at the Mexican International Family Strengths Conference. Cuernavaca, Morelos, Mexico
- Williams, K.L., Bentley, C., **Hatch, D.L.**, Galliher, R.V. (April, 2005). Associations among individual psychological characteristics and relationship quality in adolescent romantic couples. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Atlanta, GA.
- Hatch, D.L.**, Hunt, S., & Galliher, R.V. (April, 2005). Attitudinal and psychological factors associated with sexual intercourse in adolescent romantic couples. Poster presented at the Biennial Meeting of the Society for Research in Child Development, Atlanta, GA.
- Hatch, D.L.**, Hart, S. N., & Galliher, R. V. (April, 2004). Predicting sexual behavior in adolescent romantic relationships from couple members' dating and sexual histories. Poster presented at the biennial meeting of the Society for Research in Human Development, Park City, UT.
- Hatch, D.L.**, & Skogrand, L. (February, 2004). Understanding Latino Marriages: An Inside Perspective. Presentation at the Brigham Young University Outreach Conference, Provo, Utah
- Skogrand, L., **Hatch, D.L.**, & Singh, A. (April, 2004). Characteristics of Strong Latino and Native American Marriages in Utah. Presentation at the Utah Council on Family Relations, Annual Conference

Awards and Honors

- 2006 *Recipient of the Walter R. Borg Scholarship*
- 2004 *Recipient of Psychology Merit Scholarship*
- 2003 *Recipient of Psychology Merit Scholarship*
- 2000 *Member of Psi Chi, Weber State University*
- 1997-2002 *Dean's list, Weber State University*

Professional Service

- 2004-2005 **Combined Psychology Program Graduate Representative**
 Responsibilities include: Representative for students in the department, attended faculty meetings and reported student concerns, sat on the search committee for a new faculty member

2000-2002 PsiChi Vice President, Weber State University

Responsibilities include: Representative for students in the department, plan student poster presentations, brought in professional speakers