1999

Adult romantic attachment: Emotion regulation strategies and relationship satisfaction

Edith A. Myers
The University of Montana

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

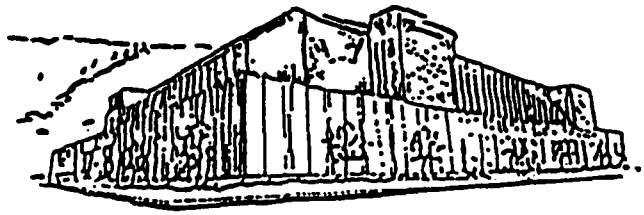
In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps. Each original is also photographed in one exposure and is included in reduced form at the back of the book.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI®

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600



Maureen and Mike
MANSFIELD LIBRARY

The University of **MONTANA**

Adult Romantic Attachment:

Emotion Regulation Strategies and Relationship Satisfaction

by

Edith A. Myers

M.A., The University of Montana, 1996

Presented in partial fulfillment of the requirements

for the degree of

Doctor of Philosophy

The University of Montana

1999

Approved by:

Chair, Board of Examiners

Dean of the Graduate School

5-14-99

Date

Myers, Edith A., M.A. 1999 Psychology

Adult Romantic Attachment: Emotion Regulation Strategies and Relationship Satisfaction

Director: Jennifer Waltz, Ph.D.

Attachment theory, originally postulated by John Bowlby and further developed by Mary Ainsworth and colleagues, has recently been proposed as an organizational framework for the study of close relationships in adults (Hazan & Shaver, 1994). A central aspect of attachment is the regulation of emotional distress within a close relationship. This usually involves seeking the support of a close relationship partner. However, little research has focused on what types of emotion regulation behaviors are Attachment theory, originally postulated by John Bowlby and further developed by preferred by adults having different attachment styles. The present study attempted to elucidate whether attachment styles in adults in long term relationships are associated with preference for different types of support from their relationship partners in regulating difficult emotions (sadness, anger, anxiety). It also focused on whether attachment style was related to satisfaction with one's partner's emotion regulation behaviors in response to one's emotional distress. For example, persons with secure attachment styles were expected to be more satisfied with their partner's responses to their emotional distress than were persons with insecure attachment styles.

In the present study, individuals with secure and insecure attachment styles showed differences in emotion regulation preferences. Persons with a dismissing style of insecure attachment preferred less cognitive and socially supportive type emotion regulation behaviors from their partners, than did persons with secure or any of the other insecure attachment styles. Also, couples in which both partners were secure preferred more problem-solving emotion regulation behaviors, while couples in which both partners were insecure preferred to ignore emotion-related distress. A difference in satisfaction with a partner's emotion regulation behaviors was found only for socially supportive type behaviors. Individuals with secure attachment were more satisfied with these types of behaviors from their partners than were individuals with a dismissing attachment style.

In previous studies, persons with secure attachment styles have been found to be more satisfied with their relationship overall. However, partners with insecure attachment styles, who may be either anxious or avoidant about depending on their partners for assistance with regulating distressful feelings, are generally less satisfied with their relationship overall. This study replicated this association between general relationship satisfaction and romantic attachment style, in individuals and in couples.

Table of Contents

List of Tables

List of Figures

Chapter 1

Introduction

The past decade has seen an immense interest in the study of adult attachment, with a number of theorists proposing models to integrate its component aspects (see Shaver & Hazan, 1993, for a review; see also Bartholomew & Perlman, 1994; Shaver, Collins, & Clark, 1996). In 1987, Shaver and Hazan applied John Bowlby's attachment theory to the study of adult romantic relationships, using the three attachment styles identified and studied in infants by Ainsworth, Blehar, Waters, and Wall (1978). Bowlby asserted that attachment continues throughout life, although his focus was on describing the development, function, and behaviors of attachment in infants and young children. Attachment theory has recently been proposed as an organizational framework for the study of close adult relationships (Hazan & Shaver, 1994).

Shaver, Collins, and Clark (1996) have noted that the goal of the attachment system may be described in terms of behavior, that is, proximity-seeking, or in terms of emotion regulation. That is, the proximity-seeking behaviors of the attachment system may have the goal of achieving a particular emotional state: felt security (also see Sroufe & Waters, 1977). They have also described a *consensus* theory of emotion and emotion regulation (Fischer, Shaver, & Carnochan, 1990) which incorporates a central construct of attachment theory, the internal working model, which provides for the relative continuity of patterns of relationship functioning from infancy through adulthood.

Emotion regulation, then, is an important aspect of attachment behavior, and an integral part of the functioning of each person's working model of attachment relationships (e.g.,

see Ainsworth, 1982, 1985; Bowlby, 1979; Cicchetti, Ganiban, & Barnett, 1991; Collins & Read, 1994; Pipp & Harmon, 1987; Sroufe & Waters, 1977). Emotion regulation is the ability to monitor, evaluate, and alter one's own emotional state (Thompson, 1991). The ability to change or regulate one's own emotional reactions (whether physiological, cognitive, or behavioral aspects) is learned beginning in early infancy. By adulthood, emotion regulation styles are likely to characterize how a person ordinarily relates with peers and romantic partners, and copes with emotionally evocative events. Research throughout this decade suggests that adults demonstrate attachment styles analogous to those demonstrated in infants and children; these styles are likely to influence adults' expectations, styles and satisfaction in partner relationships (e.g., Main, Kaplan, & Cassidy, 1985; Shaver & Hazan, 1988, 1993). Because emotion regulation is an important aspect of attachment, it is likely that differences in attachment styles are related to preferences for different types of emotion regulation behaviors.

This study will focus on the relationship between attachment style and the types of emotion regulation behaviors preferred by partners in close relationships, as well as the relationship between attachment style and satisfaction with one's partner's behaviors. It will also look at the relationship between attachment style and global relationship satisfaction.

Attachment as a behavioral control system

A central theme in attachment theory is that attachment is a biologically "pre-wired" behavioral control system. "Behavioral control systems organize and direct *behaviors* or activities to achieve specific *set goals*, which had survival value within the 'environment of evolutionary adaptedness'" (Stevenson-Hinde & Hinde, 1990, p. 65). In infancy, the

attachment system's *set goal* is proximity to a specific caretaker, with the underlying function of protection from danger (e.g., predators, falling, drowning), along with sense of a safe haven and secure base. This set goal, and the behaviors that serve to achieve it, ultimately enhance the infant's chances of survival. The relationship between an infant and its caregiver can be described as a *complementary* one. Both members of the dyad exhibit certain behaviors, which are different from each other but interlocking. Ideally, the infant consistently seeks proximity and care, and the caregiver consistently provides them; these work together for the survival of the species. As briefly described above, many attachment theorists have expanded the idea of the *set goal* of attachment behaviors to include a sense of felt security.

Bowlby also originally described his attachment theory as "a way of conceptualizing the propensity of human beings to make strong affectional bonds to particular others and of explaining the many forms of emotional distress and personality disturbance, including anxiety, anger, depression, and emotional detachment, to which unwilling separation and loss give rise" (Bowlby, 1979, p. 127; see also, Ainsworth, Blehar, Waters, & Wall, 1978; Sroufe & Waters, 1977). Bowlby (1979, 1982) located his theory within ethology, evolutionary theory, psychoanalytic object relations theory, and cognitive theory. He described attachment behavior as "any behavior that results in a person attaining or retaining proximity to some other ... preferred individual, who is usually conceived as stronger and/or wiser" (Bowlby, 1979, p. 129). Attachment behaviors are any behaviors that elicit care from a preferred individual. In infants they include such behaviors as crying, calling, following, and clinging. According to Bowlby (1979), with age these types of behaviors decrease in intensity and frequency, but "persist as an important part of

man's [sic] behavioral equipment" (p. 129).

Ainsworth and colleagues (1978) identified several different patterns of infant-caregiver attachment relationships: secure, insecure-avoidant, and insecure-resistant or ambivalent. Secure infants show the attributes of proximity maintenance, comfort seeking, and the ability to use the caregiver as a safe haven and a secure base from which to explore the environment. In Ainsworth's Strange Situation procedure, these infants are distressed when the caregiver (usually mother) leaves, are comforted when she returns, and engage in active exploration when she is present. In home observations, their mothers are observed to be both consistently available and appropriately responsive to their infants. In American samples, this is the most commonly found pattern (about 60%) (Campos, Barrett, Lamb, Goldsmith, & Stenberg, 1983).

Insecure (anxious)-avoidant infants in the laboratory situation tend to not appear distressed by separations from their mothers, avoid contact with her, and keep their attention directed toward the toys in the room, although less enthusiastically than the secure infants. At home, the mothers of these infants tend to consistently reject or deflect their infants' efforts to be comforted, especially by close bodily contact. About 25% of American samples demonstrate this pattern of attachment (Campos et al., 1983).

Insecure (anxious)-resistant/ambivalent infants in the laboratory situation appear to be both anxious and angry, and are preoccupied with their mothers so much that they do not actively explore the environment. In home observations, their mothers are found to be inconsistently responsive to their infants. That is, sometimes they are unavailable or unresponsive, and sometimes they are intrusive. In American samples, this is the least common pattern, about 15% (Campos et al., 1983).

More recently, research has revealed a fourth pattern, termed an insecure-disorganized/disoriented pattern, which is found in infants of depressed, disturbed, or abusive parents (Crittenden, 1988; Main & Hesse, 1990; Main, Kaplan, & Cassidy, 1985; Main & Solomon, 1986, 1990). In the laboratory Strange Situation, these infants do not show a coherent strategy for regulating their distress, but show a diverse mixture of disoriented and disorganized behaviors. These include stereotypies in the presence of their parent, falling down prone after initially approaching their parent, beginning to approach their parent then turning their face away and rocking back and forth on hands and knees, or complete freezing of movement accompanied by a trance-like expression. They have also been described as appearing dazed and confused in the Strange Situation (Simpson & Rholes, 1994). Mothers of these infants score higher on measures of chronic life stress than do mothers of the other types of insecure infants (Simpson & Rholes, 1994). Main and colleagues have speculated that the attachment behaviors of infants in this category may reflect a breakdown or disorganization of the infant/caregiver relationship. Also, the parent, due to unresolved trauma, may at times be either (or both) frightened or frightening, creating conflictual feelings in their infant and leading to the infant's disoriented behavior (Main, 1991). That is, an infant normally approaches a parent when alarmed, as a safe haven. However, if the parent is himself or herself a source of alarm, the infant may experience a conflictual situation, in which it can neither approach (because the parent is frightening) nor flee the parent (because the infant's natural tendency is to approach). About 15-25% of infants in normal samples have been found to be classifiable as disorganized (Main, 1996; Main & Solomon, 1990); many maltreated children are found to be classifiable as disorganized (Cicchetti, Toth, &

Lynch, 1995).

Emotion Regulation and Attachment

Attachment relationships are integral in the development of emotion regulation: the ability to redirect, modulate, control, and change emotional arousal in order to allow the individual to function adaptively (Cicchetti, Ganiban, & Barnett, 1991). The different attachment styles which have been identified are based on differences in emotional responsiveness between infants and their caregivers. Variations in children's styles of attachment to primary caregivers have been described as reflecting children's different styles of emotion regulation (for a review, see Cicchetti et al., 1991).

The functions of an attachment relationship in infants include maintenance of proximity with the attachment figure (staying near and protesting separation), the caregiver providing a safe haven (to which the infant can retreat when distressed or fearful, for reassurance, comfort, support, etc.), and the caregiver providing a secure base (from which the infant can explore the environment). The goal of these various functions is to achieve and maintain a sense of felt security. A child learns to regulate this sense of felt security, and to organize his or her emotional experience, within the context of the caregiver's sensitivity to and responsiveness toward the child's signals of distress (Kobak & Sceery, 1988; Sroufe & Waters, 1977).

Based on Bowlby's (1982) theory of attachment, theorists have postulated that infants and children develop cognitive, representational working models, or a system of beliefs and expectations, about the caregiver's responsiveness in meeting the child's needs and helping the child regulate his or her emotional state, usually by reducing distress. That is, based on their history of regulating distressful emotions within the relationship with their

attachment figure, infants develop certain strategies for achieving their set goal of felt security. These strategies become organized as patterns of behavior, rules, and expectations (working models) for reducing distress, first in situations which elicit attachment behavior (such as the Strange Situation); later, these working models serve as strategies for emotion regulation in other settings as well.

For example, children classified as secure infants have been found to be more enthusiastic, persistent at solving problems, and to show more positive affect as toddlers. They are more flexible, persistent, and resourceful as preschoolers; they smile more, display more positive emotions in social interactions, and tolerate more negative affect, than do children classified as insecurely (anxiously) attached in infancy (see Kobak & Sceery, 1988). Children classified as insecure-avoidant, due to their histories of not getting comfort from their attachment figure, are more likely to cut off affective displays. This is likely to avoid conflict with their attachment figure, who is rejecting or insensitive. However, they may then express their anger or distress inappropriately in other social relationships (Kobak & Sceery, 1988). Children classified as insecure-ambivalent appear to have a lower threshold for the expression of distress and the activation of attachment behavior (Goldsmith & Alansky, 1987), and express both fear and anger toward their attachment figure. This type of behavior pattern is likely to interfere with active exploration, and to interfere with the child's confidence in new situations (Ainsworth et al., 1978). They are likely to appear more fearful and less self-confident than those with an avoidant attachment style, and may seem helpless or impulsive (Kobak & Sceery, 1988).

Working models appear to develop very early, in the first months of life, particularly in

the latter half of the first year. Working models then shape and influence the child's mental representations of future relationships. The different patterns of attachment relationships, as regulatory strategies which develop within the child's history of "distress remediation and emotional synchrony" with their caregivers (Kobak & Sceery, 1988; Pipp & Harmon, 1987), are believed to persist into adulthood.

Adult romantic attachment

Bowlby assumed that attachment behavior persists into adulthood, and adult romantic attachments have been conceptualized as falling into similar styles as those found in the child development research. Bowlby (1979), in his formulation of attachment theory, stated,

> Whilst especially evident during early childhood, attachment behaviour is held to characterize human beings from the cradle to the grave. ... In adults they [attachment behaviors] are especially evident when a person is distressed, ill, or afraid. The particular patterns of attachment behaviour shown by an individual turn partly on his present age, sex, and circumstances and partly on the experiences he has had with attachment figures earlier in his life (pp. 129-130).

The three main aspects of an attachment relationship in infants, proximity-seeking, secure base, and safe haven, are all found in close adult relationships (Weiss, 1982, 1991). In both infants and adults, attachment relationships are "dyadic relationships in which proximity to a special and preferred other is sought or maintained to achieve a sense of security" (West & Sheldon-Keller, 1994, p.19). However, adult attachment relationships differ from those of infants in important ways (Hazan & Shaver, 1994). For

example, adult attachment relationships are typically found between peers rather than between parent and child, and usually include a sexual relationship. Also, because, according to attachment theory, adults have developed working models, or internal cognitive representations of their relationship to an attachment figure, the attachment relationship is more often active at the level of beliefs, expectations, and thoughts, rather than at the level of externally observable behaviors. Adults are assumed to require less physical contact-comfort in order to feel felt-security than do infants and young children, because they are able to derive a sense of felt security merely from the thought that an attachment figure is available. However, in times of emotional distress (e.g., crises or perceived danger), behaviors such as crying, hugging, and proximity seeking will emerge. Furthermore, in adults, the attachment relationship is generally a *reciprocal* one, in which either partner can be care-giving or care-seeking at different times. However, in some relationships, the bond may resemble the complementary adult-infant style, in which one partner behaves as a child seeking care and protection, while the other, stronger and wiser, derives satisfaction from feeling needed and providing care (Ainsworth, 1989). The attachment relationships of adults are also thought of as an integration of several behavioral systems—not only the attachment system, but also a caregiving system and a sexual mating system (Hazan & Shaver, 1994; Shaver, Hazan, & Bradshaw, 1988; Weiss, 1982.

Bowlby (1973) asserted that working models of attachment are constructed gradually throughout infancy, childhood, and adolescence, after which they become relatively resistant to change. Research has shown that stability of attachment classifications is closely related to stability of the environment. For infants in stable environments,

stability has ranged from 81 to 96% over a 6-month period (Connell, 1976; Waters, 1978; both cited in Hazan & Shaver, 1994b). In unstable environments, stability was found to be about 60% (Egeland & Farber, 1984; cited in Hazan & Shaver, 1994b). In more longitudinal studies, Main, Kaplan, and Cassidy (1985) found a stability coefficient of .76 between age 1 and 6 years; Wartner (1986; cited in Hazan & Shaver, 1994b) found similar results in a replication. Elicker, Englund, and Sroufe (1992; cited in Hazan & Shaver, 1994b) found "significant continuity" (p. 70) over a ten-year period starting at 1 year of age.

A number of studies have shown that adult attachment categories are moderately stable. For example, Scharfe and Bartholomew (1994) found that categorical attachment patterns had test-retest correlations from .51 to .70 over a period of 8 months, in a stable environment, depending on whether the rating was by an interviewer, a partner, or a self-report. Fifty-nine to 77% of their subjects remained in the same attachment category over an eight-month period. In the same study, they found stability coefficients for measures of internal working models of self and others ranging from .72 to .85 (based on a dimensional measure developed by Collins & Read, 1990, 1994). In general, they found that interview ratings of attachment style were the most stable, and hypothesized that this was due to the interview measures being also the most reliable, compared to the relatively lesser reliabilities of self-report and partner-report measures. Most self-report measures of attachment have stabilities of about .60 over periods of from 2 weeks to 8 months (Collins & Read, 1990; Feeney, Noller, & Callan, 1994; Hammond & Fletcher, 1991; Levy & Davis, 1988; Shaver & Brennan, 1992). For the AAI, an interview measure of adults' attachment relationships with their parents, test-retest reliabilities range from 77 to

90% over periods of 1 to 15 months (van Ijzendoorn & Bakermans-Kranenburg, 1997).

In summary, the function of attachment, to maintain a sense of security and safety, persists throughout life. Attachment, along with sexual mating and caregiving, is an important component of long-term romantic adult relationships. Hazan and Shaver (1994) hypothesized that attachment shifts from parents (caregivers) to peers gradually over the course of development, with proximity-seeking the first behavior to transfer (due to affiliative and exploratory behavioral systems), beginning in childhood with playmates and continuing to shift throughout adolescence into adulthood. In adolescence, the safe haven or support seeking function of attachment begins to transfer to peers, and eventually peers who have consistently provided support and alleviated distress may become relied on as a secure base. Attachment and caregiving expectations and behaviors in relationships should be especially salient in times of life stress, when their functioning helps the person respond adaptively, either to seek care or to provide it to their mate. The mechanism which provides for the continuity in attachment relationships is the working model, which guides emotional responses and behaviors when the attachment system is activated.

Mental representations, or *internal working models* of self and others in relationships, are developed by an infant based on repeated interactions with their caregivers. A working model is a "cognitive map ... a coded representation of whatever is mapped ... [which is used to] transmit, store, and manipulate information that helps in making predictions as to how ... set-goals can be achieved" (Bowlby, 1982, p. 80). "Working", according to Bowlby, refers to the notion of "cognitive manipulation of alternative behavioral strategies" (Crittenden, 1990, p. 260).

Working models of attachment serve as templates which organize beliefs and expectations about behaviors of self and others in close relationships. The working model contains templates of beliefs and expectations, both for how responsive a caregiving other can be expected to be, and for whether the self is the type of person toward whom a caregiving other is likely to respond helpfully (Bowlby, 1973). Each person has a working model of the environment (the other person) and of his or her self in terms of relationships. Beliefs and feelings about both self and others in relationships originate in patterns of past experiences with caregivers, and depend on the responsiveness of caregivers to their infant's needs for security, protection, and comfort.

Working models contain information which a person knows about relationships. Such information includes not only beliefs and expectations, but also factual knowledge about one's own or others' attachment behaviors, and also feelings, or affect, related to thoughts of and experiences with the attachment figure (Crittenden, 1990).

Bowlby (1982) asserted that working models could be at least partly or sometimes conscious, but that out-dated, inappropriate, inconsistent, or inflexible working models of attachment could be the basis for psychopathology. Working models allow us to interpret and predict others' behaviors, and help us consider and plan alternative response strategies (Crittenden, 1990).

For example, a person with *secure* working models of self and others tends to predict that others in close relationships will be available and responsive, and to view him- or herself as both worthy of receiving and able to provide support and comfort to another. Such persons are likely to be comfortable with intimacy, able to depend on and trust their peer-partner, and relatively easily soothed. Consistent with these ideas, secure adults have

been found to have long, stable relationships (Collins & Read, 1990; Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994; Kirkkpatrick & Hazan, 1994). They have been found to have higher self-esteem, more self-confidence, and more positive regard for others, for example believing that people are trustworthy, dependable, and altruistic (Collins & Read, 1990; Feeney & Noller, 1990). Secure subjects, when stressed, seek social support (Mikulincer, Florian, & Weller, 1993) and support their romantic attachment figure when that person is stressed (Simpson, Rholes, & Nelligan, 1992).

A person with an insecure working model tends to predict inconsistent responsiveness or even rejection from others, and may view him- or herself as being unworthy of or unable to provide support and comfort to another. For example, adults with an insecure/ambivalent working model of attachment relationships (also referred to as preoccupied), whose working model is likely to be one of vigilantly tracking an unreliable caregiver, may seek intense closeness, yet constantly fear abandonment. Research has shown that adults classified as anxious or preoccupied are extremely jealous and obsessed with their romantic partners (Hazan & Shaver, 1987). They have a high break-up rate, but also tend to reunite with their partners more often than those with other attachment styles (Hazan & Shaver, 1987; Kirkpatrick & Hazan, 1994; Shaver & Brennan, 1992). They have lower self-esteem (Collins & Read, 1990; Feeney & Noller, 1990) and tend to feel misunderstood and unappreciated at work (Hazan & Shaver, 1990). Mikulincer et al. (1993) found that anxiously attached adults tend to become very emotional under stress and use emotion-focused coping techniques. They worry about being rejected during social interactions, and self-disclose too much, too soon (Mukulincer & Nachshon, 1991). Kunce and Shaver (1994) found that they tend to be overcontrolling, intrusive, and

argumentative; Daniels and Shaver (1991; cited in Shaver, Collins, & Clark, 1996) found that they disregard their romantic partner while instead asserting their own needs and feelings.

Finally, an adult with an insecure/avoidant working model of attachment relationships is likely to be uncomfortable getting close to others, and to have difficulty depending on a partner (Hatfield & Rapson, 1993; Shaver & Hazan, 1988). Research has shown that avoidants have a higher break-up rate, and grieve less afterwards, than do secures (Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994; Shaver & Brennan, 1992; Simpson, 1990). Simpson et al. (1992) found that avoidants, when experiencing stress, tend to avoid seeking care or support from their romantic partners. They try to ignore or deny stress (Dozier & Kobak, 1992). They report feeling distant or bored during social interactions (Tidwell, Shaver, Lin, & Reis, 1991; cited in Shaver, Collins, & Clark, 1996) and do not like to self-disclose to others (Mikulincer & Nachshon, 1991). With their working model of attachment based on experience of either a consistently rejecting or frightening and confusing caregiver, adult avoidants tend to be either defensively self-reliant, or dominating and abusive toward their romantic partners (Shaver, Collins, & Clark, 1996).

Bowlby (1979) claimed that the formation of an attachment bond is like falling in love:

> ...many of the most intense of all human emotions arise during the formation, the maintenance, the disruption, and the renewal of affectional bonds...In terms of subjective experience, the formation of a bond is described as falling in love, maintaining a bond as loving someone, and losing a partner as grieving over someone. Similarly, threat of loss arouses anxiety and actual loss causes sorrow; whilst both situations are

> likely to arouse anger. Finally the unchallenged maintenance of a bond is experienced as a source of security, and the renewal of a bond as a source of joy (p. 69).

In a direct application of Bowlby's assertion that attachment behaviors persist into adulthood, Shaver and Hazan (1988, 1993; Hazan & Shaver, 1987) sought to show that adult attachments could be differentiated in ways analogous to Ainsworth's attachment styles in infants. They constructed a simple self-report, forced-choice questionnaire which translated descriptions of the three infant attachment patterns into adult terms. The secure type describes comfort with closeness and trust. The ambivalent (preoccupied) type describes worry about the availability and willingness of a partner to be close, and a strong but frustrated desire for closeness. The avoidant type describes discomfort with closeness, lack of trust in others, and a desire to keep others at a distance. Hazan and Shaver (1987) found that individuals described both their romantic relationships and their childhood relationships with parents in ways consistent with the attachment style they endorsed. Further, they found that the distribution of subjects across the different attachment categories was quite similar to the distribution of infants in American studies: about 55% secure, 25% avoidant, and 20% ambivalent. Since then, they and many other investigators have replicated and extended their findings (e.g., Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1994; Sperling & Berman, 1994; West & Sheldon-Keller, 1994).

Using a different application of Bowlby's (1973) theory, Bartholomew (1990; Bartholomew & Horowitz, 1991) conceptualized adult attachment styles as influenced by adults' internal working models of themselves and others (both positive and negative).

Bowlby theorized that these working models of one's own self worth and one's expectations of receiving support and care from others, are influenced by one's attachment relationship history in infancy and childhood. Bartholomew postulated four styles of adult attachment based on the intersection of the two dimensions of working model of self and working model of others: secure, ambivalent (preoccupied) and two types of avoidant (fearful and dismissing). She conceptualized these four styles as the different combinations of positive or negative models of self and others. Secure adults have positive models of both self and others; ambivalent (preoccupied) adults have negative models of self but positive models of others; and the avoidant types have negative models of others. *Dismissing* avoidants have a positive model of self and negative model of others, while *fearful* avoidants have a negative model of self and negative model of others. Bartholomew asserted that Hazan and Shaver's (1987) measure identifies fearful avoidants (they wish for but fear intimacy), while Main's Adult Attachment Interview (George, Kaplan, & Main, 1985) identifies dismissing avoidants (Main calls avoidants "dismissing" types). It is the fearful avoidant category which seems to be analogous to the disorganized/disoriented attachment style found in infants of depressed, disturbed, or abusive parents (Crittenden, 1988; Shaver & Hazan, 1993).

Similarly, Hindy and Schwarz (1994; Hindy, Schwarz,& Brodsky, 1989) have used the perspective of attachment theory to study adult romantic relationships, particularly anxious romantic attachments. In their studies, anxious romantic attachments were described as characterized by "insecurity, emotional dependency, and 'clinging'" (Hindy & Schwarz, 1994, p. 179), and they developed the Anxious Romantic Attachment Scale (ARAS) to measure subjects' tendency toward these types of romantic relationships. They

found that subjects who had higher scores on the ARAS experienced more intense negative *and* positive emotional states in their romantic relationships. They seemed to be overly invested in their relationships, with intense experiences of depression when relationships broke up, and sexual jealousy; they experienced their relationships as "imbalanced or unrequited" (p. 182). They seemed to seek extensive contact with their romantic partners in efforts to achieve a reciprocal and secure relationship. Also consistent with predictions from attachment theory, subjects who reported receiving inconsistent love and nurturance from their caregivers scored higher on the ARAS, than those who reported their childhoods as more consistent, warm, and secure. Also, subjects who tended to form anxious romantic relationships were found to protect themselves emotionally from discouraging responses from potential romantic partners, while those with lower scores on the ARAS were affected equally (positively or negatively) by either encouragement or discouragement. A factor analysis of the ARAS yielded two factors. Romantic Anxiety tapped fear and anxiety about the availability and affection of one's romantic partner; Romantic Obsession tapped preoccupation with one's partner to a degree which lead to neglect of other aspects of life. Hindy and Schwarz noted that these factors appear to be conceptually analogous to Bartholomew's "preoccupied" and "fearful" styles of attachment.

Attachment and Communication

Studies have shown that there is a link between effective communication and attachment styles (Bretherton, 1988, 1990; Grossmann, Grossmann, & Schwan, 1986). Communication patterns which are "emotionally open, fluent, and coherent" (Bretherton, 1990, p. 58) characterize secure relationships; insecure relationships "seem to be

characterized by selective ignoring of signals" (Bretherton, 1990, p. 58). For example, secure attachment in infants is associated with relationships with caregivers who accurately read and respond to their child's signals. That is, such caregivers notice the infants' signals, accurately interpret them as "bids for comfort, soothing, and protection" (Bretherton, 1990, p. 61), and respond in a suitable and timely fashion, while also supporting and promoting the infants' exploratory behaviors and developing sense of independence. For securely attached infants, expression of negative affect serves to communicate with their caregivers and to elicit effective responses (Ainsworth et al., 1978; Cassidy & Kobak, 1988; Kobak & Sceery, 1988). Further, secure attachment relationships are characterized by the ability to communicate flexibly, openly, and coherently *about* attachment relations.

In contrast, caregivers of insecure infants may "fairly consistently interpret security seeking as overly demanding or as unimportant or too often restrict the baby's desire for independent exploration..." (Bretherton, 1990, p. 61). This sends the infant the message that his or her communications are not understood, or are not important. As Bretherton (1990) notes, this lack of understanding may consist not only of rejecting the infants' bids for comfort, but may also consist of unnecessarily interfering with the infants' exploratory behaviors. For infants with insecure attachment, negative emotions are more likely to come to be perceived as ineffective in eliciting caregiving, and so they may learn to exaggerate or to inhibit their negative emotional expressions. The lack of flexible and open communication between infant and caregiver is assumed to restrict the flow of information not only between the relationship partners, but also within each partner's internal representational system of relationships (working model), as certain emotion-

eliciting topics or aspects are eliminated from reciprocal communication patterns. This restriction of interpersonal and intrapersonal information processing thus gives rise to distorted and incomplete communication patterns. This dysfunctional interpersonal style of communication and emotion regulation is likely to lead to further lack of understanding and to further negative responses from others (e.g., caregivers and future romantic partners). In summary, emotional availability, the flow of communication between relationship partners, and appropriate attention to signals (as opposed to ignoring or misreading them) of emotional distress are characteristically present in secure attachment relationships, and are problematic in insecure attachment relationships.

The relationship between communication and attachment styles in adults has become a subject of growing interest, beginning with the development of the Adult Attachment Interview by Main and colleagues (1984; cited in Bretherton, 1990). The interview focuses on the adult's memory, thoughts, and feelings about childhood attachment issues and experiences, and patterns of responding are evaluated according to their organization, accessibility, and internal consistency. Three response patterns have been described: secure-autonomous, dismissing, and preoccupied. Secure-autonomous adults easily, and relatively objectively, discuss attachment influences; also, they tend to have secure infants. Dismissing adults deny the importance and influence of attachment relationships, and are inconsistent in their descriptions; in particular, they tend to describe early relationships with their caregivers in idealized terms, while being unable to recall specific incidents; they tend to have avoidant infants. Adults are classified as preoccupied when their descriptions of childhood attachment relationships reflected a lack of autonomy and a preoccupation with unsuccessful attempts to please parents. They have many specific

memories of childhood, but are unable to formulate global impressions of the relationship. Their infants tend to be classified as ambivalent (Main, Kaplan, & Cassidy, 1985; Main & Solomon, 1986, 1990). Kobak and Sceery (1988) found these same three patterns in college students, and found that, using peer ratings, those classified as autonomous were rated higher on social relatedness and adjustment, and lower on negative affect, than those in the dismissing and preoccupied groups.

The ability of adults in couple relationships to accurately and openly communicate their needs and to discuss attachment issues is likely to contribute to their satisfaction in the relationship. For example, attachment style has been found to be associated in predictable ways with self-disclosure (Mikulincer & Nachshon, 1991). They found that secure and ambivalent subjects were more willing to self-disclose in conversations than were avoidant subjects; furthermore, secure subjects were more flexible and reciprocal when self-disclosing than were the ambivalent subjects. Similarly, Simpson, Rholes, and Nelligan (1992) found that securely attached women experiencing situational anxiety were more likely to accept physical contact and seek emotional support from their partners than were avoidant women, and this difference increased as anxiety increased. Also, Simpson et al.(1992) found that men who were securely attached provided their partners with more emotional support and reassurance, and displayed more concern, than avoidant men.

Attachment Styles and Relationship Satisfaction

A number of studies have shown that attachment styles are related to relationship satisfaction. For example, Brennan and Shaver (1995) found that attachment style was related to relationship satisfaction in a group of university students involved in

relationships. Subjects' level of relationship satisfaction was related to their partner's scores on a secure-to-avoidant attachment dimension, and to their own scores on all of the attachment measures used. Specifically, subjects' relationship satisfaction was positively correlated with their own level of attachment security and with the security of their partners, was negatively correlated with avoidant and preoccupied types of attachment in themselves, and was negatively correlated with avoidant attachment in their partners. In another study, Simpson (1990) found that, for both men and women in dating couples, secure attachment style was positively correlated with scores on a relationship satisfaction measure, but anxious and avoidant attachment styles were negatively correlated with relationship satisfaction. Similarly, Pistole (1989) found that subjects with a secure attachment style reported higher levels of relationship satisfaction, and used more integrative and compromising conflict resolution strategies with their partners, than did subjects with ambivalent or avoidant attachment styles. Collins and Read (1990) found evidence for gender differences in the relationship between attachment style and satisfaction. In a group of dating couples, they found that men's satisfaction was related to their comfort with closeness, whereas women's satisfaction was negatively related to their anxiety about relationships. Kobak and Hazan (1991), in a study of marital relationships, found that husbands' reports of their wives' "psychological availability" were associated with both partners' marital satisfaction, but that wives' reports of their husbands' psychological availability were associated only with their own satisfaction.

In summary, a number of different types of adult attachment classifications have been shown to be related to relationship satisfaction. However, little work has directly focused on the influence of internal working models of self and others on relationship satisfaction.

Attachment and Emotion Regulation in Marital Relationships

Studies of marital conflict have revealed the importance of emotion regulation in relationship functioning (Gottman & Krokoff, 1989; Gottman & Levenson, 1986, 1992; Krokoff, Gottman, & Roy, 1988). Compared with nondistressed couples, distressed couples show more dysfunctional negative affect during problem-solving discussions (Gottman & Levenson, 1992). Dysfunctional negative affect includes negative reciprocal exchanges and lower levels of validation and support between partners (Gottman, 1979; Gottman, Markman, & Notarius, 1977).

Kobak and Hazan (1991) postulated that insecure working models of attachment might contribute to such dysfunctional interactions. For example, when an individual has a working model which predicts a lack of psychological or physical availability of the partner, behaviors which would normally elicit caregiving responses (anger, crying, etc.) might be either exaggerated or inhibited, which might then elicit defensive responses from the partner (Rusbult, Zembrodt, & Gunn, 1982). These patterns of negative expressions and defensive responses may then contribute further to the already-problematic working models of self and other (Izard & Kobak, 1991).

Given that the function of attachment is the maintenance of safety and felt security, attachment relationships should be especially crucial in times of life crises and in determining successful adaptation as adults (West & Sheldon-Keller, 1994). As Bowlby (1988) has stated,

> ... the extent to which [each individual] becomes resilient to stressful life events is determined to a very significant degree by the pattern of attachment he or she develops during the early years (p. 8).

Early studies of family and couple relationships revealed the necessity of studying emotion (Gottman, 1993). Although these studies attempted to focus strictly on the content of communication between couples, they revealed that emotion was an integral and important part of communication in marital interaction that could not be ignored (e.g., Soskin & John, 1963; Hops, Wills, Patterson, & Weiss, 1972; both cited in Gottman, 1993). For example, Gottman and colleagues (e.g., Gottman & Krokoff, 1989; Gottman & Levenson, 1986, 1992) have found that the expression of negative emotion and predictable reciprocal exchanges of negative affect are associated with marital dissatisfaction. Gottman and Levenson (1992) found that less satisfied married couples engaged in as many or more negative expressions (e.g., engaging in conflict, withdrawal and lack of interest, defensiveness, anger, stubbornness, whining, lack of affection or joy) than positive behaviors. The more satisfied couples engaged in more positive than negative behaviors.

Research has revealed that the expression and reciprocation of certain types of negative affect are problematic in couple relationships. For example, Gottman and Krokoff (1989) found that patterns of expressing defensiveness, stubbornness, and withdrawal from interaction predicted deterioration in marital satisfaction. However, it is not yet clear why some couples engage in these types of interactions, and other couples do not. Some unhappy couples may lack problem-solving skills; some may have disparate values and thus more things to disagree about; some may have more external stress in their lives. Others simply may not feel that they are companions who can deal with stress and conflict together (Krokoff, Gottman, & Roy, 1988). All of these variables may lead to the presence and expression of negative affect, and to relationship distress. The current study

will address another possible contributing factor to the presence and expression of destructive levels of negative affect: insecure attachment styles which are associated with maladaptive emotion regulation strategies.

The degree to which partners are able to respond to each other in ways that each finds helpful in dealing with painful emotions is likely to influence how satisfied they are in their relationships. When one partner finds him- or herself in a negative emotional state, (e.g., about something that happened at work that day) they are likely to turn to their partner for assistance in order to feel better. The extent to which partners can assist each other in these situations may play an important role in the relationship. If an appropriate response is not forthcoming, or a response is perceived as inappropriate, the negative affect is likely to escalate and lead to conflict. When partner A provides a desired response, partner B is likely not only to feel better emotionally, but to feel positively toward partner A as well.

People with different attachment styles may differ in their preferred styles of emotion regulation, and so may prefer different types of responses from their partners when they experience negative affect. Some people may prefer assistance with cognitive strategies, such as re-appraising the importance of the situation that elicited the negative affect, finding out more about the situation, or considering other points of view. Others may prefer to focus more directly on the situation itself, and want help from their partner with problem solving about it. Yet others may prefer that their partner provide emotional support, perhaps simply by listening, by validating their feelings, encouraging them to express their feelings, or encouraging them to seek social support from others. Alternatively, rather than focusing on the situation itself or thinking about it, another type

of strategy might be to attempt to elicit a more positive affect. Partner A may want partner B to try to cheer him/her up, make him/her laugh about the situation or at least feel better about it, or engage in some other mood-altering activity such as listening to cheerful or soothing music, or watching a comedy on the VCR.

Another way to regulate negative affect is through distraction: some people may want their partner to help them think about something else, talk about something else, or engage in some other unrelated activity together. Some people may prefer to regulate negative emotions by engaging in physical activities, so may want their partners to encourage them or accompany them to exercise, jog, dance, or alternatively to help them focus on physically relaxing. Others may simply want to be soothed by their partner in certain ways, perhaps by doing something for them which they perceive as particularly caregiving and comforting, such as taking care of some chores, fixing a meal, giving a massage, hugging them, or even allowing them some time alone. There are also a number of strategies for regulating emotions which may be considered maladaptive. These include ingesting mood-altering substances, such as alcohol or nicotine. Ignoring negative emotions or being discouraged from showing them or talking about them may also be maladaptive.

There are many potential negative consequences for couples of impaired emotion regulation ability in one or both partners. A person who is frequently in a negative emotional state which is not easily changed by themselves or their partner, for example someone who is frequently angry and aggressive, is likely to have difficulty establishing and maintaining a close relationship. Similarly, someone who is typically depressed, passive, or withdrawn, and so is unable to communicate his or her emotional needs to a

partner in order to elicit support, or perhaps even unable to acknowledge distress, is unlikely to be able to establish or maintain a close relationship. The frequent use of maladaptive means of regulating emotional states is also likely to have negative implications for long-term couple relationships. For example, a person who abuses alcohol to regulate affect may be both unpredictable and unavailable to their partner.

Another type of difficulty in the interpersonal regulation of emotion might be illustrated by a person who is overly dependent on their partner to help them regulate their negative affect. They may be experienced as clinging and overly needy of attention and reassurance, and may eventually come to be felt as a burden. A person such as any described above, who is unable to regulate his or her own emotional states, is unlikely to be either consistently available or effectively supportive when their partner needs emotional support. Alternatively, difficulty might arise when a person excessively uses withdrawal or denial as a way to regulate their emotions. If they are with a partner who expects the sharing of emotional experiences, the partner may feel rejected or resentful at the lack of communication or emotional connection in the relationship.

Kobak and Hazan (1991) found that marital partners with secure working models of attachment ["self as relying on partner and partner as psychologically available" (p.861)] showed more constructive emotion regulation and maintenance of problem solving communication tasks, and reported better marital adjustment. They used an 84-item Q-sort measure of reliance on partner and partner's psychological availability, Hazan and Shaver's (1987) three-paragraph forced-choice measure of attachment style, and the Dyadic Adjustment Scale as a measure of marital adjustment. Forty couples, recruited from partners responding to a newspaper survey of attachment styles and to radio

advertisements, completed these measures. Subjects also participated in two videotaped interactions in the laboratory: one involving a problem-solving communication task, and one involving a confiding task. The problem-solving task was rated for rejection and for support-validation, and the confiding task was rated for disclosing (for the speaker) and acceptance of distress (for the listener). Security of attachment was determined based on Q-sort scores of subjects' own reliance on their partners, and their ratings of their partners' psychological availability. They found that spouses with secure attachment styles maintained better communication during the problem-solving discussion. For example, secure husbands (who perceived their spouses as psychologically available) were less rejecting and more supportive of their wives. Insecure wives (who reported themselves as relying less on their spouses, and reported their husbands as less available psychologically) were more rejecting and displayed more negative affect during the problem-solving discussion. Thus, those with insecure attachment styles, who have negative expectations of their partners' availability, appear to have difficulty regulating negative emotions during such discussions, and are rejecting toward their partners. Kobak and Hazan (1991) also found that agreement between partners about working models of attachment (measured by correlations between subjects' ratings on each of the 84 Q-sort items and their partners' ratings of them on the same items) contributed more than one third of the variance in marital adjustment. Agreement about attachment security was also positively correlated with support-validation and negatively correlated with rejection during problem solving, and with acceptance during the confiding task.

Simpson, Rholes, and Nelligan (1992) examined the relationships between adult attachment styles (categorized along a secure to avoidant dimension or along an anxious

dimension), support-giving, and support-seeking behaviors in spontaneous interactions of dating couples under a stressful condition. They provoked anxiety in the female member of each couple, and rated videotapes of the couples' subsequent interactions. They found that secure women sought more support from their partners as their level of anxiety increased, whereas more avoidant women sought less support, both physically and emotionally, as their anxiety level increased. Similarly, more secure men tended to offer more support as their partners' anxiety increased, whereas more avoidant men did not. There were no significant effects for participants with the anxious attachment style.

Purpose

Hazan and Shaver (1987) called for researchers to extend their findings by applying adult attachment theory to the study of partners within ongoing romantic relationships. This study will focus on evaluating whether people having different attachment styles differ in terms of how they want their partner to respond to them when they are experiencing difficult emotions. There has been little research relating adult attachment styles to actual emotion regulation behaviors between the partners. Attachment theory itself has been described as a theory of emotion regulation, that is, a theory about how people deal with difficult emotional states. Differences in attachment style are influenced by the individual's experience with caregivers' responsiveness to his or her distress signals. Through this experience, the individual develops strategies for dealing with difficult emotions (Sroufe & Waters, 1977), which according to attachment theory generalize not only to various distressful situations, but to other relationships in which caregiving plays a role.

Adults have a broad range of possible emotion regulation behaviors, as well as a broad

range of ways in which they might provide support to a long-term romantic partner. This study therefore is an attempt to clarify how adult attachment style affects long term adult romantic relationships, through looking at emotion regulation behavior preferences of adults with different attachment styles. Attachment style theoretically reflects one's general style of dealing with stressful emotions and one's orientation toward giving and receiving emotional support in close relationships. Therefore, individuals with different attachment styles are expected to express different preferences for emotion regulation behaviors from their partners.

This study is an extension of previous research which focused on emotion regulation behaviors in couple relationships. Myers (1996; Myers & Waltz, 1997) developed a measure which asked about emotion regulation behaviors desired from one's partner when one was feeling sad, angry, or anxious, and about the level of one's satisfaction with the way the partner responded with each behavior. A confirmatory factor analysis revealed that seven categories of desired emotion regulation behaviors in couples were empirically valid: Cognitive, Social Support, Distraction, Physical Activity, Problem Solving, Soothing, and Direct Mood Change. Satisfaction with one's partner's emotion regulation behaviors was measured on the same categories, as well as one additional category, Maladaptive. The Cognitive subscale involves strategies such as reappraisal of the eliciting situation, finding out more about the situation, or considering other points of view. The Problem Solving subscale includes focusing directly on the problematic situation and generating solutions to it. The Social Support subscale contains strategies such as providing emotional support, listening, validating feelings, and encouraging the expression of feelings. The Direct Mood Change subscale encompasses attempts to elicit a more

positive affect, for example cheering up, or engaging in some mood-altering activity. The Distraction subscale includes strategies such as being encouraged to talk or think about something else or engaging in some unrelated activity, while the Physical subscale contains strategies such as being engaged by one's partner in various physical activities or in physical relaxation. The Soothing subscale includes being soothed by one's partner by receiving caregiving and comfort. The Maladaptive category consists of strategies such as ingesting mood-altering substances, ignoring negative emotions, or being discouraged from showing them or talking about them.

There were no differences of response patterns across the three different emotions of anger, sadness, or anxiety. However, there were differences of response patterns across level of relationship satisfaction and sex. Women preferred significantly more Social Support and Soothing behaviors from their partners than did men; men and women did not differ significantly in their preferences for Cognitive, Distraction, Mood Change, Physical, or Problem Solving behaviors from their partners. Participants who were relatively more satisfied with their relationship overall preferred significantly more Cognitive, Mood Change, and Problem Solving behaviors from their partners, than did those participants who were less satisfied with their relationship. There were no differences in preference for Distraction, Physical, Social Support, or Soothing strategies.

Similarly, women were more satisfied than men with their partner's emotion regulation behaviors on the Social Support and Soothing subscales. Participants who were relatively more satisfied with their relationship overall were significantly more satisfied with their partner's Cognitive, Mood Change, and Problem Solving behaviors, than were participants who were less satisfied with their relationship.

This study will also attempt to replicate previous research findings regarding differences in overall relationship satisfaction between adults with different attachment styles, but using a group of subjects involved in long term committed relationships rather than subjects who are involved only in dating or hypothetical relationships. The study will extend previous research findings regarding the relationship between adult attachment style and relationship satisfaction by also focusing on individuals' satisfaction specifically about their partner's responsiveness in terms of emotion regulation behaviors.

Hypothesis 1: Individuals with different attachment styles should endorse preference for different emotion regulation strategies from their partners.

1a: Partners with secure working models of attachment should endorse preferences for positive, interactive emotion regulation behaviors such as cognitive or problem solving activities, or direct mood change activities. They are likely to turn to their partner for support because they expect responsive caregiving and are able to utilize such caregiving.

1b: Partners with avoidant working models of attachment should endorse overall less preference for interactive emotion regulation support from their partners than individuals with other attachment styles. They may prefer more self-reliant approaches, for example, distraction or physical activity. They are unlikely to turn to their partner for support because of their early experiences with rejecting or insensitive caregivers, and because they have learned to restrict display of negative feelings.

1c: Partners with ambivalent working models of attachment should indicate preference for a higher level of emotion regulation behaviors from their partners than either of the other types, particularly the emotion-focused and supportive type behaviors. They are likely to be focused on their feelings and emotional expression, having learned that

expression of distress is a way to maintain contact with inconsistent caregivers.

Hypothesis 2: Partners with secure working models of attachment should report more overall relationship satisfaction (as measured by the Dyadic Adjustment Scale) than partners with avoidant or preoccupied (anxious/ambivalent) working models, who may perceive their partners as unavailable or unhelpful.

2a: Relationship satisfaction for men and women may be differentially affected by the different attachment styles. For example, Bartholomew and Scharfe [1993, cited in Griffin and Bartholomew (1994)] found that, for women, all three insecure attachment styles (preoccupied, dismissing and fearful) were negatively correlated at about the same magnitude with relationship satisfaction. For men, the magnitudes of the negative correlations differed significantly, with the dismissing-avoidant attachment style being most highly (negatively) related.

Hypothesis 3: Working models of self and other should predict preferences for emotion regulation strategies from one's partner.

Hypothesis 4: An individual's working models of self and other should be related to overall relationship satisfaction.

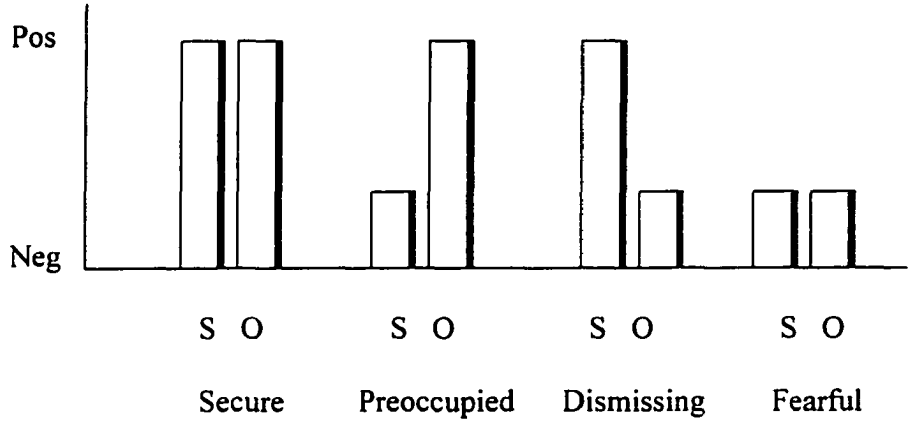
4a: Men's and women's overall relationship satisfaction may be differentially effected in terms of their working models of self and of others.

Hypothesis 5: Partners with secure attachment styles should report more satisfaction with their partners' emotion regulation behaviors than partners with avoidant or preoccupied (anxious/ambivalent) attachment styles. Participants with ambivalent attachment styles are expected to indicate the lowest level of satisfaction with their partner's emotion regulation behaviors.

Hypothesis 6: An individual's working models of self and others should be related to satisfaction with one's partner's emotion regulation behaviors.

6a: Men's and women's satisfaction with their partner's emotion regulation behaviors may be differentially affected by their working models of self and others.

Hypothesis 7: Working models of self and others should be related to attachment styles as predicted by Bartholomew's four-category model, as illustrated below:



Hypothesis 8: Categorical and dimensional models of attachment may be differentially predictive of overall relationship satisfaction.

Hypothesis 9: Categorical and dimensional models of attachment may be differentially predictive of preferences for certain emotion regulation strategies.

This study is an extension of previous work, in which a measure of emotion regulation strategies in couple relationships was developed (Myers, 1996). Women were found to prefer more relationship-focused, emotionally expressive, and empathic responses from their partners than men, but men and women did not differ in their preferences for more

instrumental and cognitive emotion regulation strategies. Overall relationship satisfaction was associated with preference for the more instrumental and cognitive strategies. Although it has been postulated that attachment style is likely to be related to preferences for particular emotion regulation strategies, there has been no research to date that has focused specifically on this issue in adults involved in long term committed relationships. Therefore, this study will extend previous research efforts in both adult attachment and emotion regulation.

Chapter 2

Method

Subjects

One hundred couples (N = 200) from the community and the general psychology subject pool were recruited. Both partners were required to be at least 18 years of age, and were required to have been living together at least one year. Couples from the community were solicited by advertisements, notices, and radio public service announcements requesting couples to participate in a study of couple relationships. Couples from the community received $10 for their participation; those from the subject pool received experimental credits in partial fulfillment of course requirements. Over 90 percent (182) of the participants were Caucasian. Their ages ranged from 18 to 71, with a mean age of 29 years. About 80 percent (163) had at least some college education. They had been living with their partners for an average of 5.7 years (range 1 - 35 years)

Materials

Partner Emotion Regulation Scale (PERS). The PERS is a self-report inventory developed in the course of an earlier study, and previously described (Myers, 1996; Myers & Waltz, 1997). It is a self-report measure of patterns of regulation of the emotions of sadness, anxiety, and anger within couple relationships. There are two main sections of the PERS for each emotion. The first section is a measure of what the respondent wants his or her partner to do when he or she is in a particular emotional state and wants to change how he or she feels. The second section is a measure of the degree to which the respondent is satisfied with their partner's responses (see Appendix A).

Eight general categories of emotion regulation behaviors and 40 specific behavior items

for the PERS were rationally derived from a review of other questionnaires described in the literature on emotion regulation, emotion control, and coping (Folkman & Lazarus, 1988; Moos, Cronkite, & Finney, 1990; Roger & Najarian, 1989; Stone & Neale, 1984; Watson & Greer, 1983). First, eight categories of general styles of emotional regulation were proposed (Cognitive, Social Support, Distraction, Physical Activity, Problem Solving, Soothing, Maladaptive, and Direct Mood Change). Five statements associated with each category were developed. The ensuing 40 items were then randomly arranged in a questionnaire format. Subjects indicate, on a five-point frequency scale, what they want their partners to do to help them change a given emotional state: 1 indicates *never*, 2 - *rarely*, 3 - *sometimes*, 4 - *often*, and 5 - *almost always*. A second section of the scale uses a similar five-point scale to indicate how satisfied the subject is with the way their partner engages in each activity: 1 indicates *very unsatisfied*, 2 - *somewhat unsatisfied*, 3 - *neutral*, 4 - *fairly satisfied*, and 5 - *very satisfied*. A brief interview is administered at the beginning of the PERS for each emotional state, which elicits examples of two times the subject has experienced that state, in order to facilitate the subject thinking about instances when they have experienced the emotional state being addressed. A confirmatory factor analysis revealed a satisfactory fit of the model, for research purposes, after a few items were deleted, for 7 of the 8 categories of desired partner emotion regulation behaviors (all except the Maladaptive category). The PERS desired partner behavior subscales were found to have adequate reliability for research purposes, with alpha coefficients in the .60 to .80 range, with a few exceptions. Across the three emotions, the Social Support subscale had the lowest coefficients, at .47, .60, and .49 for Anger, Sadness, and Nervousness, respectively. Test-retest stability over two weeks was

adequate, with significant correlations between subscales on the two administrations (.48 to .94) with the exception of the Cognitive subscales.

Romantic Relationships Questionnaire (RRQ). Two measures of adult attachment styles will be used (see Appendix). Both are self-report measures and provide both categorical and continuous ratings. The first measure is the most recent version of a questionnaire developed by Shaver and Hazan (1987, 1993). It consists of three short paragraphs which describe, in adult terms, each of the three infant attachment patterns (secure, anxious, and avoidant). In its first section, for each of the three attachment styles, respondents indicate on a scale of 1 to 7 (1 = disagree strongly to 7 = agree strongly) the degree to which the described style describes them in love relationships (Levy & Davis, 1988). The second section presents the same three short paragraphs, but asks the respondent to indicate the single alternative which best describes him or her in romantic relationships. Stability of the categorical classifications is 70 to 80% over periods from several weeks to 4 years (Kirkpatrick & Hazan, 1994). Test-retest stability of the 7-point ratings is about .60 over periods from 8 months to 2 years (Scharfe & Bartholomew, 1994; Shaver & Brennan, 1992). Construct validity has been described in a variety of studies (see Hazan & Shaver, 1994; Shaver & Hazan, 1993).

The second adult attachment measure was developed by Bartholomew and Horowitz (1991). It contains four short paragraph descriptions of attachment styles (secure, anxious, dismissing avoidant and fearful avoidant). It was also presented both as a dimensional measure, in which the subject rates on a scale of 1 to 7 the degree to which the paragraph describes him- or herself, and as a forced-choice categorical measure. The use of both the 3-item and 4-item measures, including both a forced-choice and rating scale format,

serves as a quick self-report measure of the dimensions of adult attachment. The reliability, two-dimensional structure, and construct validity of the measure has been described by Bartholomew and Horowitz (1991) and Griffin and Bartholomew (1994).

Scores on the attachment dimensions of positivity of self model and of other model can be derived using linear combinations of scores on the Likert scale versions of Bartholomew and colleagues' four-category attachment measure. A score for the positivity of self model is derived by adding together ratings on the dimensions defined by positive self model (secure and dismissing-avoidant) and then subtracting the ratings on the dimensions defined by negative self models (preoccupied and fearful-avoidant). Similarly, a score for the positivity of other model is derived by adding together ratings on the dimensions defined by positive other model (secure and preoccupied) and then subtracting the ratings on the dimensions defined by negative models of others (dismissing- and fearful-avoidant). Griffin and Bartholomew (1993, cited in Bartholomew and Griffin [1994]) noted that these two attachment dimensions show good convergent validity across different methods of assessment (e.g., self-report, raters' judgments, and peer and partner reports). They also reported results from a confirmatory factor analysis in which the two dimensions showed good discriminant validity (low correlations between scores on the two dimensions), and good construct validity of the two dimensions. Positivity of self model was highly related to a positive self-concept, and positivity of other model was highly related to a positive interpersonal orientation.

Dyadic Adjustment Scale (DAS). The DAS (Spanier, 1976) was developed to assess the degree of couple relationship satisfaction. It has been used extensively in the study of dyadic relationships, most often of married couples. The DAS consists of 32 self-report

items, primarily using Likert-type response scales; scores can range from 0 to 161, with higher scores indicating higher levels of satisfaction, or general contentment and agreement, in the relationship. It has satisfactory validity and reliability (Spanier, 1976). Spanier's normative sample had a mean of 114.8 with a standard deviation of 17.8. Scores of participants in the current study ranged from 64 to 146, with a mean of 113 and standard deviation of 14.3 (median = 115).

Procedure

After being contacted by telephone, couples who met criteria and were willing to participate were scheduled for an appointment at the research lab and were sent a packet of information which included a demographic form (see Appendix) and other measures not pertinent to the current study. When the couple arrived at the lab, informed consent was obtained, and subjects completed the PERS, DAS, and RRQ. Some of the subjects continued with other studies. Order of presentation of the three PERS scales was counterbalanced across couples. Subjects were debriefed after completion of all measures.

Chapter 3

Results

Adult Attachment Classifications

The distribution of participants across attachment categories was examined to determine whether it was similar to that found in other studies. In contrast to previous studies, there was a lower percentage of anxious (preoccupied) and a higher percentage of secure individuals as classified by the Hazan and Shaver (1987) model. In the current study, the distribution according to Hazan and Shaver's model was 69% secure, 9% anxious, and 22% avoidant. Most previous studies of adults and infants in the U.S. and other countries using this type of categorization have proportions close to 55%-20%-25% (see review by Shaver & Hazan, 1993). However, a recent study using a nationally representative sample showed attachment styles distributed more similarly to the current study: 59% secure, 11% anxious, and 25% avoidant (Mickelson, Kessler, & Shaver, 1997). When the distribution of participants was viewed according to Bartholomew's (1990; Bartholomew & Horowitz, 1991) classification system, there were 56% secure, 12% preoccupied, 13% dismissing avoidant, and 19% fearful avoidant. This is similar to the pattern in Bartholomew and Horowitz's (1991) study, in which the percentages were 47% secure, 14% preoccupied, 18% dismissing, and 21% fearful. As can be seen in Figure 1, about 75% of subjects who rated themselves as secure on Hazan and Shaver's measure also rated themselves as secure on Bartholomew's measure, with the rest dividing fairly equally across the other three styles. About 44% of those who rated themselves as anxious on Hazan and Shaver's measure also rated themselves as

preoccupied on Bartholomew's measure, with 22% rating themselves as secure, 28% as fearful, and 6% as dismissing. Of those who rated themselves as avoidant on Hazan and Shaver's measure, 52% and 31% rated themselves as fearful- or dismissing- avoidant on Bartholomew's measure, with about 10% and 7% rating themselves as secure or preoccupied. These results are similar to those of Brennan, Shaver, and Tobey (1991) and Levy, Blatt, and Shaver (1998) in that avoidants in the Hazan and Shaver system mostly rated themselves as fearful in the Bartholomew system. These results are dissimilar in that those who rated themselves as secure in the Hazan and Shaver system, but insecure in the Bartholomew system, in the present study, were about equally divided between the insecure categories, rather than all choosing the fearful category.

In the current study, the two measures were highly related, $\chi 2$ (6, N = 194) = 94.3, $p <$ .001. Many of the correlations between the attachment style ratings were significant. The correlations of the four Bartholomew scores with the Hazan-Shaver security scores were: security, .70, $p < .01$; preoccupied, -.07, *ns*, ; dismissing, -.10, *ns*; and fearful, -.67, $p < .01$. Correlations with the Hazan-Shaver anxious scores were: security, -.23, $p < .01$; preoccupied, .48, $p < .01$; dismissing, -.09, *ns*; and fearful, .26, $p < .01$. Correlations with the Hazan-Shaver avoidant scores were: security, -.58, $p < .01$; preoccupied, *ns*; dismissing, .26, $p < .01$; and fearful, .68, $p < .01$. Similar to results found by Levy et al. (1998), these results show that the concepts of security and anxiety (preoccupation) were moderately similar across the two measures of attachment. Avoidance in the Hazan-Shaver model appears to be somewhat similar to both of Bartholomew's concepts of avoidance, but more closely related to the fearful type.

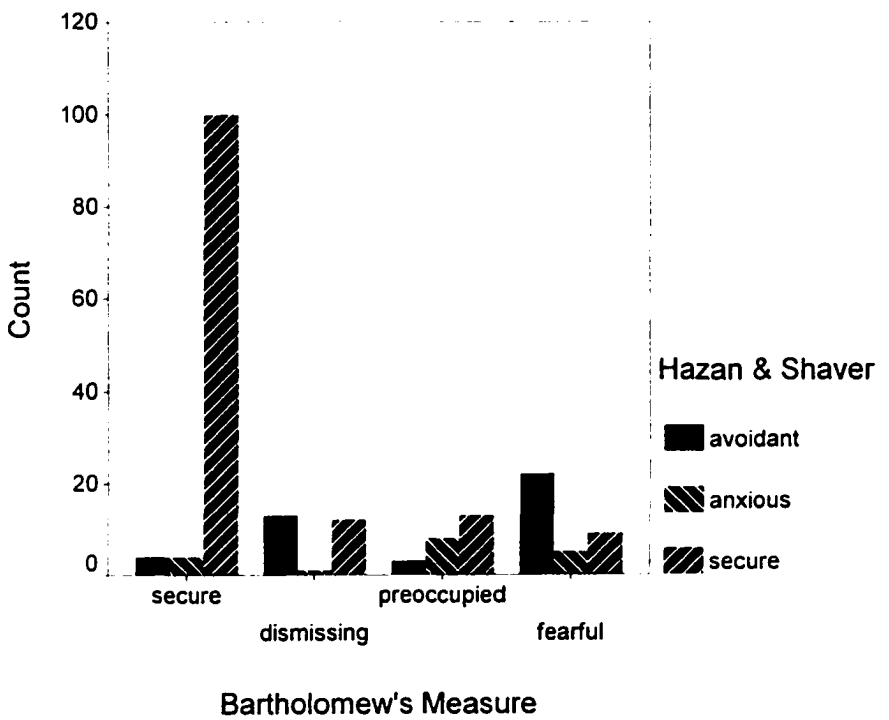


Figure 1. Attachment classifications of participants as a function of Hazan and Shaver's (1987) three-category measure and Bartholomew's (1990) four-category measure.

Prior to analysis, the seven Desired Partner Emotion Regulation Behaviors (PERS-Desired) subscales, the seven Satisfaction with Partner Emotion Regulation Behaviors (PERS-Satisfaction) subscales, Dyadic Adjustment Scale (DAS) total scores, and derived Working Model of Self (WMS) and Working Model of Others (WMO) scales were examined for normality of their distributions. Review of histograms, normal probability

plots, and detrended probability plots indicated that the distributions were fairly normal. None of the distributions were so skewed as to suggest requiring transformation to achieve normality. Review of boxplots showed a number of outliers, most of them between 2 and 3 standard deviations from their respective means. All outliers were examined for accuracy of data entry. Review of each outlying subject's data revealed that outlying scores on the PERS subscales were created by extreme and consistent responses to the items. These outliers were retained in the data analysis because it seemed normal in this type of study for a few subjects to consistently either "never" or "almost always" desire (or be satisfied or dissatisfied with) emotion regulation behaviors of all kinds from their partner. Also, the outlying subjects did not appear to have responded in consistently extreme fashion to other items in the study. Similarly to the review for univariate normal distribution of scores on the PERS and other scales, the scores in each cell of each multivariate analysis were examined for normality of their distributions and were found to be normal and relatively free of outliers.

Attachment Style and Desired Partner Emotion Regulation Behaviors

Because, as shown in Table 1, the PERS-Desired subscales were substantially correlated (.07 to .77), a multivariate analysis of variance was undertaken as a preliminary to univariate ANOVA as a precaution against Type I error.

Differences in response patterns across attachment style in desired partner emotion regulation behaviors were explored in a MANOVA (SPSS General Linear Model: Multivariate). Categorical attachment style was the between-subjects independent variable. Scores on each of the seven subscales of desired partner emotion regulation behaviors from the PERS were the dependent measures. A T-score for each subject on each of the seven PERS subscales, was derived by averaging the person's T-score on each subscale across the three emotions. This was done because the previous study of emotion regulation behaviors determined that there were no significant differences in preferred partner emotion regulation behaviors across the different emotions (nervousness, sadness, and anger).

Multivariate tests of the homogeneity of variance-covariance matrices were nonsignificant. One MANOVA was done using the 3-category attachment measure; another was done using the 4-category measure. Eta^2 was computed for each analysis and compared to see which attachment measure accounted for more variance in emotion regulation preferences.

Table 1

Intercorrelations Between Partners Emotion Regulation Average Subscale T-Scores ($N = 202$)

	Subscale						
Subscale	Cognitive	Soc Supp	Distract	Physical	Prob Solv	Soothing	Mood Change
Cognitive	----	.46**	.27**	.19**	.77**	.39**	.50**
Social Support		----	.16*	.19**	.36**	.34**	.32**
Distraction			----	.47**	.21**	.60**	.70**
Physical				----	.07	.36**	.34**
Problem Solving					----	.44**	.53**
Soothing						----	.68**
Mood Changing							----

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

Three-category attachment model. For the 3-category model, the MANOVA revealed that the combined PERS subscales were not significantly affected by attachment style (*Pillai* = .093, $F(14, 378) = 1.318$, $p = .193$, $eta^2 = .047$). Although the multivariate test was not significant, univariate tests suggested a significant effect on the Soothing subscale, $F = 3.27(2, 194)$, $p = .03$, $eta^2 = .033$. Given the nonsignificant multivariate test, this result must be regarded as tentative. Tukey HSD post hoc tests suggested ($p < .05$) that anxiously attached participants desired more soothing behaviors from their partners ($m = 55.08$) than either the securely or avoidantly attached participants ($m = 49.81$ and 49.47, respectively; effect sizes = .62 and .66, respectively). See Figure 2. Cell size, means, standard deviations may be found in Table 2.

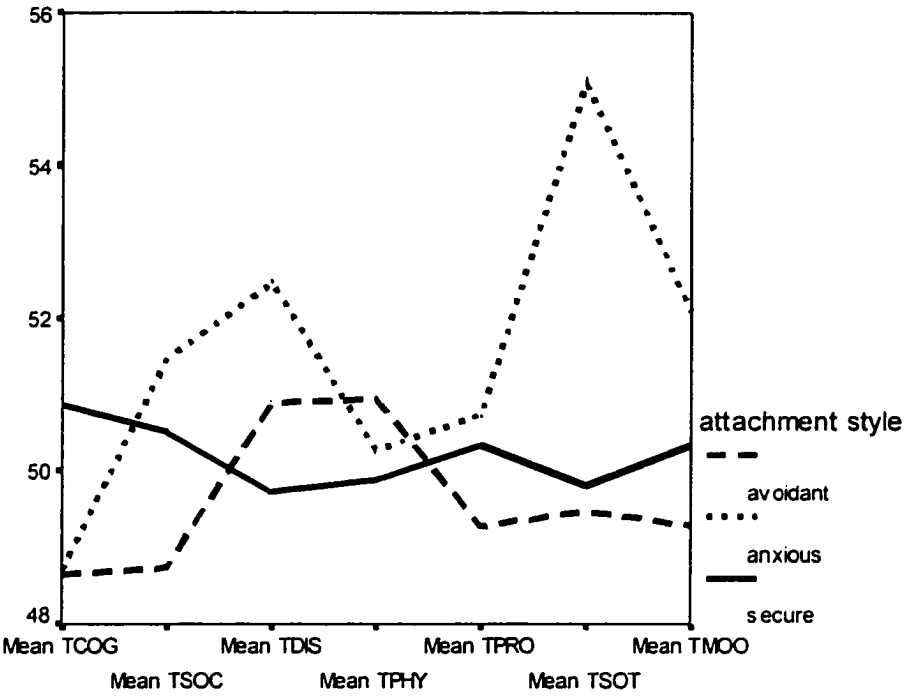


Figure 2. Mean T-scores on PERS-Desired subscales for the three-category attachment measure. COG = Cognitive; SOC = Social Support; DIS = Distraction; PHY = Physical; PRO = Problem Solving; SOT = Soothing; MOO = Mood Change.

Table 2

Means, Standard Deviations, and Number of Cases for Partner Emotion Regulation Subscale Scores as a Function of Adult Attachment Classification (Three-Category Measure)

	Attachment Style		
Subscale	Secure (*N*=137)	Anxious (*N*=18)	Avoidant (*N*=42)
Cognitive			
M	50.87	48.70	48.64
SD	(8.72)	(8.47)	(6.61)
Social Support			
M	50.51	51.49	48.74
SD	(8.04)	(5.09)	(7.51)
Distraction			
M	49.73	52.46	50.90
SD	(8.83)	(5.69)	(7.33)
Physical			
M	49.88	50.27	50.94
SD	(9.03)	(9.73)	(8.95)

Table 2 (Continued)

Means, Standard Deviations, and Number of Cases for Partner Emotion Regulation Subscale Scores as a Function of Adult Attachment Classification (Three-Category Measure)

	Attachment Style		
Subscale	Secure (N=137)	Anxious (N=18)	Avoidant (N=42)
Problem Solving			
M	50.34	50.75	49.27
SD	(8.62)	(6.50)	(7.59)
Soothing			
M	49.81	55.08	49.47
SD	(9.13)	(6.58)	(6.80)
Mood Changing			
M	50.34	52.09	49.28
SD	(8.96)	(5.49)	(7.92)

Four-category attachment model. For the 4-category model, the MANOVA revealed that the combined PERS subscales were significantly affected by attachment style [*Pillai* = .20, F (21, 558) = 1.901, p = .009, eta^2 = .067]. See Figure 3. Because the matrices appeared homogeneous in the multivariate tests, and the Levene tests for univariate equality of error variance were not extreme, the F test for the one-way analyses was assumed to be sufficiently robust so as not to be disturbed by the univariate heterogeneity of variance. Follow-up univariate tests revealed significant relationship between attachment style and the Cognitive [F = 3.26 (3, 190), p = .023, eta^2 = .049] and the Social Support [F(3, 190) = 3.04, p = .03, eta^2 = .046] subscales. Tukey HSD post hoc tests on the Cognitive subscale revealed that participants with a dismissing style of attachment (m = 47.21) desired significantly less cognitively-oriented emotion regulation behavior from their partners than the securely attached participants (m = 51.83, $p < .05$; effect size = .56). Tukey's HSD post hoc tests on the Social Support subscale revealed that participants with a dismissing style of attachment were less inclined to seek encouragement for social support (m = 46.06) than participants with any of the other attachment styles (m = 50.83, 50.95, 51.23, for secure, fearful, and preoccupied groups, respectively; all $p < .05$; effect sizes = .62, .64, and .68, respectively). Cell means and standard deviations for this analysis may be found in Table 3.

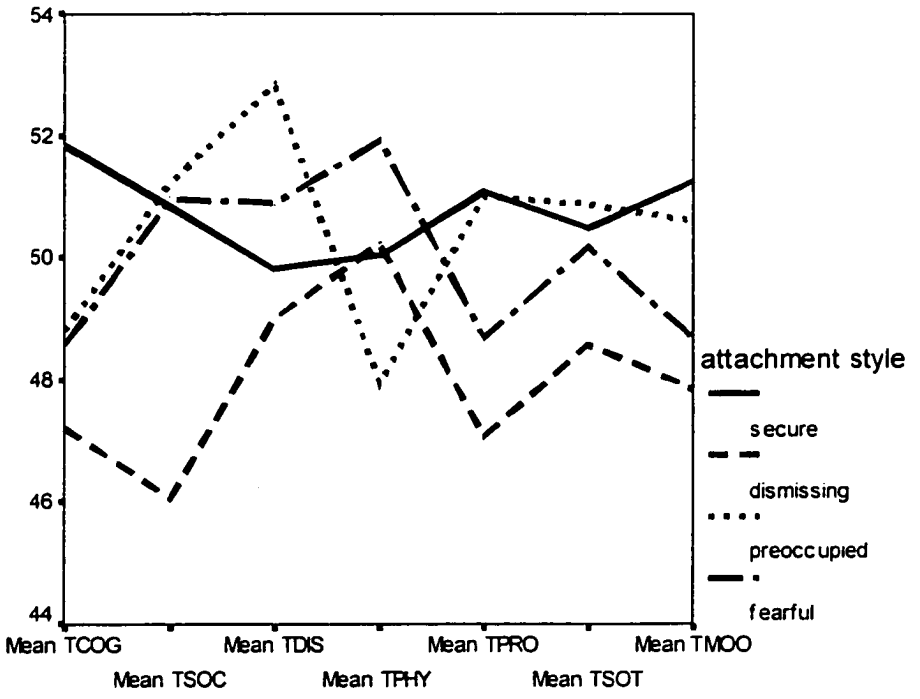


Figure 3. Mean T-scores on PERS-Desired subscales for the four-category attachment measure. COG = Cognitive; SOC = Social Support; DIS = Distraction; PHY = Physical; PRO = Problem Solving; SOT = Soothing; MOO = Mood Change.

The four-category model of attachment explained slightly more of the variance in the PERS subscales than did the three-category model, but neither model explained much; the difference between 7% and 5% of the variance does not appear to be of practical significance.

Table 3

Means, Standard Deviations, and Number of Cases for Partner Emotion Regulation Subscale Scores as a Function of Adult Attachment Classification (Four-Category Measure)

	Attachment Style			
Subscale	Secure (N = 108)	Preoccupied (N=24)	Fearful (N=36)	Dismissing (N=26)
Cognitive				
M	51.83	48.40	48.57	47.21
SD	(8.76)	(8.29)	(6.62)	(7.73)
Social Support				
M	50.83	51.23	50.95	46.06
SD	(8.07)	(7.15)	(6.65)	(7.45)
Distraction				
M	49.80	52.83	50.87	49.01
SD	(8.92)	(6.84)	(7.97)	(7.38)
Physical				
M	50.01	47.95	51.91	50.21
SD	(9.15)	(7.96)	(9.38)	(9.23)
Problem Solving				
M	51.07	50.99	48.69	47.07
SD	(8.61)	(6.71)	(6.65)	(9.28)

Table 3 (Continued)

Means, Standard Deviations, and Number of Cases for Partner Emotion Regulation Subscale Scores as a Function of Adult Attachment Classification (Four-Category Measure)

	Attachment Style			
Subscale	Secure (N = 108)	Preoccupied (N=24)	Fearful (N=36)	Dismissing (N=26)
Soothing				
M	50.48	50.86	50.17	48.58
SD	(9.19)	(8.31)	(7.39)	(8.25)
Mood Changing				
M	51.24	50.59	48.67	47.85
SD	(8.78)	(5.83)	(8.50)	(8.93)

Attachment Style and Relationship Satisfaction

Replication of previous findings regarding differences in overall relationship satisfaction among individuals with differing attachment styles was attempted via two one-way ANOVAs using categorical attachment style (both the 3- and 4-category measures) as the independent variable and total score on the Dyadic Adjustment Scale (DAS) as the dependent variable. Although there were a number of outliers, the distributions appeared to be fairly normal, and tests for homogeneity of variance were satisfactory.

Three-category attachment model. Using the 3-style measure of attachment, there were significant differences between groups, $F(2, 194) = 10.74$, $p < .001$, $eta^2 = .10$. See Figure 4. Follow-up analyses with Tukey's HSD revealed that persons with secure attachment had significantly higher total DAS scores ($m = 116.23$) than those with avoidant ($m = 107.40$, $p = .001$; effect size = .64) or anxious ($m = 104.44$, $p = .002$; effect size = .86) attachment styles. Cell means and standard deviations for this analysis may be found in Table 4.

Four-category attachment model. Using the 4-style measure of attachment, there were again significant differences between groups, $F(3, 190) = 7.44$, $p < .001$, $eta^2 = .105$. See Figure 5. Post-hoc Tukey's HSD tests revealed that persons with secure attachment had significantly higher total DAS scores ($m = 117.10$) than those with fearful attachment styles ($m = 105.22$, $p < .001$; effect size = 1.23), but not those with dismissing or preoccupied attachment styles (m = 111.88 and 110.08, respectively; effect sizes = .38 and .51, respectively). Cell means and standard deviations for this analysis may be found in Table 4.

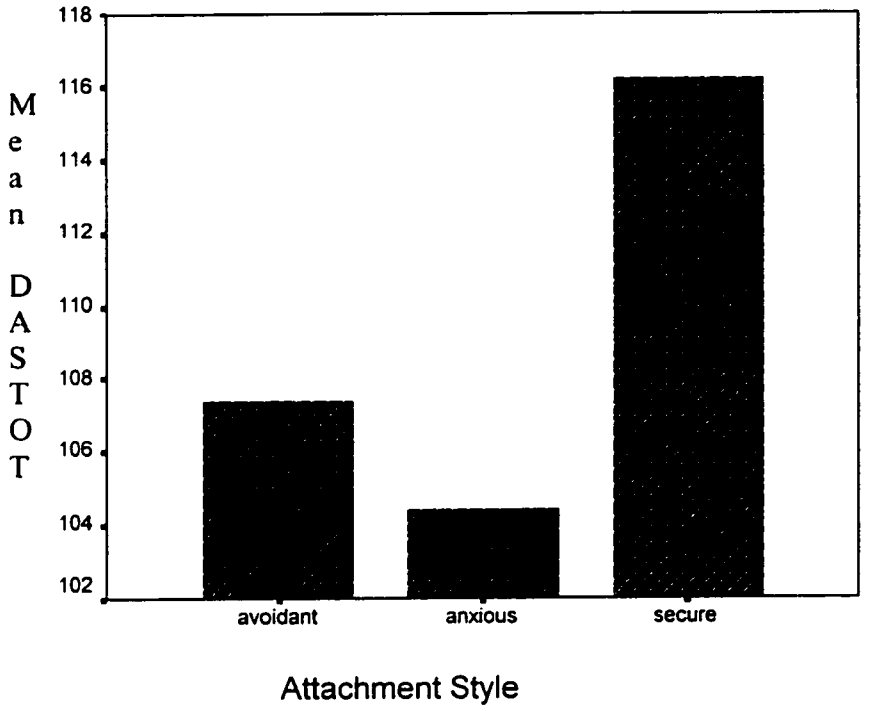


Figure 4. Mean level of overall relationship satisfaction by three categories of adult attachment style.

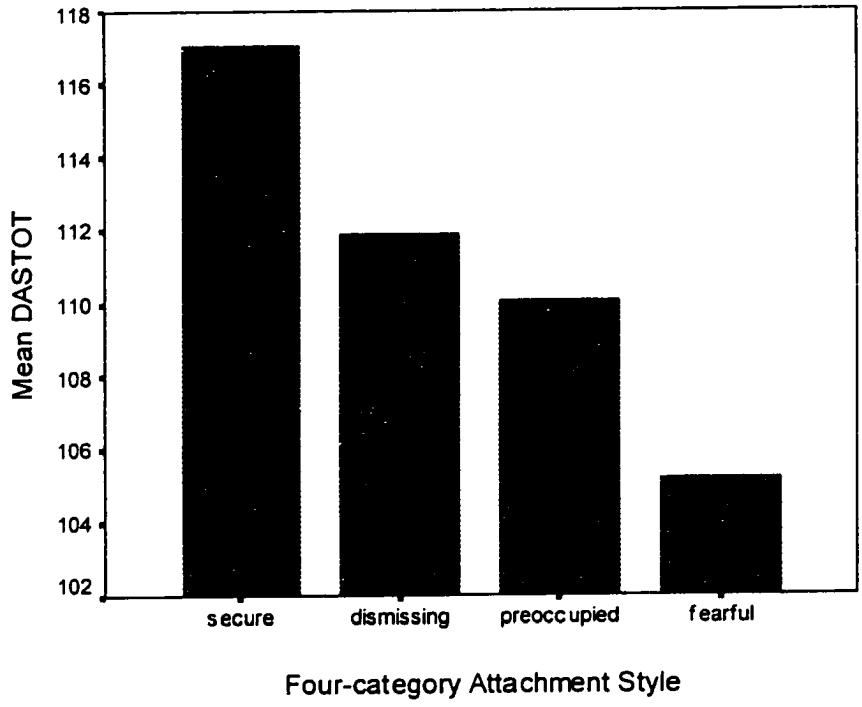


Figure 5. Mean level of overall relationship satisfaction by four categories of adult attachment style.

Table 4

Means, Standard Deviations, and Number of Cases for Dyadic Adjustment Scale Scores as a Function of Adult Attachment Classification (Three- and Four-Category Measures)

Measure	Mean	*SD*	*N*
Three-Category Measure			
Secure	116.23	(13.49)	137
Anxious	104.44	(13.05)	18
Avoidant	107.40	(14.73)	42
Four-Category Measure			
Secure	117.10	(13.79)	108
Preoccupied	110.08	(13.47)	24
Dismissing	111.88	(10.04)	26
Fearful	105.22	(15.84)	36

Possible differences between men and women in the magnitude of correlations between attachment styles and relationship satisfaction were explored by computing these correlations separately for men and women. Relationship satisfaction was positively correlated with attachment security for both men and women at about the same magnitude (r = .27 and .29, respectively, both $p < .01$). For men, both dismissing and fearful attachment were significantly and negatively related with relationship satisfaction (r = -.30 and -.33, respectively, both $p < .01$); preoccupied attachment was unrelated. For

women, only fearful attachment was significantly, and negatively, related to relationship satisfaction (r = -.35, $p < .01$); dismissing and preoccupied attachment were unrelated to relationship satisfaction. Although some of these correlations are statistically significant, they are of such small magnitude that they probably lack practical significance. See Table 5.

Table 5

Correlations between Relationship Satisfaction (Total DAS Score) and Attachment Style Rating as a Function of Sex

	Attachment Style			
Sex	Secure	Preoccupied	Dismissing	Fearful
Male	.270**	-.067	-.302**	-.325**
Female	.286**	-.052	-.110	-.353**

Note. **$p < .01$.

Emotion Regulation Preferences and Internal Working Models of Self and Others

Certain preferred emotion regulation strategies might be predictive of the positivity or negativity of individuals' working model of self and/or working model of others. The relationship between internal working models of self and others, and individuals' preferences for specific emotion regulation strategies were assessed with regression analyses.

Working Model of Self (WMS). A stepwise regression analysis was performed on individuals' scores on working model of self to determine which emotion regulation preferences were the best predictors of working model of self. WMS scores regressed onto PERS-Desired subscale scores revealed no significant relationships ($p > .05$).

Working Model of Others (WMO). Another stepwise regression analysis was performed on individuals' scores on working model of others to determine which emotion regulation preferences were the best predictors of working model of others. WMO scores regressed onto PERS-Desired subscale scores revealed a significant positive relationship ($b = .226$, $t = 3.255$, $p = .001$, *partial* $R^2 = .051$) between the WMO scores and the Cognitive PERS-Desired subscale scores. That is, as preference for cognitive-oriented emotion regulation behaviors increased, the positivity of internal working model of others was found to increase. Correlations for these analyses may be found in Table 6.

Table 6

Correlations Between Working Model of Others Scores and PERS-Desired Subscale Scores (N = 199)

Scores	WMO	Cog	Soc Supp	Distract	Physical	Prob Solv	Soothing	Mood Change
WMO		.23**	.19**	-.01	.04	.19**	.08	.12
Cognitive			.46**	.27**	.19**	.77**	.39**	.50**
Social Support				.16*	.19**	.36**	.34**	.32**
Distraction					.47**	.21**	.60**	.70**
Physical						.07	.36**	.34**
Problem Solving							.44**	.53**
Soothing								.68**
Mood Change								

Note. $*p < .05$. $**p < .01$. (All 2-tailed.)

Working Models of Self and Others and Overall Relationship Satisfaction

The relationship between working model of self and working model of others, and overall relationship satisfaction, was explored by regressing the total DAS scores onto working model scores (of self and of others), in order to determine how well working model scores predict relationship satisfaction. DAS total scores regressed onto WMS and WMO scores revealed that scores on both working models of self and others contributed significantly to prediction of relationship satisfaction. R^2 for WMO alone was .105; when WMS was added to the model, R^2 = .129. In other words, scores on working model of others explained about 10.5% of the variability in relationship satisfaction scores, with scores on working model of others explaining about 2.4% more of the variability. As scores on working model of others and working model of self became more positive, overall relationship satisfaction increased. See Table 7. For correlations between WMO, WMS, and relationship satisfaction, see Table 8.

Table 7

Summary of Stepwise Regression Analysis for Working Model of Self and Others Predicting Overall Relationship Satisfaction

Variable	*B*	*SE B*	β	*t*
WMO	.962	.225	.292***	4.28
WMS	.521	.227	.156*	2.29

Note. $*p < .05$. $**p < .01$. $***p < .001$.

Table 8

Correlations Between WMS, WMO, and DASTOT

	WMS	WMO	DASTOT
WMS	--		
WMO	.21**	--	
DASTOT	.22**	.32**	--

Note. $**p < .01$ (2-tailed). $N = 199$.

Attachment Style and Satisfaction with Partner's Emotion Regulation Behaviors

Possible differences of response patterns across attachment style regarding satisfaction with partner's emotion regulation behaviors were explored using MANOVAs (SPSS General Linear Model: Multivariate). The 3- and 4-category attachment measures were the independent variables and scores on the seven subscales of satisfaction-with-partner's-behaviors from the PERS (PERS-Satisfaction) were the dependent variables. As with the desired-partner-behaviors PERS subscales, T-scores on each subscale across the three emotions for each participants were averaged to yield one T-score for each subscale. All distributions were fairly normal. Tests for multivariate and univariate homogeneity of variance were nonsignificant.

Three-category attachment model. A MANOVA between the 3-category attachment style measure and PERS-Satisfaction scores revealed no significant relationship, $p > .05$, $eta^2 = .036$. Cell means and standard deviations for this analysis can be found in Table 9.

Table 9

Means, Standard Deviations, and Number of Cases for PERS-Satisfaction Scores as a Function of Adult Attachment Classification (Three-Category Measure)

	Attachment Style		
Subscale	Secure (*N*=137)	Anxious (*N*=18)	Avoidant (*N*=42)
Cognitive			
M	50.56	49.51	49.28
SD	(8.23)	(9.84)	(7.48)
Social Support			
M	50.56	51.23	48.78
SD	(8.84)	(5.81)	(7.19)
Distraction			
M	49.73	52.46	50.90
SD	(8.83)	(5.69)	(7.33)
Physical			
M	49.88	50.27	50.94
SD	(9.03)	(9.73)	(8.95)
Problem Solving			
M	50.10	51.65	49.69
SD	(8.55)	(7.31)	(7.82)

Table 9 (Continued)

Means, Standard Deviations, and Number of Cases for PERS-Satisfaction Scores as a Function of Adult Attachment Classification (Three-Category Measure)

	Attachment Style		
Subscale	Secure (*N*=137)	Anxious (*N*=18)	Avoidant (*N*=42)
Soothing			
M	49.65	54.54	50.09
SD	(8.94)	(7.54)	(7.31)
Mood Change			
M	50.34	52.09	49.28
SD	(8.96)	(5.49)	(7.92)

Four-category attachment model. There was a significant multivariate effect for the four-category attachment style measure and the seven PERS-Satisfaction subscales [*Pillai* = .179, $F(21, 558) = 1.68$, $p = .029$, $eta^2 = .06$]. Univariate tests revealed a relationship which approached significance on the Social Support subscale [$F(3, 190) = 2.58$, $p = .055$, $eta^2 = .039$]. See Figure 6. Tukey's HSD post hoc comparisons suggested that on the Social Support subscale, participants with a secure attachment style were significantly more satisfied with their partners' encouragement to seek social support ($m = 50.99$) than were participants with a dismissing attachment style ($m = 46.21$), $p = .039$ (effect size = .58). Cell means and standard deviations for this analysis can be found in Table 10.

Eta^2 for the three-category model was about .04: less than the .06 for the four-category analysis. The difference is obviously not of practical significance.

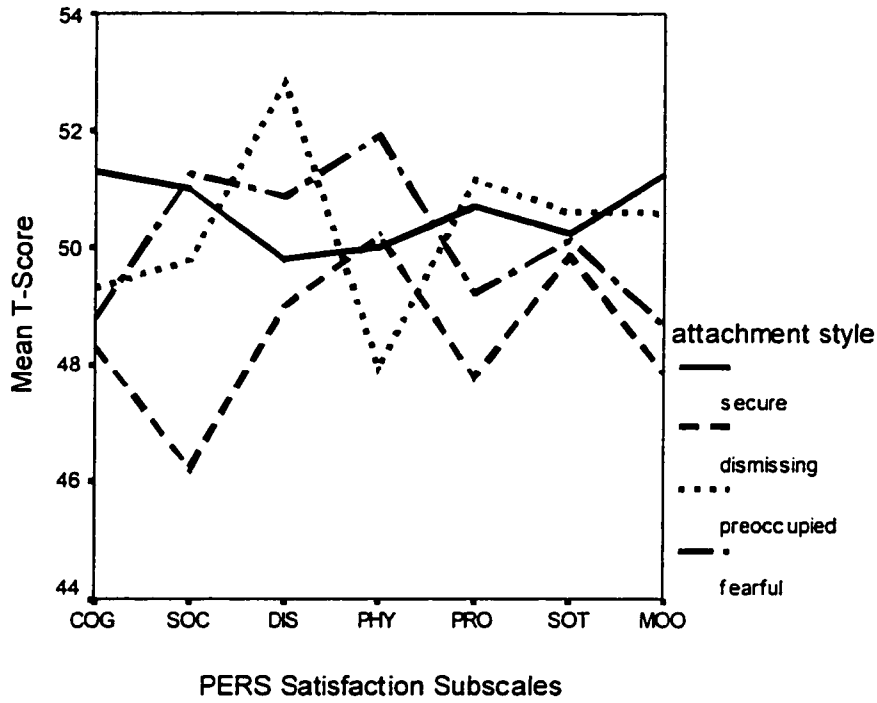


Figure 6. Mean T-Scores on PERS Satisfaction Subscales. COG = Cognitive; SOC = Social Support; DIS = Distraction; PHY = Physical; PRO = Problem Solving; SOT = Soothing; MOO = Mood Change.

Table 10

Means, Standard Deviations, and Number of Cases for PERS-Satisfaction Subscale Scores as a Function of Adult Attachment Classification (Four-Category Measure)

	Attachment Style			
Subscale	Secure (*N*=108)	Preoccupied (*N*=24)	Fearful (*N*=36)	Dismissing (*N*=26)
Cognitive				
M	51.31	49.31	48.80	48.31
SD	(8.42)	(9.29)	(6.67)	(8.22)
Social Support				
M	50.99	49.79	51.25	46.21
SD	(9.05)	(7.66)	(6.95)	(6.45)
Distraction				
M	49.80	52.83	50.87	49.01
SD	(8.92)	(6.84)	(7.97)	(7.38)
Physical				
M	50.01	47.95	51.91	50.21
SD	(9.15)	(7.96)	(9.38)	(9.23)
Problem Solving				
M	50.71	51.16	49.22	47.77
SD	(8.52)	(7.44)	(6.75)	(9.86)

Table 10 (Continued)

Means, Standard Deviations, and Number of Cases for PERS-Satisfaction Subscale Scores as a Function of Adult Attachment Classification (Four-Category Measure)

	Attachment Style			
Subscale	Secure (N=108)	Preoccupied (N=24)	Fearful (N=36)	Dismissing (N=26)
Soothing				
M	50.25	50.60	50.13	49.85
SD	(8.90)	(8.99)	(8.15)	(8.10)
Mood Change				
M	51.24	50.59	48.67	47.85
SD	(8.78)	(5.83)	(8.50)	(8.93)

Relationship of Internal Working Models of Self and Others and Satisfaction with Partner's Emotion Regulation Behaviors

The relationship between internal working models of self and others, and individuals' satisfaction with their partner's emotion regulation behaviors was explored using stepwise regression analyses.

Working Model of Self. A stepwise regression analysis was performed on individuals' scores on working model of self to determine which satisfaction-with-emotion-regulation strategies from one's partner (PERS-Satisfaction subscale scores) were the best predictors of working model of self. When WMS scores were regressed on PERS-Satisfaction subscale scores, no significant relationships were revealed ($p > .05$). When p of F-to-enter was relaxed from .05 to .12, a trend towards a negative relationship was found between the Social Support subscale and WMS scores ($b = -.11$, $t = -1.60$, $df = 1, 197$, $p = .11$, *partial* $R^2 = .01$). As participants scored lower on their degree of satisfaction with their partner's encouragement to seek social support from others, the positivity of their working model of self increased. This trend must be regarded as tenuous.

Working Model of Others. Another stepwise regression analysis was performed on individuals' scores on working model of others to determine which PERS-Satisfaction subscales were the best predictors of working model of others. WMO scores regressed onto PERS-Satisfaction subscale scores revealed a significant positive relationship between the Social Support subscale scores and WMO scores ($b = .21$, $t = 3.03$, $df = 1, 197$, $p = .003$, *partial* $R^2 = .04$). As participants scored higher on satisfaction with how their partner encouraged them to seek social support from others, the positivity of their

working model of others increased. Correlations for this analysis can be found in Table 11.

Table 11

Correlations between Working Model of Others Scores and PERS-Satisfaction Subscale Scores ($N = 199$)

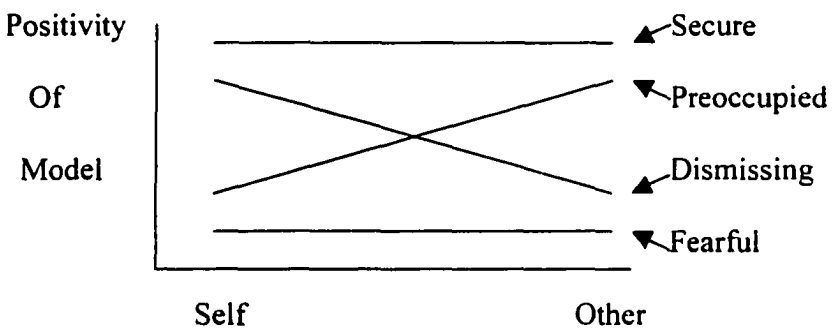
	WMO	Cognitive	Soc Supp	Distraction	Physical	Prob Solv	Soothing	Mood
WMO		.18*	.21**	-.01	.04	.14*	.02	.12*
Cognitive			.40**	.33**	.22**	.73**	.36**	.54**
Social Support				.17*	.29**	.33**	.30**	.29**
Distraction					.47**	.26**	.59**	.70**
Physical						.07	.35**	.34**
Problem Solving							.45**	.55**
Soothing								.62**

Note. *$p < .05$. **$p < .01$. (All 2-tailed).

Attachment Style and Internal Working Models of Self and Others

A MANOVA (SPSS General Linear Model: Multivariate) was conducted to evaluate whether attachment style (with four levels) was related to internal working models of self and others (WMS and WMO) as predicted.

An interaction was expected, as illustrated below:



Distributions of the dependent variables (WMS and WMO) were fairly normal. Multivariate tests of homogeneity of variance-covariance matrices were nonsignificant. The results revealed a statistically significant multivariate effect of attachment style on WMS and WMO (*Pillai* = .82, $F = (6, 380) = 44.21, p < .001$, $eta^2 = .41$).

Because the matrices appeared homogeneous in the multivariate tests, and the Levene tests for univariate equality of error variance were not extreme, the *F* tests for the oneway analyses were assumed to be sufficiently robust so as not to be disturbed by the mild univariate heterogeneity of variance. Univariate tests revealed significant relationships between attachment style and WMS [$F(3, 190) = 39.52, p < .001$, $eta^2 = .38$], and between attachment style and WMO [$F(3, 190) = 63.96, p < .001$, $eta^2 = .50$]. Tukey's HSD post hoc comparisons revealed significant differences in attachment styles for both WMS and WMO. For WMS, participants with both secure ($m = 4.83$) and

dismissing (m = 3.77) attachment styles had significantly higher WMS scores than did the participants with preoccupied (m = -1.00) or fearful (m = -.81) attachment styles (all p < .001; effect sizes ranged from 1.39 to 1.77). For WMO, participants with both secure (m = 3.15) and preoccupied (m = 2.58) attachment styles had significantly higher WMO scores than did the participants with fearful (m = -3.58) or dismissing (m = -3.38) attachment styles (all p < .001; effect sizes ranged from 1.94 to 2.19). Cell means and standard deviations for this analysis can be found in Table 12. See Figure 7.

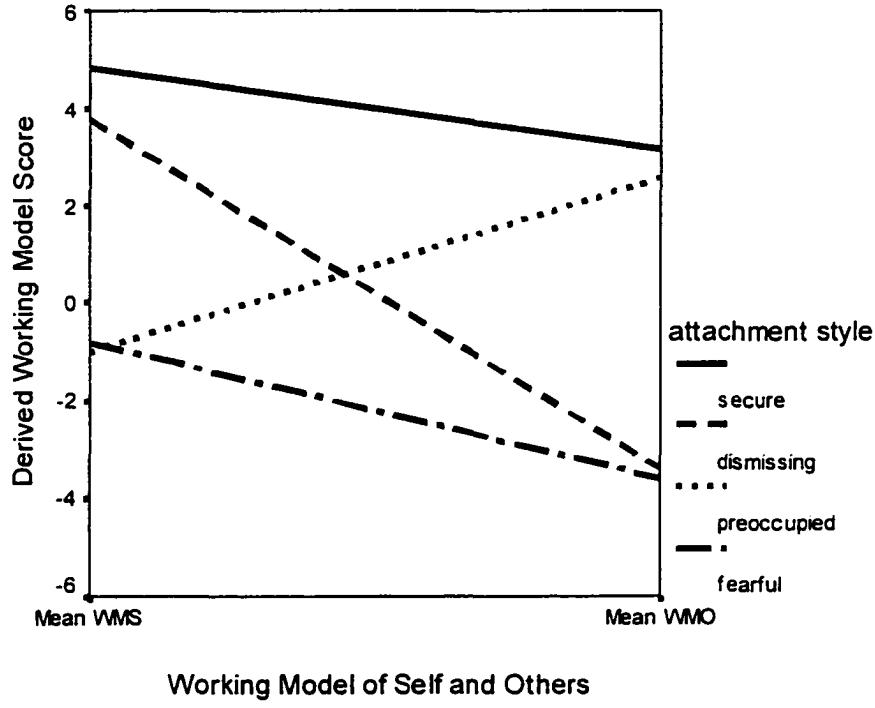


Figure 7. Mean scores of subjects with different attachment styles on working model of self and working model of others.

In summary, this study provided further validation that Bartholomew's four categorical attachment styles appear to be related to internal working models of self and others as postulated by Bartholomew (1990; Bartholomew & Horowitz, 1991). Specifically, participants with secure and dismissing attachment styles had more positive internal working models of self than did individuals with either the fearful or preoccupied styles. Participants with secure and preoccupied attachment styles had more positive internal working models of others than did individuals with either the fearful or dismissing styles.

Table 12

Cell Means, Standard Deviations, and Number of Cases for Scores on Working Models of Self and Others as a Function of Attachment Style

	Attachment Style			
Working Model	Secure (N=108)	Preoccupied (N = 24)	Dismissing (N = 26)	Fearful (N=36)
Self				
M	4.83	-1.00	3.77	-0.81
SD	(3.40)	(2.28)	(3.41)	(3.42)
Others				
M	3.15	2.58	-3.38	-3.58
SD	(2.72)	(3.01)	(4.24)	(3.15)

Predicting Relationship Satisfaction: Comparing the Predictive Value of Internal Working Models of Self and Others versus the Four-Category Attachment Style Measure

A focus of this research was to compare whether derived scores on internal working models of self and others, or categorical choices of attachment styles, were more predictive of overall relationship satisfaction. To accomplish this, the variance accounted for by the two models was compared. The stepwise regression of DAS scores on working models of self and others (see p. 61) showed that internal working models of self and others accounted for about 13% of the variance in relationship satisfaction: 10.5% of the variance was explained by scores on working model of others (WMO), with WMS explaining 2.4% more. Eta^2 from the one-way ANOVA (4 attachment styles x DAS score; see p. 54) revealed that the 4-part categorical attachment style measure accounted for about 10.5% of the variance in relationship satisfaction ($eta^2 = .105$).

An additional multiple regression was performed in order to determine the relative importance of the concepts of working models and attachment styles in predicting relationship satisfaction. DAS scores were regressed onto the IVs of WMO, WMS, and the four attachment styles (which were recoded from one categorical variable into four dummy variables). This regression revealed that after the variance accounted for in relationship satisfaction by WMO and WMS (as described above), none of the four attachment styles predicted any significant additional variance in relationship satisfaction.

Predicting Emotion Regulation Preferences: Comparing the Predictive Value of Internal Working Models of Self and Others versus the Four-Category Attachment Style Measure

This research also sought to elucidate which approach to attachment - internal working models of self and others, or categorical attachment style - was more predictive of preferred emotion regulation strategies. To determine which approach was more predictive, an attempt was made to compare the variance accounted for by the two models.

Regressing participants'scores on the seven PERS-Desired emotion regulation strategies onto scores for working models of self and others would provide an estimate of the variance in emotion regulation strategies accounted for by the internal working models. In the absence of a computer routine to do multivariate multiple regression, seven separate regressions of each PERS-Desired subscale onto WMO and WMS scores were performed, and the variance accounted for averaged across the seven analyses. Only for the Social Support subscale did both WMO and WMS predict some variance (partial R^2 = .060; with WMO predicting 3.5% and WMS predicting an additional 2.5% of the variance in the Social Support subscale scores). For the Cognitive, Problem Solving, and Mood Change subscales, only WMO predicted some variance (partial R^2 = .051, .037, and .015, respectively, and with the probability of F-to-enter relaxed to <= .15 for Problem Solving and Mood Change). Even with a relaxed probability of F-to-enter, neither WMO nor WMS predicted any variance in the Distraction, Physical, or Soothing subscales. Averaged across the seven PERS-Desired subscales, WMO (mostly) and WMS accounted for about 4% of the variance in emotion regulation preferences (*partial* R^2 = .043).

The variance in emotion regulation strategies accounted for by the four attachment styles by MANOVA (see p. 50) was about 7% (eta^2 = .067). Comparing the 4% and 7% of the variance accounted for by the two different models suggests that although the four-category attachment model appears to be more predictive of preferred emotion regulation strategies than the internal working models, neither model accounts for a practically significant amount.

Effects of Sex and Working Models of Self and Others on Overall Relationship Satisfaction

It was hypothesized that men and women may be differentially affected by the degree of positivity or negativity of their working models of self and of others in terms of their overall relationship satisfaction (DAS total score)(see 4a in Purpose section, p. 41). This question was explored by regressing DAS scores onto scores for working model of self and working model of others, adding a "dummy variable" and multiplicative terms for the separate and interactive (WMO x sex and WMS x sex) effects of sex, respectively. Neither the separate nor the interactive effects of sex explained a significant amount of additional variance beyond that explained by working model of others and of self. In this model, R^2 for WMO alone was .102; when WMS was added to the model, R^2 = .126. These results are very similar to those found when DAS was regressed onto only WMO and WMS (see p. 61). In that analysis, R^2's were .105 increasing to .129. In the current model, in order to have the effect of sex enter the model, the probability of F-to-enter had to be relaxed to .35, and the effect of sex only increased R^2 by .004. See Table 13.

Table 13

Summary of Stepwise Regression Analysis for Working Model of Self and Others and the Separate and Interactive Effects of Sex Predicting Overall Relationship Satisfaction

Variable	*B*	*SE B*	β	*t*	R^2
WMO	.954	.228	.286	4.182***	.102
WMS	.522	.228	.157	2.29*	.126
Sex	1.813	1.908	.064	.950[a]	.130

Note. $*p < .05$. $***p < .001$. [a]$p > .35$.

Effects of Sex and Working Models of Self and Others on Desired Emotion Regulation Strategies

It was also hypothesized that men and women may be differently affected by the degree of positivity or negativity of their working models of self and of others in terms of their preferences for different emotion regulation strategies (see p. 32). This question was explored by performing seven separate stepwise regressions, regressing scores for each desired emotion regulation strategy onto working model of self and working model of others, adding a "dummy variable" and multiplicative terms for the separate and interactive effects of sex, respectively. Although R^2 in these analyses was not high, only explaining from 4 to 18% of the variation in four of the PERS subscales, the R^2's were significant, and the findings suggested some interesting relationships.

Cognitive subscale scores regressed onto WMO, WMS, and the dummy variables for the separate and interactive effects of sex revealed that WMO, WMS, and the interactive effect of WMS and sex contributed significantly to prediction of the Cognitive subscale scores. R^2 for WMO alone was .049; when the interactive effect of WMS and sex was added to the model, R^2 = .079, and when WMS was added, R^2 = .099. See Table 14. These findings suggest that, for both men and women, as working model of others became more positive, they desired more Cognitive type ER behaviors from their partners. Regarding working model of self, however, the effects differed for men and women. For women, as working model of self became more positive, they desired more Cognitive type ER behaviors from their partners. For men, as working model of self became more positive, they desired less Cognitive type ER behaviors from their partners.

Problem Solving subscale scores regressed onto WMO, WMS, and the dummy variables for the separate and interactive effects of sex revealed that WMO and the interactive effect of WMS and sex contributed significantly to prediction of the Problem Solving subscale scores. R^2 for WMO alone was .035; when the interactive effect of WMS and sex was added to the model, R^2 = .063. See Table 15. These results suggest that, similar to findings described above regarding the Cognitive subscale, for both men and women, as working model of others became more positive, they desired more Problem Solving type ER behaviors from their partners. However, for women, there was no effect on Problem Solving scores as their working model of self became more positive, while for men, as their working model of self became more positive, they desired less Problem Solving type ER behavior from their partners.

Table 14

Summary of Stepwise Regression Analysis for Working Model of Self and Others and the Separate and Interactive Effects of Sex Predicting PERS Cognitive Subscale Scores

Variable	*B*	*SE B*	β	*t*	R^2
WMO	.447	.140	.222	3.189**	.049
WMS x Sex	-.765	.236	-.257	-3.237**	.079
WMS	.341	.161	.170	2.112*	.099

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

Table 15

Summary of Stepwise Regression Analysis for Working Model of Self and Others and the Separate and Interactive Effects of Sex Predicting PERS Problem Solving Subscale Scores

Variable	*B*	*SE B*	β	*t*	R^2
WMO	.416	.138	.211	3.016**	.035
WMS x Sex	-.488	.204	-.167	-2.389*	.063

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

Social Support subscale scores regressed onto WMO, WMS, and the dummy variables for the separate and interactive effects of sex revealed that the separate and interactive effects of sex contributed significantly to prediction of the Social Support subscale scores. R^2 for the effect of sex alone was .101; when the interactive effect of WMO and sex was added to the model, $R^2 = .143$, and when the interactive effect of WMS and sex was added, $R^2 = .165$. See Table 16. These results suggested that overall, women preferred more Social Support type ER behaviors than did men. However, men and women differed in terms of how internal working models of self and others affected their Social Support subscale scores. For women, positivity of working models of self and others did not affect their Social Support scores. For men, as their internal working model of others became more positive, their preference for Social Support ER behaviors from their partners increased. However, as men's internal working model of self became more positive, their preference for Social Support ER behaviors from their partners decreased.

Soothing subscale scores regressed onto WMO, WMS, and the dummy variables for the separate and interactive effects of sex revealed that the separate effect of sex contributed significantly to prediction of the Soothing subscale scores. ($b = -.342$, $t = -1.674$, $p < .001$, $R^2 = .117$). This finding suggested that overall, women preferred more Soothing type ER behaviors from their partners than did men.

The Distraction, Physical, and Mood Change subscale scores regressed individually onto WMO, WMS, and the dummy variables for the separate and interactive effects of sex revealed no significant relationships ($p > .05$).

Table 16

Summary of Stepwise Regression Analysis for Working Model of Self and Others and the Separate and Interactive Effects of Sex Predicting PERS Social Support Subscale Scores

Variable	*B*	*SE B*	β	*t*	R^2
Sex	-4.326	1.251	-.264	-3.457**	.101
WMO x Sex	.714	.181	.268	-3.940***	.152
WMS x Sex	- .549	.223	-.193	-2.464*	.177

Note. $*p < .05$. $**p < .01$. $***p < .001$.

Additional Analyses

At the dissertation proposal meeting, the committee requested several additional analyses. A description of these requested analyses and their results follows.

Superordinate Categories of Emotion Regulation Strategies

An exploratory factor analysis was performed in order to ascertain whether interpretable superordinate categories of emotion regulation strategies could be found. It was agreed that if interpretable factors were found, the remainder of the additional analyses would be done using these empirically derived scales.

Three principal components factors extraction with varimax rotation (without Kaiser normalization) were performed through SPSS on the 40 items from each of the three original PERS instruments (one for each emotion: anger, sadness, and nervousness) (see Myers, 1996). After examination of the three scree plots illustrating the eigenvalues of the 40 items on each instrument, it appeared that either three, four, or five major factors appeared to explain most of the variance. A cut of the absolute value of 0.35 was made for inclusion of an item in interpretation of a factor. After a consideration of the three-, four-, and five-factor solutions, it appeared that the four factor solution was most interpretable and consistent across all three emotions. The four factors were labeled Problem-Solving, Distraction, Physical, and Ignore.

Loadings of variables on factors, ordered and grouped by size, and percents of variance for the factors on each of the three emotions are shown in Tables 17, 18, and 19. Items which loaded consistently on a factor across all three emotions were retained for use in further analyses. The items retained for each factor are described in Table 20. Alpha coefficients were computed to assess the internal consistency of the factors for each

emotion. As shown in Table 21, the reliability coefficients ranged from .42 to .86. The Ignore factor had the lowest coefficients, at .59, .42, and .49 for Nervousness, Anger, and Sadness, respectively.

Although the factors across the three emotions appeared to be fairly consistent, the reliability of the factor scales was low to only reasonably high. The remainder of the analyses were undertaken with these less-than-reliable scales, but must be seen as exploratory, and not altogether trustworthy. Factor scores were derived by calculating the raw total score (across all three emotions) for each of the four factors, computing the means, and then converting the mean scores to T-scores. These resulting T-scores were then used in the remainder of the following analyses.

Prior to further analyses, distributions of the four new PERS factors were examined for normality. Review of histograms, boxplots, normal probability plots, and detrended probability plots indicated that the distributions were fairly normal and relatively free of outliers. None of the distributions were so skewed as to suggest requiring transformation to achieve normality. Similarly to the review for multivariate normal distribution of scores in the previous analyses, the scores in each cell of each multivariate analysis were examined for normality of their distributions and were found to be normal and relatively free of outliers. In contrast, the discrepancy scores used in some of the next analyses were skewed, enough so that there was not much to be done about them other than to admit the fact. A number of transformations were attempted but were not successful in normalizing the discrepancy score distributions.

Table 17

Factor Loadings, Communalities and Percent of Variance for Principal Factors Extraction and Varimax (no Kaiser Normalization) Rotation on PERS Anger Measure

Item	Factor 1	Factor 2	Factor 3	Factor 4	h^2
16	.786				.63
15	.757				.58
35	.737				.55
39	.693				.53
29	.680				.53
17	.661				.49
18	.607	.375			.51
30	.551				.43
1	.492				.27
28	.422	.386			.44
21		.711			.57
11		.709			.54
4		.702			.56
13		.698			.57
36		.660			.56
9		.615			.47
23		.614	.422		.57
22	.365	.559			.46
25	.431	.490			.47
2		.394			.34
38		.366			.25
7			.814		.68
5			.782		.63
31			.689		.55
12			.654		.52
6	.372		.506		.49
40			.498		.33
33			.452		.29
26			.429		.26
8			.397		.27
27				.669	.46
34				.664	.45
37		.397		.488	.41
3				.474	.29
10				-.432	.33
14				.412	.34
% of variance	21.24	9.25	6.81	5.10	

Note. Factor labels: F1 = Problem Solving; F2 = Distract; F3 = Physical; F4 = Ignore

Table 18

Factor Loadings, Communalities and Percent of Variance for Principal Factors Extraction and Varimax (no Kaiser Normalization) Rotation on PERS Sadness Measure

Item	Factor 1	Factor 2	Factor 3	Factor 4	h^2
17	.797				.66
16	.793				.64
35	.791				.63
39	.685				.55
15	.680				.47
29	.643				.44
25	.534	.453			.50
30	.528				.32
18	.527	.476			.52
1	.455				.37
19	.399				.30
11		.718			.60
36		.655			.54
13		.651			.56
21		.630			.47
2		.591			.37
4		.585			.42
38		.583			.37
23		.494	.430		.44
9		.492			.31
22	.435	.457			.45
28		.434		-.377	.38
7			.857		.75
5			.797		.67
12			.712		.62
31			.629		.50
40			.531		.34
27				.686	.49
37				.646	.44
34				.644	.45
3		.369		.538	.43
6				-.507	.41
10				-.368	.32
14				.363	.35
% of variance	19.35	10.60	6.50	6.00	

Note. Factor Labels: F1=Problem Solving; F2=Distract; F3=Physical; F4=Ignore.

Table 19

Factor Loadings, Communalities and Percent of Variance for Principal Factors Extraction and Varimax (no Kaiser Normalization) Rotation on PERS Nervous Measure

Item	Factor 1	Factor 2	Factor 3	Factor 4	h^2
11	.752				.62
13	.696				.54
36	.658				.55
23	.650		.448		.62
9	.634				.44
2	.624				.49
21	.611				.47
22	.602	.431			.56
18	.595	.527			.64
25	.587	.384			.50
28	.537				.39
4	.528			.380	.45
38	.452				.28
40	.373		.367		.29
1	.364	.353			.30
16		.799			.66
29		.749			.59
35		.734			.58
15		.675			.50
17		.659			.50
39		.640		-.354	.56
30		.593			.46
7			.847		.73
5			.750		.59
12			.732		.64
31			.716		.62
26			.404		.24
33			.373		.22
34				.747	.57
3				.706	.54
27				.701	.50
37				.608	.42
10				-.427	.41
6				-.410	.36
% of variance	22.44	9.74	7.01	5.50	

Note. Factor labels: F1=Distract; F2=Problem Solving; F3=Physical; F4=Ignore

Table 20

PERS Items Retained for Further Analyses Grouped by Factor

Factor	Item	Description
Problem-Solving		
	15	Help me see different points of view about the issue (see things in a different way)
	16	Help me consider alternative plans of action or solutions to the situation
	17	Help me do what I need to do to resolve the situation for problem
	29	Help me find out more about the issue
	30	Help me somehow accept the situation
	35	Help me figure out what to do/develop a plan of action with me
	39	Help me think about it; help me think it through
Physical		
	5	Encourage me to go get some exercise
	7	Exercise with me (such as go jogging together)
	12	Go on a walk, hike, or bicycle ride (or some other physical activity) with me
	31	Encourage me to do something to physically relax

Table 20 (Continued)

PERS Items Retained for Further Analyses Grouped by Factor

Factor	Item	Description
Distraction		
	2	Do something for me (such as run a hot bath for me to relax in for a while, give me a massage, or fix a meal for us)
	4	Help me think about something else
	9	Try to make me laugh about it somehow
	11	Do some unrelated activity with me at home (such as watch TV or a movie, listen to music
	13	Try to cheer me up
	21	Talk about something else to get my mind off the situation
	22	Help me calm myself down
	23	Go out with me to do some unrelated activity together (such as go out for a drive or to a movie)
	36	Put on some music or choose a movie that will change my mood
	38	Take care of some chores for me so I can relax
Ignore		
	3	Tell me to ignore my feelings and they'll go away
	10	Listen to me*
	27	Discourage me from talking about how I feel
	34	Discourage me from showing how I feel
	37	Convince me that it's not important

Note. * negatively correlated with this factor

Table 21

Alpha Coefficients of PERS Factor Subscales by Emotion

Subscale	Number Of Items	Mean	*SD*	Alpha	*N*
Problem Solving					
Sadness	7	24.62	4.80	.86	201
Anger	7	24.40	4.82	.86	199
Nervousness	7	25.62	4.50	.85	198
Distraction					
Sadness	10	32.99	6.36	.83	198
Anger	10	32.60	6.79	.86	200
Nervousness	10	33.57	6.53	.86	201
Physical					
Sadness	4	11.84	3.63	.83	196
Anger	4	11.98	3.71	.84	201
Nervousness	4	12.00	3.49	.84	202
Ignore					
Sadness	5	10.22	1.88	.49	200
Anger	5	10.76	2.07	.42	199
Nervousness	5	10.79	2.44	.59	201

Influences of Pairings of Attachment Styles in Couples

The next additional analysis requested by the committee involved the possible effects of couples' pairings of attachment styles. Specifically, different pairings of attachment styles in couples may influence each member of the couple in terms of overall relationship satisfaction as well as in terms of preferred emotion regulation strategies. To address these issues, three different *pairings* of attachment style in the couples were assessed: secure/secure, insecure/insecure, and secure/insecure.

Overall Relationship Satisfaction. A oneway ANOVA between paired attachment styles and level of relationship satisfaction (DAS total) revealed a significant relationship [F (2, 183), $p < .001$, $eta^2 = .102$]. Follow-up analyses using a Tukey's HSD revealed significant differences in DAS scores (all $p < .005$). Specifically, individuals in a secure/secure couple relationship had significantly higher DAS scores ($m = 119.55$) than individuals in either secure/insecure or insecure/insecure couple relationships (m's = 112.65 and 107.76, respectively). See Figure 8. Cell means and standard deviations for this analysis can be found in Table 22.

Table 22

Cell Means, Standard Deviations, and Number of Cases for Overall Relationship Satisfaction as a Function of Attachment Style Pairing

Attachment Pairing	M	SD	N
Secure-Secure	119.55	14.86	60
Secure-Insecure	112.65	12.30	88
Insecure-Insecure	107.76	10.99	38

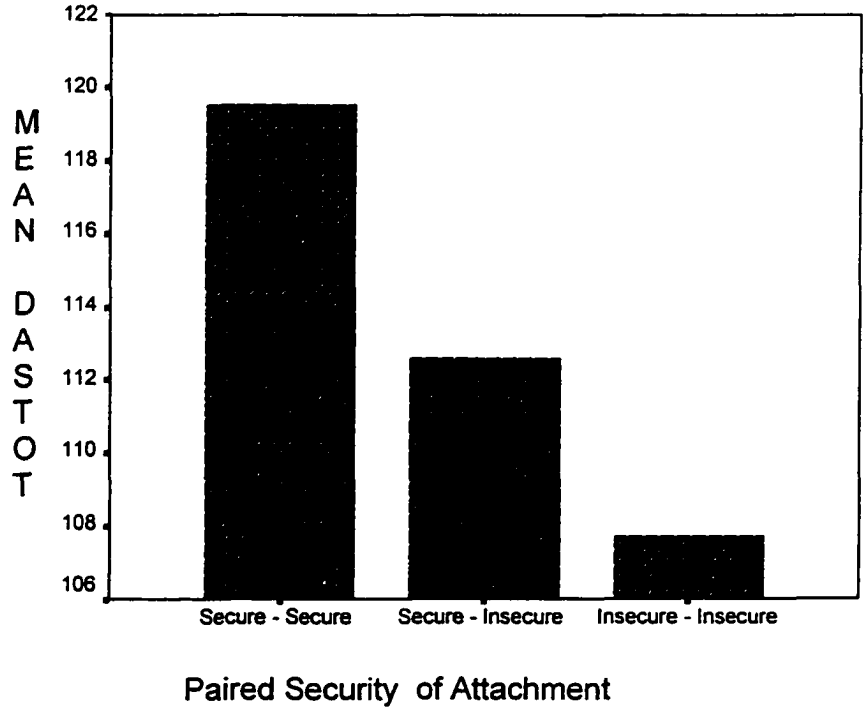


Figure 8. Level of overall relationship satisfaction (total DAS score) by pairing of attachment style in couples.

Preferred Emotion Regulation Strategies. A MANOVA between the three pairings of attachment style and the four derived PERS factors revealed a statistically significant multivariate effect [*Pillai* = .097, $F(8, 362) = 2.32$, $p = .02$, $eta^2 = .05$]. Follow-up one-way ANOVAs revealed significant relationships between paired attachment styles and the Problem Solving factor [$F(2, 183) = 3.48$, $p = .03$, $eta^2 = .037$], as well as between paired attachment styles and the Ignore factor [$F(2, 183)$, $p = .016$, $eta^2 = .044$]. For the Problem Solving factor, Tukey's HSD post hoc analyses revealed that individuals in a secure-secure couple relationship desired significantly more problem solving type behaviors from their partners ($m = 52.36$) than did individuals in an insecure-insecure couple relationship ($m = 47.08$), $p < .05$. For the Ignore factor, Tukey's HSD comparisons revealed that individuals in an insecure-insecure couple relationship preferred significantly more "ignoring" type behaviors ($m = 54.18$) from their partners than did individuals in either secure-secure or secure-insecure couple relationships (m's = 48.96 and 49.21, respectively; all $p < .05$). See Figure 9. Cell means and standard deviations for these analyses can be found in Table 23.

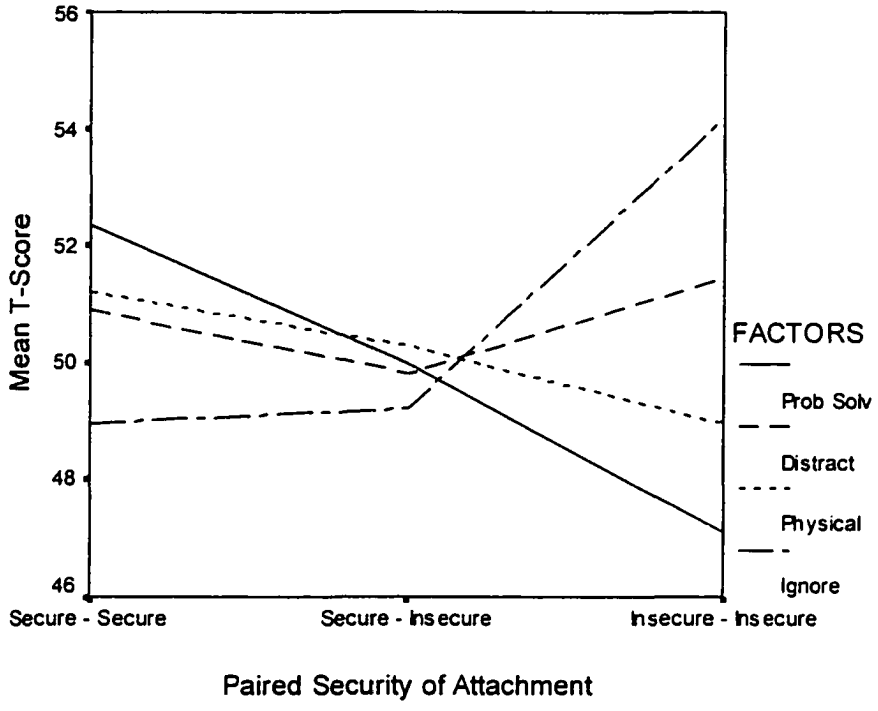


Figure 9. Levels of PERS factor scores by paired adult attachment style.

Table 23

Means, Standard Deviations, and Number of Cases for PERS Factor Subscales as a Function of Paired Adult Attachment Style (based on Four-Category Measure)

	Paired Attachment Style		
Factor	Secure-Secure (N = 60)	Insecure-Secure (N = 88)	Insecure-Insecure (N = 38)
Problem Solving			
M	52.36	49.98	47.08
SD	(11.09)	(9.33)	(7.94)
Distraction			
M	50.89	49.82	51.44
SD	(10.30)	(10.36)	(7.03)
Physical			
M	51.21	50.28	48.96
SD	(10.09)	(10.26)	(10.31)
Ignore			
M	48.96	49.21	54.18
SD	(8.66)	(9.99)	(10.25)

Several other exploratory analyses were proposed to look further at the relationship between emotion regulation and attachment. Given the high number of comparisons already being made, the following should be viewed as exploratory.

Adult Attachment Style and Discrepancy between Couples' Emotion Regulation Preferences

It was suggested that the amount of discrepancy in emotion regulation preferences between the partners in a couple might be related to each person's attachment style. To evaluate this question, discrepancy scores between partners' emotion regulation factor T-scores were computed. A median split was then made to divide the sample into low versus high discrepancy subgroups on each of the four emotion regulation factors. The median difference scores for the Problem Solving, Distraction, Physical, and Ignore factors were 7.387, 7.437, 9.2116, and 5.8404, respectively. The lower (less than or equal to the median)- and higher (greater than the median)- discrepancy groups were then compared across four attachment styles using a χ^2 test. Lower- and higher-discrepancy groups only differed on the Ignore factor [$\chi 2$ (3, N = 194) = 11.424, p = .01]. These results must be considered very tentative due to the generally poor reliability of discrepancy scores. Numbers of cases in each cell can be found in Table 24.

Table 24

Numbers of Low- and High-Discrepancy Emotion Regulation Factor Scores Across Attachment Styles (N = 194)

	Attachment Style				
Factor	Secure (N=108)	Preoccupied (N=24)	Dismissing (N=26)	Fearful (N=36)	Total
Problem Solving					
Low	50	16	11	20	97
High	58	8	15	16	97
Distraction					
Low	50	15	12	19	96
High	58	9	14	17	98
Physical					
Low	55	13	14	16	98
High	53	11	12	20	96
Ignore					
Low	64	14	6	18	102
High	44	10	20	18	92

Influence of Attachment Style and Length of Relationship on Discrepancy Between Partners' Emotion Regulation Preferences

Another additional question raised by the committee was whether emotion regulation preferences might become more similar over time, and that this process might be influenced by an individual's attachment style. This question was explored by dividing the participants by a median split into two groups according to length of relationship: longer versus shorter length of relationship. The participants' median length of relationship was 2.5 years; a "longer" relationship was defined as greater than 2.5 years, and a "shorter" relationship was defined as 2.5 years or less. Next, using the discrepancy scores between partners on the PERS factors (derived from the exploratory factor analysis), a MANOVA was conducted. The two independent variables were attachment style (four categories) and length of relationship (longer vs. shorter) and the dependent variables were the discrepancy scores for each of the four PERS factors. The results revealed no statistically significant multivariate effects or interactions.

Influence of Attachment Style on Length of Relationship for Men and Women

The question of whether there is a relationship between attachment style and length of relationship was explored with a factorial ANOVA, with sex and attachment style as the independent variables and length of relationship as the dependent variable. No significant interactions or univariate effects were found. Although an examination of means showed that individuals with an avoidant (on the 3-category measure) or fearful (on the 4-category measure) attachment style had been in longer relationships than individuals with other attachment styles, none of the differences were statistically significant ($p > .35$). See Table 25.

Table 25

Means and Standard Deviations of Length of Relationship (in Years) as a Function of Adult Attachment Style

Attachment Style	*N*	Mean Yrs Living Together	*SD*
Three-Category Model			
Secure	136	5.35	7.11
Anxious	18	4.92	6.42
Avoidant	41	7.00	7.93
Four-Category Model			
Secure	107	5.56	7.68
Preoccupied	24	4.45	6.18
Dismissing	25	4.74	5.88
Fearful	36	7.37	7.39

Chapter 4

Discussion

This study extended the research in the field of adult attachment by focusing on how emotion regulation (ER) preferences are associated with different adult attachment styles. It addressed relationships between ER preferences, romantic attachment styles, and relationship satisfaction of partners in long term couple relationships. Partners in long term relationships completed self-report measures of ER preferences, satisfaction with partner's ER behaviors, overall relationship satisfaction, and adult romantic attachment style. Several predictions derived from attachment theory were tested. Attachment behavior has been described as an emotion regulation system, and so adults with different adult attachment styles were postulated to differ in what types of ER behaviors they would prefer from their long-term relationship partners. Adults were also postulated to differ in how satisfied they would be with specific types of ER behaviors from their partner. Previous research has found that persons with secure attachment styles are generally more satisfied with their relationships than persons with insecure attachment styles; this study replicated this finding. This study also endeavored to compare the explanatory usefulness of several current conceptualizations of attachment: A three-category measure of attachment style, based on Hazan and Shaver's (1987) adaptation of Ainsworth's work (hereafter called the Hazan-Shaver measure); a four-category measure developed by Bartholomew (1991) (hereafter called Bartholomew's measure); and a two-dimensional measure, of working models of self and of others, obtained by linear transformation of responses to Bartholomew's measure (hereafter called the dimensional measure).

Adult Attachment Styles and Emotion Regulation Preferences

There were a number of interesting differences in preferences for ER behaviors from one's partner between participants with different attachment styles, especially involving individuals with a Dismissing attachment style. Dismissings were found to prefer significantly less cognitive type ER behavior from their partners than participants who endorsed a Secure attachment style. This is consistent with our prediction that Secures would prefer more positive, interactive type ER from their partners, and that avoidants would prefer less interactive ER from their partners. The Cognitive subscale consisted of items such as wanting their partner to help them look at different points of view, learn more about the issue, think about the issue, or accept the situation. These findings are consistent with the general characteristics of Dismissing and Secure types, with Secures favoring open communication with their relationship partners. Secures, being comfortable with close relationships, are more likely than individuals with insecure (preoccupied or avoidant) attachment to engage in constructive communication processes such as self-disclosure, exchange of information, and accurate decoding of messages (Feeney, Noller, & Callan, 1994). Secures have been found to have a positive, open, and flexible attitude toward information processing, in that they are interested in learning new information and have a sense of confidence when exploring and integrating new information. In contrast, those with insecure attachment styles appear to have an ambivalent or closed attitude about exploring and integrating new information (Mikulincer, 1997). Secures are likely to have a sense of confidence in themselves, their partners, and the environment, which enables them to engage in constructive, flexible approaches to problem solving. Insecurely attached participants may lack confidence in

themselves and/or their partners, and might find cognitive openness and flexibility to be threatening, either directly, or indirectly, in the sense that it requires being open to another person's ideas.

Dismissing participants also preferred significantly less socially supportive ER behaviors from their partners than participants with any of the other three attachment styles. The Social Support subscale consisted of items such as encouraging them to show their feelings, listening, validating perceptions and feelings, and encouraging them to talk to someone else. These findings are consistent with the general characteristics of people with a Dismissing style. Previous research has shown that Avoidants in general are less likely to seek support from their partners when they are upset (Rholes, Simpson, & Stevens, 1998). Dismissings specifically tend to be introverted, inexpressive (Bartholomew & Horowitz, 1991), autonomous, and not reliant or dependent on others for emotional support (Bartholomew, 1993, cited in Shaver, Collins, and Clark, 1996). This is consistent with the description of the Dismissing type in Bartholomew's measure: independent, self-sufficient, and preferring not to depend on others or have others depend on them. It is also consistent with more recent research by Fraley, Davis and Shaver (1998), in which Dismissings appeared to organize their social environment in ways that avoided intimacy, rejection, and potential anxiety-laden attachment experiences. In the present study, rejection of ER preference for socially supportive behaviors appeared unique to the Dismissing types. In contrast, individuals with the other three attachment styles preferred more socially supportive behavior from their partners. For Secures, this may be due to their confident expectation that others will be available, dependable, and

supportive. For Preoccupied and Fearfuls, this may be due to their expectations that they are unable to cope with the threatening situation without assistance.

There were interesting effects of paired attachment styles in couples in terms of the ER preferences of the individuals forming the couple. The significant differences were between secure-secure and insecure-insecure couples. Using factor scores derived from a re-analysis of the PERS measures, persons in secure-secure couples preferred more Problem Solving type behaviors from their partners than did persons in insecure-insecure couples. The Problem Solving factor was essentially a combination of the PERS Cognitive and Problem Solving subscales. It included cognitively considering an issue or situation and developing and carrying out an action plan. In contrast, persons in an insecure-insecure couple relationship preferred more Ignore type behaviors than did persons in any of the other pairings. The Ignore factor included ignoring feelings, not listening, discouragement of showing or talking about feelings, and convincing that the issue is not important. These findings again are consistent with previous research regarding the cognitive and coping styles of secure versus insecure persons. That is, Secures are comfortable with cognitive approaches to problem solving, and approaching their relationship partners in general, while Insecures are uncomfortable with cognitive approaches to problem solving, perhaps finding it threatening to their relatively inflexible cognitive style. Secures have been postulated to welcome the opportunity for communication about issues with their partners, as opportunities to confirm the closeness of their relationship. They are generally comfortable and competent in approaching difficult issues in general. Insecures would be expected to find problem-solving discussions to be threatening – possibly by bringing up the possibility of rejection by

their partner, admitting their vulnerability, or necessitating some flexibility in their strict self-reliance.

Findings regarding anxious (preoccupied) attachment, although consistent with predictions, must be considered as tentative. Results with the Hazan-Shaver measure suggested that Anxious participants tended to prefer more soothing type ER behaviors from their partners than either the Secure or Avoidant participants. Although this result did not reach statistical significance, possibly due to the relatively small number of Anxious individuals in the sample (only 9%), the effect size was reasonably meaningful. Soothing behaviors included doing something nice for them at home, helping them calm themselves down, holding them, or doing chores for them. This finding is consistent with characteristics of Anxious individuals, who have been found to become very emotionally aroused when under stress, and to use emotion-focused coping strategies (Mikulincer, Florian, & Weller, 1993). Anxious individuals tend to focus on their emotional states, and may express their distress as a way to maintain contact with their relationship partner.

These results may offer some interesting suggestions about what a relationship with a Dismissing or Anxious person might be like. Assuming that emotional distress causes the activation of long-standing attachment-related expectations and patterns of behavior, relationship partners with dismissing and anxious attachment styles would be expected to respond differently in distressing situations. Dismissing attachment is believed to "stem from environments with little affection, and cold or derisive responses to bids for comfort and support" (Rholes, Simpson, & Stevens, 1998, p. 168). For example, imagine an infant whose caregiver is continually depressed, who did not

want the child, or is otherwise consistently too self-absorbed to respond to the child's needs in an attentive way. Or imagine a caregiver who derides and rebukes a child for being sad, frightened, or needing comfort. These children appear to learn emotion regulation strategies that actually deactivate their distress (see Fraley, Davis, & Shaver, 1998). As an adult, a Dismissing person is unlikely to either seek emotional support from a partner, or provide emotional support to a distressed partner. They are unaware of others' emotional needs as well as their own. This may be acceptable as long as the relationship does not encounter any challenging or stressful situations, and the relationship can remain superficial, or both partners are satisfied with denial, distancing, and independence as ways to cope with difficulties. However, this distancing is most likely to be most evident when there is a possibility that the Dismissing's interpersonal psychological distance and independence appear to be threatened: exactly when a partner with a non-dismissing style is most likely to desire closeness. It does seem, given the usual vicissitudes of life and a general cultural expectation that relationships should be mutually supportive, that relationships involving a Dismissing partner would eventually develop difficulties.

Anxious attachment is believed to stem from environments in which sensitive and responsive care is mixed with unpredictable periods of unresponsiveness, threats of abandonment, prolonged separations, or bereavement. For example, imagine a child who has a mother who is overprotective most of the time, but who threatens to abandon the family during arguments with her husband. Or imagine a child who has a parent who is often responsive, but who has episodic bouts of depression in which they become withdrawn, hospitalized, or threaten to kill themselves. As adults in close relationships,

Anxious individuals are likely to fear abandonment and to continually question their partner's commitment and availability; they are likely to be dependent, clingy, jealous, suspicious, and controlling (Hazan & Shaver, 1994). It is obvious that a person with an anxious attachment style would not be very compatible with an avoidant person. An anxiously attached person may be compatible with a secure partner who is tolerant of their emotionality and desire for soothing, but the anxious person's expectations that their partner will not be dependable, available, or understanding seems likely to generate distress in such a relationship.

An exploration of the explanatory value of internal working models of self and others in terms of ER preferences showed that, in general, participants' working model of others were more predictive of emotion regulation preferences than were their working model of self. However, the internal working models overall were significantly predictive of only two types of emotion regulation strategies: Social Support and Cognitive. It makes sense that the internal working model of others would be more predictive than working model of self in terms of preferences for ER behaviors from a relationship partner. Working model of others involves one's beliefs, expectations, and attitudes toward a close relationship partner, such as level of trust that one's partner is trustworthy and likely to respond to one's needs in supportive, helpful ways. Persons with a positive internal working model of others would tend to turn to others for emotional, cognitive, and instrumental support in part because of their positive, trusting expectations (for Secures) or because of their need for reassurance (for Preoccupieds). Persons with negative internal working models of others do not have a sense of others as being trustworthy, responsive to their needs, or helpful. They tend to have difficulty dealing constructively

with negative emotions, being either hypervigilant and ruminating or focusing on being self-reliant and distancing themselves from experiencing, displaying, or discussing their distress (Mikulincer & Florian, 1998. These findings also make sense in terms of the dimensional model proposed by Bartholomew and increasingly validated by recent research: the working model of others is the dimension on which Secures and Dismissings differ. This dimension has also been labeled "avoidance", in that it appears to differentiate between persons who, when aroused, tend to approach their attachment figures, and those who tend to avoid approaching their attachment figures (e.g., see Brennan, Clark, & Shaver, 1998). Other researchers have labeled this dimension as "comfort", that is, comfort with closeness with a relationship partner (Feeney, 1998). Specifically, Secures have a positive internal working model of others, tend to approach relationship partners and feel comfortable doing so, whereas Dismissings have a negative internal working model of others, tend to avoid relationship partners, and are not comfortable approaching them (while both Secures and Dismissings have a positive model of self).

Attachment Styles and Satisfaction with Partner's Emotion Regulation Behaviors

This study hypothesized that individuals with secure attachment would report more satisfaction with their partners' ER behaviors. As predicted, participants with a secure attachment style were significantly more satisfied with their partners' use of socially supportive type behaviors, when attempting to help them regulate difficult emotions, than were participants with a dismissing attachment style. The reasons for this finding may be related to Dismissings' initial *preference* for less socially supportive behaviors from their partners. Given that dismissings prefer less of this type of behavior from their

relationship partners, it seems logical that they would also be less satisfied with this type of behavior if their partners attempted to provide it. Dismissings are likely to find attempts to become socially engaged threatening to their independent, defensive style of coping with negative feelings (see Fraley, Davis, & Shaver, 1998 for an in-depth discussion of dismissing avoidance). In contrast, participants with Secure attachment are more satisfied with their partners' socially supportive ER behaviors due to their initial *preference* for more of this type of response from their partners. This finding is reinforced by the regression analysis in which participants' positivity of internal working model of others was predicted by scores on the Social Support-Satisfaction subscale. Being satisfied with how a relationship partner attempts to help deal with difficult emotions in an interpersonal way is consistent with having a positive attitude about the relationship partner. The sense that the partner is trustworthy and capable of helping with difficult emotions in an interactive way defines a positive internal working model of others, and a Secure attachment style.

Adult Attachment and Overall Relationship Satisfaction

As predicted, this study replicated previous findings that persons with a secure attachment style are more satisfied with their relationship than are persons with any of the insecure attachment styles (e.g., Collins & Read, 1990; Hazan & Shaver, 1987; Kirkpatrick & Daavis, 1994; Simpson, 1990). As expected, participants with secure attachment, whether according to the Hazan-Shaver or Bartholomew's model, were more satisfied with their close relationship than were insecure participants. Also, couples *paired* according to their attachment styles differed in their level of relationship

satisfaction as would be expected, with secure-secure couples being the most satisfied, and insecure-insecure couples being least satisfied.

The results for subjects classified by Bartholomew's model had some interesting implications for relationship satisfaction. Secure participants were significantly more satisfied than the fearful participants; they also scored higher on relationship satisfaction than the preoccupied or dismissing participants, although the difference was not statistically significant. This lack of significance may have been due to the fact that some of the Hazan-Shaver secures reclassified themselves as preoccupied or dismissing (13 and 12, respectively) in Bartholomew's model. This was likely to have raised the mean satisfaction scores of those two groups. The Hazan-Shaver avoidants, however, mostly reclassified themselves as fearful in Bartholomew's model and so those mean satisfaction scores remained low. The significant difference between Secures and Fearfuls suggests that a difference along a secure-fearful dimension may have an impact on relationship satisfaction. Remember that Bartholomew's four categorical attachment styles are formed from the intersection of the two dimensions of internal working models of self and others. Also remember that, according to the dimensional model, Secures have positive working models of both self and others, while Fearfuls have negative working models of both self and others. Thus, another way of thinking about the differences between Secures and Fearfuls is to consider them as inhabiting different ends of 45-degree rotation of the two dimensions as usually described (i.e., working models of self and others). Secures on this rotated dimension have been found to be low on avoidance, low on dysfunctional anger, and more likely to demonstrate an egalitarian give-and-take approach to problem solving, compared to those at the opposite end (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble,

1993). These are qualities that certainly contribute to relationship satisfaction. This conceptualization is further supported by the finding, in this study, that both working model of others and working model of self contributed to the prediction of relationship satisfaction. That is, as internal working models of both self and others become more positive, relationship satisfaction increases.

Explanatory Value of the Different Models of Attachment

This study endeavored to compare the explanatory value of the different models of attachment. In general, there was not much difference in the explanatory values of the different models. Neither the Hazan-Shaver, Bartholomew, nor two-dimensional models of attachment emerged as one being superior to another in explaining the overall variability in ER preferences, satisfaction with a partner's ER behaviors, or overall relationship satisfaction.

In addition, none of the models of attachment accounted for very much of the overall variability in the measures of ER preferences, satisfaction with a partner's ER behaviors, or overall relationship satisfaction. For ER preferences, the models explained from 4 to 7% of the variance; for satisfaction with a partner's ER behaviors, the models explained from 4 to 6% of the variance; and for overall relationship satisfaction, the models predicted from 10 to 13% of the variance. This leads us to the conclusion that there are factors other than an individual's attachment style, however measured, which contribute to these aspects of long-term couple relationships. These might include such factors as the partner's attachment style, the personalities of each partner (such as agreeableness, conscientiousness, openness, moodiness), physical or psychological abuse, infidelity, and financial and other environmental circumstances (e.g., see Shackelford & Buss, 1997).

Gender role expectations, sexual compatibility, knowledge of one's partner's preferred coping styles, cultural mores, and religious beliefs may also have a strong influence on emotion regulation preferences and satisfaction in couple relationships.

Another possible reason for the low levels of association between attachment style or internal working models and emotion regulation preferences may be that the two concepts may be somewhat more distant from each other conceptually than postulated. Although attachment *behavior* has been conceptualized as affect regulation behavior, measures of attachment style such as the self-report measures used in this study tend to focus on the domain of consciously held *beliefs and attitudes* about close relationship partners. In contrast, the focus of this study was more in the domain of actual behaviors: the emotion regulation behaviors performed by one's relationship partner. As discussed recently by Bartholomew and Shaver (1998), it is possible that convergence across these measures might be low because of their focus on different domains (attitudes and beliefs vs. behaviors), even though both measures were self-report measures.

The Influence of Sex Differences

A number of exploratory analyses in this study attempted to determine whether sex differences influenced the relationship between attachment styles and desired ER behaviors, satisfaction with ER behaviors, or overall relationship satisfaction. The separate and interactive effects of sex with internal working models did appear to predict ER preferences, but somewhat inconsistently and only for some types of emotion regulation. These effects may be related to sex differences in emotion regulation preferences found in previous research with the emotion regulation measure (Myers, 1996). In that research, women preferred more emotion regulation behaviors from their

partners than did men, for all seven types of emotion regulation (although statistical significance was reached for two: Social Support and Soothing).

In the current study, as internal working models of others became more positive, both men and women preferred more Cognitive and Problem Solving ER behaviors from their partners. These results are compatible with the general explanations for the association between positive working models of others and cognitive, instrumental ER behavior preferences that have already been discussed. However, for internal working model of self, the sexes appeared to be affected differently in terms of Cognitive and Problem Solving ER preferences. For men, as their internal working model of self became more positive, their preference for Cognitive and Problem Solving ER behaviors from their partners decreased. This may be related to gender role expectations of men, who experience themselves positively when they are the cognitively oriented problem solvers in a relationship, and experience themselves negatively if they look to their partners for support with these types of behaviors. Alternatively, this finding might be related to a defensively self reliant approach to these types of behaviors, such as that associated with a Dismissing attachment style, which is also compatible with a traditional male gender role in this culture. For women, as their internal working model of self became more positive, they indicated an increasing preference for Cognitive ER behaviors from their partners, but women's working model of self had no effect on their preference for Problem Solving behaviors from their partners.

For the Social Support and the Soothing PERS subscales, results showed that women preferred more of these types of ER behaviors from their partners than did men. These results are essentially the same as the significant differences between men and women for

these types of emotion regulation behaviors from their partners previously found by Myers (1996) and mentioned above. However, the effects of internal working models of self and others differed for men and women regarding the Social Support subscale. Women's preferences for Social Support ER behaviors were not affected by their internal working models of self or others. For men, as working model of others became more positive, they indicated preferring more Social Support type behaviors from their partners. As men's working model of self became more positive, they indicated preferring less Social Support type behaviors from their partners. The relationship between sex and working models is still an open question.

Sex did not appear to influence overall relationship satisfaction.

Influence of Attachment Style on Discrepancy in Partners' Emotion Regulation Preferences

We also conducted an exploratory analysis regarding whether discrepancy on emotion regulation preferences between partners was related to their attachment styles. This analysis revealed that discrepancy was related to attachment style only for the Ignore factor. The Ignore factor consisted of items such as ignoring feelings, not listening, discouraging talking about or showing feelings, and trying to convince the person that the issue of concern is not important. These results are to be considered tentative due to the poor reliability of discrepancy scores coupled with the poor reliability of the Ignore factor. It appeared that more secure individuals were in relationships lower in discrepancy (rather than higher in discrepancy) with their partners in terms of preference for Ignore type emotion regulation behaviors. More dismissing individuals were in relationships higher in discrepancy (rather than lower in discrepancy) with their partners

in terms of preference for Ignore type emotion regulation behaviors. These differences make sense, in that dismissing individuals, as discussed previously, are likely to prefer Ignore type behaviors, unlike any of the other attachment groups. It seems likely that if a dismissing avoidant, with his or her propensity to ignore and avoid emotional issues, were paired with someone with any other attachment style, there would be a discrepancy in that approach to emotion regulation. In a similar way, securely attached individuals, with their propensity to *approach* and *solve* emotional issues, would be likely to be paired with individuals who either shared the same approach or at least were prepared to benefit from it.

This study suggests a number of implications for individual and couples therapy. A person's attachment history and current attachment style will have an influence on how the person expects significant others to behave in relationships; this includes their therapist. Therapy is often influenced by clients' early relationships with caregivers who were rejecting, unavailable, or inconsistent. According to attachment theory, such relationships creat certain types of expectations, that is, internal representations or working models, that are placed upon the therapist as well as upon other relationship partners. Much therapy involves a therapist providing an accepting, dependable, responsive relationship as a context in which clients can rework these negative expectations of others. Similarly, a major aspect of therapy often involves an examination of how current interpersonal relationships and behaviors are influenced by prior experiences and expectations with early caregivers. In couples therapy, these concerns extend to exploring how the previous experiences, and current beliefs and expectations about relationship partners, are affecting the current relationship.

This study provides some information for clinicians particularly about avoidant individuals and the types of difficulties they may have in relationships, including therapy relationships. For example, persons with a dismissing attachment style would be expected to be unlikely to present themselves in therapy to begin with. They are likely to be difficult to engage in a therapeutic relationship due to their expectations of being rejected or ridiculed. They may have particular difficulty exploring and integrating new information, especially if it is contrary to their beliefs and expectations about other people. They would appear to have particular difficulty with understanding that relationship partners are likely to expect to share and discuss issues, perceptions, and feelings. The individual client, and the couple in marital therapy, would likely benefit from the therapist being able to formulate, explain, and explore these issues with them.

The study also revealed important implications about the possible effects of a clinician's own attachment style. A clinician should be aware that he or she needs to behave in a way that provides an environment in which a client can explore and change their problematic patterns of relating – often by providing an environment that is complementary, or challenging, to a distressed client's typical style. A clinician needs to have an awareness of how the client expects the clinician to respond, and an awareness of their own tendency to respond in certain ways because of their own attachment style. For example, with a client with a dismissing attachment style, the clinician will need to explore why and how relationships feel threatening. With a client with an anxious attachment style, the therapist might need to resist the pull to simply care for and comfort the client (see Dozier & Tyrrell, 1998).

This study has provided some support for the influence of attachment styles and internal working models on emotion regulation preferences and overall satisfaction in couple relationships. However, the influence is not as strong as was expected, given the theoretically basic and pervasive influence of attachment-related concerns. Perhaps there are so many other aspects involved in adult relationships that attachment-related issues have a less pervasive influence than in infancy. For example, adult relationships involve a number of functions besides caregiving and providing a safe haven and secure base for a relationship partner. In adult relationships, even these aspects are usually reciprocal rather than unilateral. Gender roles, sexuality, acceptance and resignation about one's partner's abilities, one's own ability to elicit social support, soothing, or problem solving from friends, all influence a current relationship and may reduce the influence of attachment-related expectations.

It is also possible that no strong attachment style influences on emotion regulation behaviors were found because of relatively low reliability in the emotion regulation measure, or because there was inadequate activation of the attachment behavioral system. Other researchers have suggested that in order for strong attachment style related effects to emerge, participants must be in a situation that stimulates threats to the relationship, such as distancing behavior, impending abandonment, or anxiety-provoking situations (e.g., Feeney, 1998; Mikulincer & Florian, 1998). It has also been suggested that attachment related behaviors are elicited in specific types of situations for different types of individuals, and for men versus women, at differing levels of distress (Feeney, 1998). This implies the need for more behavioral observation type research rather than use of self report, retrospective or hypothetical type measures such as used in the current study.

In summary, this study has attempted to contribute to the need for more knowledge about specific kinds of behavioral strategies which adults with different attachment styles prefer from their partners when they want to regulate negative affect. Simpson and Rholes (1998) in the introduction to their recent volume, A*ttachment Theory and Close Relationships,* have called for more focus on actual behaviors related to attachment styles. Although the relationship between attachment styles and emotion regulation behaviors found in the present study was not strong, the relationships that were found were consistent with attachment theory. A number of methodological constraints may have affected the results of this study. Future research might focus on the development of a stronger measure of emotion regulation behaviors, the use of behavioral observation rather than self report measures, and the use of more externally valid stimuli to elicit attachment related behaviors.

Appendix A

Partners Emotional Regulation Scales

Participant Section

This section is headed, "When I feel sad (worried or nervous/angry) about something, and want to change how I feel, I want my partner to:" The 5-point scale headings are: "1" indicates "Never"; "2" indicates "Seldom"; "3" indicates "Sometimes"; "4" indicates "Fairly Often"; and "5" indicates "Almost Always".

Partner Section

This section is headed, "How satisfied are you with the way your partner does each of the following when you feel sad (worried or nervous/angry)?" The 5-point scale headings are: "1" indicates "Very Unsatisfied"; "2" indicates "Somewhat Unsatisfied"; "3" indicates "Neutral"; "4" indicates "Fairly Satisfied"; and "5" indicates "Very Satisfied".

Cognitive:

15) Help me see different points of view about the issue (see things in a different way)

29) Help me find out more about the issue

30) Help me somehow accept the situation

37) Convince me that it's not important*

39) Help me think about it; help me think it through

*Item was deleted from analyses on the Nervousness, Anger, and Sadness dimensions

Social Support:

6) Encourage me to show how I feel

8) Help me pray for guidance; pray with me*

10) Listen to me

19) Validate my perceptions and feelings about the situation

33) Encourage me to talk to someone else for help, such as a therapist, counselor, clergy, doctor, family member, or friend*

*These items were deleted from further analyses on the Nervousness, Anger, and Sadness dimensions

Distraction:

4) Help me think about something else

11) Do some unrelated activity with me at home (such as watch TV or a movie, listen to music)

21) Talk about something else to get my mind off the situation

23) Go out with me to do some unrelated activity together (such as go out for a drive or to a movie)

40) Go visit some friends together

Physical:

5) Encourage me to go get some exercise

7) Exercise with me (such as go jogging together)

12) Go on a walk, hike, or bicycle ride (or some other physical activity) with me

26) Go out dancing

31) Encourage me to do something to physically relax

Problem-Solving:

1) Tell me what I should do

14) Take care of the situation for me*

16) Help me consider alternative plans of action or solutions to the situation

17) Help me do what I need to do to resolve the situation or problem

35) Help me figure out what to do/develop a plan of action with me

*This item was deleted from further analyses on the Nervousness, Anger, and Sadness dimensions

Soothing:

2) Do something for me (such as run a hot bath for me to relax in for a while, give me a massage, or fix a meal for us)

22) Help me calm myself down

28) Hold me and give me comfort

32) Leave me alone for a while*

38) Take care of some chores for me so I can relax

*This item was deleted from further analyses on the Nervousness, Anger, and Sadness dimensions

Maladaptive: * (This subscale was deleted from further analyses regarding desired partner emotion regulation behaviors)

3) Tell me to ignore my feelings and they'll go away

20) Drink alcohol with me

24) Smoke a cigarette with me

27) Discourage me from talking about how I feel

34) Discourage me from showing how I feel

Change Mood:

9) Try to make me laugh about it somehow

13) Try to cheer me up

18) Help me feel better about the situation

25) Try to help me feel better about myself

36) Put on some music or choose a movie that will change my mood

Personal Responsibility Section

Seven other questions, included at the end of each section, were headed: "When my partner feels sad (worried or nervous/angry) about something (besides me or something I've done)". The 5-point response scale was the same as for the participant's section, above. The questions were:

1. I feel responsible
2. It makes me feel the same way
3. I feel that it's because of something I've done
4. It makes me feel _____
5. I want to help him/her change how he/she feels
6. I know it's not because of me
7. It's difficult for me to go about my own activities

Appendix B

Romantic Relationships Questionnaire

The following brief questionnaire is concerned with your experiences in romantic love relationships. Take a moment to think about all of the most important romantic relationships you've been involved in. For each relationship think about: How happy or unhappy you were, and how your moods fluctuated. How much you trusted or distrusted each other. Whether you felt you were too close emotionally or not close enough. The amount of jealousy you felt. How much time you spent thinking about your partner. How attracted you were to the person. How the relationship might have been better. How it ended. (Thinking about these good and bad memories of various relationships will help you answer the following questions accurately.)

Part I:

Read each of the three self-descriptions below (1, 2, and 3) and then rate how much you agree or disagree that each one describes the way you generally are in love relationships. Circle one of the numbers below each self description. (Note: The terms "close" and "intimate" refer to psychological or emotional closeness, not necessarily to sexual intimacy.)

1. I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being. (*Circle one number below.*)

Disagree Strongly	Disagree Moderately	Disagree Slightly	Mixed Not sure	Agree Slightly	Agree Moderately	Agree Strongly
1	2	3	4	5	6	7

2. I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to get very close to my partner, and this sometimes scares people away. (*Circle one number below.*)

Disagree Strongly	Disagree Moderately	Disagree Slightly	Mixed Not sure	Agree Slightly	Agree Moderately	Agree Strongly
1	2	3	4	5	6	7

3. I find it relatively easy to get close to others and am comfortable depending on them. I don't often worry about being abandoned or about someone getting too close to me. (*Circle one number below.*)

Disagree Strongly	Disagree Moderately	Disagree Slightly	Mixed Not sure	Agree Slightly	Agree Moderately	Agree Strongly
1	2	3	4	5	6	7

Part II.

Below, the three options from above are printed again. Please place a checkmark next to the single alternative that *best* describes how you feel in romantic love relationships.

1. ___ I am somewhat uncomfortable being close to others; I find it difficult to trust them completely, difficult to allow myself to depend on them. I am nervous when anyone gets too close, and often, love partners want me to be more intimate than I feel comfortable being.

2. ___ I find that others are reluctant to get as close as I would like. I often worry that my partner doesn't really love me or won't want to stay with me. I want to get very close to my partner, and this sometimes scares people away.

3. ___ I find it relatively easy to get close to others and am comfortable depending on them. I don't often worry about being abandoned or about someone getting too close to me.

Please turn to back of page

Part III.

This part and Part IV are similar to the questions on the first page, but there are 4 categories instead of 3. Read each of the four self-descriptions below (1, 2, 3, and 4) and then rate how much you agree or disagree that each one describes the way you generally are in love relationships. Circle one of the numbers below each self description. (Note: The terms "close" and "intimate" refer to psychological or emotional closeness, not necessarily to sexual intimacy.)

1. It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me, I don't worry about being alone or having others not accept me.

Disagree Strongly	Disagree Moderately	Disagree Slightly	Mixed Not sure	Agree Slightly	Agree Moderately	Agree Strongly
1	2	3	4	5	6	7

2. I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

Disagree Strongly	Disagree Moderately	Disagree Slightly	Mixed Not sure	Agree Slightly	Agree Moderately	Agree Strongly
1	2	3	4	5	6	7

3. I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

Disagree Strongly	Disagree Moderately	Disagree Slightly	Mixed Not sure	Agree Slightly	Agree Moderately	Agree Strongly
1	2	3	4	5	6	7

4. I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

Disagree Strongly	Disagree Moderately	Disagree Slightly	Mixed Not sure	Agree Slightly	Agree Moderately	Agree Strongly
1	2	3	4	5	6	7

Part IV.

Below, the four options from Part III are printed again. Please place a checkmark next to the single alternative that *best* describes how you feel in romantic love relationships.

1. ___ It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me, I don't worry about being alone or having others not accept me.

2. ___ I am comfortable without close emotional relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me.

3. ___ I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them.

4. ___ I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others.

UNIVERSITY OF WASHINGTON

D.A.S.

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

	Always Agree	Almost Always Agree	Occasionally Disagree	Frequently Disagree	Almost Always Disagree	Always Disagree
1. Handling family finances						
2. Matters of recreation						
3. Religious matters						
4. Demonstrations of affection						
5. Friends						
6. Sex relations						
7. Conventionality (correct or proper behavior)						
8. Philosophy of life						
9. Ways of dealing with parents or 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 and activities						
15. Career decisions						
	All the time	Most of the time	More often than not	Occasionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation or terminating your relationship?						
17. How often do you or your mate leave the house after a fight?						
18. In general, how often do you think that things between you and your partner are going well?						
19. Do you confide in your mate?						
20. Do you ever regret that you married (or live together)?						
21. How often do you and your partner quarrel?						
22. How often do you and your mate get on each others' nerves?						

	Every day	Almost every day	Occasionally	Rarely	Never
23. Do you kiss your mate?					

	All of them	Most of them	Some of them	Very few of them	None of them
24. Do you and your mate engage in outside interests together?					

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

	Never	Less than once a month	Once/twice a month	Once/twice a week	Once a day	More often
25. Have a stimulating exchange of ideas						
26. Laugh together						
27. Calmly discuss something						
28. Work together on a project						

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

	Yes	No
29. Being too tired for sex		
30. Not showing love		

31. The dots 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 dot which best describes the degree of happiness, all things considered, of your relationship.

Extremely unhappy · Fairly unhappy · A little unhappy · Happy · Very happy · Extremely happy · Perfect

32. Which of the following statements best describes how you feel about the future of your relationship?

_____ I want desperately for my relationship to succeed, and would go to about any length to see that it does.

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

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

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

_____ It would be nice if my relationship succeeded, but I refuse to do any more than I am doing now to keep the relationship going.

_____ My relationship can never succeed, and there is no more that I can do to keep the relationship going.

References

Ainsworth, M. D. S. (1989). Attachments beyond infancy. *American Psychologist, 44,* 709-716.

Ainsworth, M. D. S., Blehar, M. D., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation.* Hillsdale, NJ: Erlbaum.

Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships, 7,* 147-178.

Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles in young adults: A test of a four-category model. *Journal of Personality and Social Psychology, 61,* 226-244.

Bartholomew, K., & Perlman, D. (1994). *Advances in personal relationships* (Vol. 5). Bristol, PA: Jessica Kingsley.

Bartholomew, K., & Shaver, P. R. (1998). Methods of assessing adult attachment: Do they change? In J. A. Simpson & W. W. Rholes (Eds.), *Attachment theory and close relationships* (pp. 25-45). New York, NY: Guilford.

Bowlby, J. (1973). *Attachment and loss, Volume II: Separation: Anxiety and anger.* New York: Basic Books.

Bowlby, J. (1979). *The making & breaking of affectional bonds.* New York: Tavistock/Routledge.

Bowlby, J. (1982). *Attachment and loss, Volume I: Attachment* (2nd Ed.) New York: Basic Books.

Bowlby, J. (1988). Developmental psychiatry comes of age. *American Journal of Psychiatry, 145,* 1-10.

Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. W. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York, NY: Guilford.

Brennan, K. A., & Shaver, P. R. (1995). Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin, 21,* 267-283.

Brennan, K. A., Shaver, P. R., & Tobey, A. E. (1991). Attachment styles, gender, and parental problem drinking. *Journal of Social and Personal Relationships, 8,* 451-466.

Bretherton, I. (1988). Open communication and internal working models: Their role in the development of attachment relationship. In R. A. Thompson (Ed.), *Nebraska Symposium on Motivation: Socioemotional development, 36,* (pp. 57-113) Lincoln: University of Nebraska Press.

Campos, J. J., Barrett, K., Lamb, M. E., Goldsmith, H. H., & Stenberg, C. (1983). Socioemotional development. In P. H. Mussen (Ed.), *Handbook of child psychology: Vol. s. Infancy and developmental psychobiology* (pp. 783-915). New York: Wiley.

Cassidy, J., & Kobak, R. (1988). Avoidance and its relation to other defensive processes. In J. Belsky & T. Neworski (Eds.), *Clinical implications of attachment* (pp. 300-323). Hillsdale, NJ: Erlbaum.

Cicchetti, D., Ganiban, J., & Barnett, D. (1991). Contributions from the study of high-risk populations to understanding the development of emotion regulation. In J. Garber & K. A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 15-48). New York: Cambridge University Press.

Cicchetti, D., Toth, S. L., & Lynch, M. (1995). Bowlby's dream comes full circle: The application of attachment theory to risk and psychopathology. *Advances in Clinical Child Psychology, 17,* 1-75.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58,* 644-663.

Collins, N. L., & Read, S. J. (1994). Cognitive representations of attachment: The structure and functional of working models. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships, Vol. 5* (pp. 53-90). Bristol, PA: Jessica Kingsley.

Crittenden, P. M. (1988). Relationships at risk. In J. Belsky & T. Nezworski (Eds.), *Clinical implications of attachment* (pp. 136-174). Hillsdale, NJ: Erlbaum.

Crittenden, P. M. (1990). Internal representational models of attachment relationships. *Infant Mental Health Journal, 11,* 259-277.

Dozier, M., & Kobak, R. R. (1992). Psychophysiology and adolescent attachment interviews: Converging evidence for repressing strategies. *Child Development, 59,* 1273-1285.

Eldridge, N. S., Mencher, J., & Slater, S. (1997). The conundrum of mutuality: A lesbian dialogue. In J. V. Jordan (Ed.), *Women's growth in diversity* (pp. 107-137). New York: Guilford.

Feeney, J., & Noller, P. (1990). Attachment style as a predictor of adult romantic

relationships. *Journal of Personality and Social Psychology, 58,* 281-291.

Feeney, J., & Noller, P. (1991). Attachment style and verbal descriptions of romantic partners. *Journal of Social and Personal Relationships, 8,* 187-215.

Feeney, J., Noller, P., & Callan, V. J. (1994). Attachment style, communication and satisfaction in the early years of marriage. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 5, pp. 269-308). Bristol, PA: Jessica Kingsley.

Fischer, K. W., Shaver, P. R., & Carnochan, P. (1990). How emotions develop and how they organise development. *Cognition and Emotion, 4,* 81-127.

Folkman, S., & Lazarus, R. S. (1988). *Ways of Coping Questionnaire (Manual).* Palo Alto, CA: Consulting Psychologists Press.

Fraley, R. C., Davis, K. E., & Shaver, P. R. (1998). Dismissing-avoidance and the defensive organization of emotion, cognition, and behavior. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 249-279). New York, NY: Guilford.

Genero, N. P., Miller, J. B., & Surrey, J. (1992a). *The Mutual Psychological Development Questionnaire* (Research Project Report No. 1). Wellesley, MA: Stone Center, Wellesley College.

Genero, N. P., Miller, J. B., Surrey, J., & Baldwin, L. M. (1992b). Measuring perceived mutuality in close relationships: Validation of the Mutual Psychological Development Questionnaire. *Journal of Family Psychology, 6,* 36-48.

Goldsmith, H. H., & Alansky, J. A. (1987). Maternal and infant temperamental predictors of attachment: A meta-analytic review. *Journal of Consulting and Clinical Psychology, 55,* 805-816.

Gottman, J. M. (1979). *Marital interaction: Experimental investigations.* San Diego: Academic Press.

Gottman, J. M. (1993). Studying emotion in social interaction. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp. 475-487). New York: Guilford.

Gottman, J. M., & Krokoff, L. J. (1989). Marital interaction and satisfaction: A longitudinal view. *Journal of Consulting and Clinical Psychology, 57,* 47-52.

Gottman, J. M., & Levenson, R. W. (1986). Assessing the role of emotion in marriage. *Behavioral Assessment, 8,* 31-48.

Gottman, J. M., & Levenson, R. W. (1992). Marital processes predictive of later dissolution: Behavior, physiology and health. *Journal of Personality and Social Psychology, 63,* 221-233.

Gottman, J. M., Markman, H., & Notarius, C. (1977). The topography of marital conflict: A sequential analysis of verbal and nonverbal behavior. *Journal of Marriage and the Family, 39,* 461-477.

Griffin, D. W., & Bartholomew, K. (1994). The metaphysics of measurement: The case of adult attachment. In K Bartholomew & D. Perlman (Eds.), *Advances in Personal Relationships* (Vol. 5, pp. 17-52). Bristol, PA: Jessica Kingsley Publishers.

Grossmann, K. E., Grossmann, K., & Schwan, A. (1986). Capturing the wider view of attachment: A reanalysis of Ainsworth's Strange Situation. In C. E. Izard & P. B. Read (Eds.), *Measuring emotions in infants and children* (Vol. 2, pp. 124-171). New York: Cambridge University Press.

Hammond, J. R., & Fletcher, G. J. O. (1991). Attachment styles and relationship satisfaction in the development of close relationships. *New Zealand Journal of Psychology, 20,* 56-62.

Hatfield, E., & Rapson, R. (1993). Love and attachment processes. In M. Lewis & J. M. Haviland (Eds.), *Handbook of emotions* (pp 595-604). New York: Guilford.

Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology, 59,* 270-280.

Hazan, C., & Shaver, P. R. (1994a). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5,* 1-22.

Hazan, C., & Shaver, P. R. (1994b). Deeper into attachment theory. *Psychological Inquiry, 5,* 68-79.

Hendrick, C., & Hendrick, S. S. (1989). Research on love: Does it measure up? *Journal of Personality and Social Psychology, 56,* 784-794.

Hindy, C. G., & Schwarz, J. C. (1994). Anxious romantic attachment in adult relationships. In M. B. Sperling & W. H. Berman (Eds.), *Attachment in adults: Clinical and developmental perspectives* (pp. 179-203). New York: Guilford.

Hindy, C. G., Schwarz, J. C., & Brodsky, A. (1989). *If this is love, why do I feel so insecure?* New York: Atlantic Monthly Press.

Izard, C. E., & Kobak, R. R. (1991). Emotions system functioning and emotion

regulation. In J. Garber & K. A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 303-321). New York: Cambridge University Press.

Jordan, J. (1986). *The meaning of mutuality* (Work in Progress, No. 23). Wellesley, MA: Stone Center, Wellesley College.

Jordan, J. V. (Ed.). (1997). *Women's growth in diversity.* New York: Guilford.

Jordan, J. V., Kaplan, Alexandra G., Miller, J. B., Stiver, I. P., & Surrey, J. L. (1991). *Women's growth in connection: Writings from the Stone Center.* New York: Guilford.

Kirkpatrick, L. A., & Davis, K. E. (1994). Attachment style, gender, and relationship stability: A longitudinal analysis. *Journal of Personality and Social Psychology, 66,* 502-512.

Kirkpatrick, L. A., & Hazan, C. (1994). Attachment styles and close relationships: A four-year prospective study. *Personal Relationships, 1,* 123-142.

Kobak, R. R., Cole, H. E., Ferenz-Gillies, R., Fleming, W. S., & Gamble, W. (1993). Attachment and emotion regulation during mother-teen problem solving: A control theory analysis. *Child Development, 64,* 231-245.

Kobak, R. R., & Hazan, C. (1991). Attachment in marriage: Effects of security and accuracy of working models. *Journal of Personality and Social Psychology, 60,* 861-869.

Kobak, R. R., & Sceery, A. (1988). Attachment of late adolescence: Working models, affect regulation, and representations of self and others. *Child Development, 59,* 135-146.

Koski, L. R., & Shaver, P. R. (1997). Attachment and relationship satisfaction across the lifespan. In R. J. Sternberg & M. Hojjat (Eds.), *Satisfaction in close relationships* (pp. 26-55). New York, NY: Guilford.

Kunce, L. J., & Shaver,, P. R. (1994). An attachment-theoretical approach to caregiving in romantic relationships. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships* (Vol. 5, pp. 205-237). Bristol, PA: Jessica Kingsley.

Levy, K. N., Blatt, S. J., & Shaver, P. R. (1998). Attachment styles and parental representations. *Journal of Personality and Social Psychology, 74,* 407-419.

Levy, M. B., & Davis, K. E. (1988). Lovestyles and attachment styles compared: Their relations to each other and to various relationship characteristics. *Journal of Social and Personal Relationships, 5,* 439-471.

Main, M. (1996). Introduction to the special section on attachment and

psychopathology: 2. Overview of the field of attachment. *Journal of Consulting and Clinical Psychology, 64,* 237-243.

Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) model of attachment: Findings and directions for future research. In C. M. Parkes & J. Stevenson-Hinde (Eds.), *Attachment across the life cycle* (pp. 127-159). New York: Tavistock/Routledge.

Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years* (pp. 161-184). Chicago: University of Chicago Press.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. In I. Bretherton & E. Waters (Eds.), *Growing points in attachment theory and research, Monographs of the Society for Research in Child Development, 50* (1-2, Serial No. 209), 66-104.

Main, M., & Solomon, J. (1986). Discovery of an insecure-disorganized/disoriented attachment pattern. In T. B. Brazelton & M. W. Yogman (Eds.), *Affective development in infancy* (pp. 95-124). Norwood, NJ: ABLEX.

Main, M., & Solomon, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years* (pp. 121-160). Chicago: University of Chicago Press.

Mickelson, K. D., Kessler, R. C., & Shaver, P. R. (1997). Adult attachment in a nationally representative sample. *Journal of Personality and Social Psychology, 73,* 1092-1106).

Mikulincer, M. (1997). Adult attachment style and information processing: Individual differences in curiosity and cognitive closure. *Journal of Personality and Social Psychology, 72,* 1217-1230.

Mikulincer, M., & Florian, V. (1998). The relationship between adult attachment styles and emotional and cognitive reactions to stressful events. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 143-165). New York, NY: Guilford.

Mikulincer, M., Florian, V., & Weller, A. (1993). Attachment styles, coping strategies, and posttraumatic psychological distress: The impact of the Gulf War in Israel. *Journal of Personality and Social Psychology, 64,* 817-826.

Mikulincer, M., & Nachshon, O. (1991). Attachment styles and patterns of self-disclosure. *Journal of Personality and Social Psychology, 61,* 321-331.

Miller, J. B. (1988). *Connections, disconnections and violations* (Work in Progress, No. 33). Wellesley, MA: Stone Center, Wellesley College.

Moos, R. H., Cronkite, R. C., & Finney, J. W. (1990). *Health and Daily Living Form Manual, 2nd Edition.* Palo Alto, CA: Stanford University Medical Center.

Myers, E. A. (1996). *Emotion regulation in couple relationships.* Unpublished manuscript, University of Montana, Missoula, Montana.

Myers, E. A., & Waltz, J. (1997). *Emotion regulation in couple relationships.* Paper presented at the annual meeting of the Rocky Mountain Psychological Association, Reno, NV.

Pipp, S., & Harmon, R. J. (1987). Attachment as regulation: A commentary. *Child Development, 58,* 648-652.

Pistole, M. C. (1989). Attachment in adult romantic relationships: Style of conflict resolution and relationship satisfaction. *Journal of Social and Personal Relationships, 6,* 505-510.

Rholes, W. S., Simpson, J. A., & Stevens, J. G. (1998). Attachment orientations, social support, and conflict resolution in close relationships. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships (*pp. 166-188). New York, NY: Guilford.

Roger, D., & Najarian, B. (1989). The construction and validation of a new scale for measuring emotion control. *Journal of Personality and Individual Differences, 10,* 845-853.

Rusbult, C. E., Zembrodt, I. M., & Gunn, L. K. (1982). Exit, voice, loyalty, and neglect: Responses to dissatisfaction in romantic involvements. *Journal of Personality and Social Psychology, 43,* 1230-1242.

Saarni, C. (1990). Emotional competence: How emotions and relationships become integrated. In R. Thompson (Ed.), *Nebraska Symposium on Motivation: Socioemotional development (Vol. 36)* (pp. 115-182). Lincoln: University of Nebraska Press.

Sanford, K. (1997). Two dimensions of adult attachment: Further validation. *Journal of Social and Personal Relationships, 14,* 133-143.

Scharfe, E., & Bartholomew, K. (1994). Reliability and stability of adult attachment

patterns. *Personal Relationships, 1,* 23-44.

Shackelford, T. K., & Buss, D. M. (1997). Marital satisfaction in evolutionary psychological perspective. In R. J. Sternberg & M. Hojjat (Eds.), *Satisfaction in close relationships* (pp. 7-25). New York, NY: Guilford.

Shaver, P. R., & Brennan, K. A. (1992). Attachment styles and the "Big Five" personality traits: Their connections with each other and with romantic relationship outcomes. *Personality and Social Psychology Bulletin, 18,* 536-545.

Shaver, P. R., Collins, N., & Clark, C. L. (1996). Attachment styles and internal working models of self and relationship partners. In G. J. O. Fletcher & J. Fitness (Eds.), *Knowledge structures in close relationships: A social psychological approach* (pp. 25-61). Mahwah, NJ: Erlbaum.

Shaver, P. R., & Hazan, C. (1988). A biased overview of the study of love. *Journal of Social and Personal Relationships, 5,* 474-501.

Shaver, P. R., & Hazan, C. (1993). Adult romantic attachment: Theory and evidence. *Advances in Personal Relationships, 4,* 29-70.

Shaver, P. R., Hazan, C., & Bradshaw, D. (1988). Love as attachment: The integration of three behavioral systems. In R. J. Sternberg & M. L. Barnes (Eds.), *The psychology of love* (pp. 68-99). New Haven, CT: Yale University Press.

Shaver, P. R., Papalia, D., Clark, C. L., Koski, L. R., Tidwell, M. C., & Nalbone, D. (1996). Androgyny and attachment security: Two related models of optimal personality. *Personality and Social Psychology Bulletin, 22,* 582-597.

Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology, 59,* 971-980.

Simpson, J. A., & Rholes, W. S. (1994). Stress and secure base relationships in adulthood. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships, Vol. 5* (pp. 181-204). Bristol, PA: Jessica Kingsley.

Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology, 62,* 434-446.

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Sex and Marital Therapy, 5,* 15-28.

Sperling, M. B., & Berman, W. H. (1994). *Attachment in adults: Clinical and developmental perspectives.* New York: Guilford.

Sroufe, L. A., & Waters, E. (1977). Attachment as an organizing construct. *Child Development, 48,* 1184-1199.

Stevenson-Hinde, J., & Hinde, R. (1990). Attachment: Biological, cultural and individual desiderata. *Human Development, 33,* 62-72.

Stone, A. A., & Neale, J. M. (1984). New measure of daily coping: Development and preliminary results. *Journal of Personality and Social Psychology, 46,* 892-906.

Surrey, J. (1985). *The "self in relation": A theory of women's development* (Work in Progress, No. 13). Wellesley, MA: Stone Center, Wellesley College.

Van Ijzendoorn, M. H., & Bakermans-Kranenburg, M. J. (1997). Intergenerational transmission of attachment: A move to the contextual level. In L. Atkinson & K. J. Zucker (Eds.), *Attachment and psychopathology* (pp. 135-170). New York, NY: Guilford.

Watson, M., & Greer, S. (1983). Development of a questionnaire measure of emotional control. *Journal of Psychosomatic Research, 27,* 299-305.

Weiss, R. S. (1982). Attachment in adult life. In C. M. Parkes & J. Stevenson-Hinde (Eds.), *The place of attachment in human behavior* (pp. 171-184). New York: Basic Books.

Weiss, R. S. (1991). The attachment bond in childhood and adulthood. In C. M. Parkes, P. Marris, & J. Stevenson-Hinde (Eds.), *Attachment across the life cycle* (pp. 66-76). New York: Routledge.

West, M. L., & Sheldon-Keller, A. E. (1994). *Patterns of relating: An adult attachment perspective.* New York: Guilford.