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RELATIONS OF CONCORDANT AND DISCORDANT PARENT-ADULT ATTACHMENT STYLES TO ADULT PSYCHOLOGICAL AND RELATIONSHIP ADJUSTMENT

By

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ABSTRACT

RELATIONS OF CONCORDANT AND DISCORDANT
PARENT-ADULT ATTACHMENT STYLES TO
ADULT PSYCHOLOGICAL AND RELATIONSHIP ADJUSTMENT

By

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This study adopts Bowlby's attachment theory as a framework for research on adult relationships with parents. The purpose of this study was to investigate the relationship of adult attachment styles with both parents, considered jointly, to adult college students' psychological and relationship adjustment. This study used a recently developed and validated self-report measure to assess adult attachment styles with mothers and with fathers. Based on responses to the attachment measure, respondents were grouped into one of the following parent-adult attachment style groups: concordant secure (secure attachment styles with both parents), concordant insecure (insecure attachment styles with both parents), and discordant (secure attachment style with only one parent). Results indicated that parent-adult attachment style groups were related to romantic relationship adjustment, but were not related to adult psychological adjustment (psychological symptoms and coping strategies). Post hoc analyses indicated that factor-

analytically derived dimensions of Healthy and Unhealthy Functioning may have provided more sensitive adjustment indexes than did the a priori separation of dependent variables into psychological and romantic relationship adjustment domains. Furthermore, these dimensions were related in theoretically consistent ways to parent-adult attachment style groups. The implications of these and other findings are discussed.

I dedicate this work to my parents, Bernard and Regina Narusis.

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CHAPTER I

INTRODUCTION

Individuation from parents, which is normally achieved by adults, does not result in a cessation of attachments to parents (Franz & White, 1985; Kenny & Rice, 1995). In fact, most adults maintain meaningful relationships with their parents throughout life, even though their parents fulfill a different role than they did in childhood (Ainsworth, 1989; Cicirelli, 1986; Grotevant & Cooper, 1986; Weiss, 1982). Despite the emergent recognition of the life-long importance of the parent-offspring relationship, we have little systematic knowledge of its nature. The two principal founders of attachment theory have acknowledged the lack of research and have encouraged further research on parent-offspring attachment throughout the life span (Ainsworth, 1989; Bowlby, 1988a). The primary aim of this study was to extend the research in attachment theory by examining whether differences in adult attachment styles with parents, considered jointly, are related to differences in adult psychological and relationship adjustment. This study's purpose is relevant to counseling psychologists given that the majority of services provided at university counseling centers are related to relationship and psychological adjustment (Annual Data Bank, 1988; Eurelings-Bontekoe, Diekstra & Verschuur, 1995; Gallagher, 1987).

A critical mass of studies show that underlying dimensions (e.g., care, overprotection, trust, alienation) of attachment relationships with parents, past and present, are linked to adolescent and young adult psychological adjustment (Armsden & Greenberg, 1987; Armsden, McCauley, Greenberg, Burke, & Mitchell, 1990; Kenny & Donaldson, 1991; Lapsley, Rice, & Fitzgerald, 1990; Papini, Roggman, & Anderson, 1991; Rice; 1990; Sessa & Holmbeck, 1989). Another body of literature indicates that adult accounts of childhood attachment dimensions (e.g., care, overprotection) with parents are associated with attachment styles in intimate relationships (Carnelley & Janoff-Bulman, 1992; Carnelley, Pietromonaco, & Jaffe, 1994; Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987) which, in turn, are associated with romantic relationship adjustment (Collins, 1991; Kirkpatrick & Davis, 1994; Koback & Hazan, 1991; Levy & Davis, 1988; Simpson, 1990).

Although there are well-established links between attachment dimensions with parents and adult psychological and relationship adjustment, there are some critical gaps and weaknesses in the literature. First, many studies use adult accounts of childhood attachment bonds with parents as the sole aspect of adult attachment relationships with parents (e.g., Carnelley et al., 1994; Collins & Read, 1990; de Ruiter & van IJzendoorn, 1992; Feeney & Noller, 1990; Hazan & Shaver, 1987; Torgensen & Alnaes, 1992). However, recent research indicates that retrospective accounts of early attachment relationships with parents do not adequately capture the quality of the current, adult relationship between parent and offspring, and that later life attachment relationships may be better predictors of adult adjustment (Carnelley et al., 1994; Egeland, Jacobvitz, & Sroufe, 1988; Main, Kaplan, & Cassidy, 1985; Pearson, Cohn, Cowan, & Cowan, 1994;

Rutter, Quinton, & Hill, 1990). Current parent-adult attachment styles may tap into an important source of variation in parent-adult relationships that is not captured by retrospective reports of earlier bonds between the parents and child.

Second, the research has paid scant attention to the possibility that adults can have different attachment relationships with each parent. In fact, most studies conceptualize and measure attachment styles in the context of intimate/close relationships, based on the assumption that attachment style is a personality construct, consistent across close relationships (e.g., mother, father, romantic partners). However, recent research calls this assumption into question (Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Main & Weston, 1981; Trinke & Bartholomew, 1995). Two studies found that a significant portion of young adults reported discordance in their attachment relationships with each parent (Baldwin et al., 1996; Trinke & Bartholomew, 1995). For instance, 34% of one sample reported different attachment styles in the relationship with mother than with father (Baldwin et al., 1996).

Third, the research has overlooked the associations of concordant and discordant attachment styles with parents to adult adjustment. It is possible that adults integrate attachment relationships with each parent into a parental subsystem (van IJzendoorn, Sagi, & Lambermon, 1992) or a larger attachment hierarchy (Collins & Read, 1994) which is more predictive of psychological and relationship adjustment than the attachment relationship with either parent. And, it is possible that adults who have secure attachment styles with both parents (concordant secure attachment style) differ in psychological and relationship adjustment from adults who have insecure attachment styles with one or both parent(s) (discordant attachment styles or concordant insecure attachment styles). Infant

and childhood attachment research indicate that secure attachment styles with each parent result in a qualitatively superior relationship configuration than do discordant or concordant insecure ones (Main & Weston, 1981; van IJzendoorn et al., 1992). This research precedent offers indirect support for the notion that adults who report concordant secure parent-adult attachment styles may be best positioned to experience healthy psychological and relationship functioning.

Fourth, more research attention is needed on the role of background variables, especially respondents' gender and parental divorce, in parent-adult attachment relationships. Research indicates that attachment relationships may be more predictive of adult outcomes for women than for men (e.g., Berman & Sperling, 1991; Kenny & Donaldson, 1991; Rice, 1993) and that parental divorce may influence the quality of attachment relationships with parents, especially fathers, in adulthood (e.g., Black & Pedro-Carroll, 1993; Lopez, Campbell, & Watkins, 1989; Parish & Wigle, 1985).

In anticipation of the proposed study, a pilot study was conducted to validate a novel measure of (current) parent-adult attachment styles. The measure was designed tap an important source of variation in parent-adult attachment relationships that is not captured by retrospective reports of earlier bonds or by more generic measures of relationship quality and satisfaction. The measure was found to have adequate test-retest reliability and construct validity. In addition, 32% of the pilot sample reported having a different attachment style with their mother than with their father. The data also indicated that individuals who reported secure attachment styles with both parents reported higher levels of self-esteem than those who reported insecure attachment styles with one or both

parent(s). This preliminary finding suggests that adults' attachment styles with their parents, considered jointly, may predict important aspects of adult adjustment.

Definition of Terms: Main Study

Parent-adult attachment style group. In the main study, parent-adult attachment styles were considered in light of three groups: concordant secure attachment styles (secure attachment styles with both parents), concordant insecure attachment styles (insecure attachment styles with both parents), and discordant attachment styles (secure attachment style with only one parent).

Psychological adjustment. Psychological adjustment was considered in terms of a composite score based on self-reported coping strategies and psychological distress/symptoms.

Romantic relationship adjustment. Romantic relationship adjustment was defined as the self-reported quality of the romantic relationship, in terms of affectional expression, dyadic cohesion, dyadic consensus, and dyadic satisfaction (Spanier, 1976).

Problem Statement

The primary purpose of this study was to investigate the relationships between adults' current attachment styles with both parents, considered jointly, and broad measures of adult adjustment. This study (1) used a recently developed and validated self-report instrument to assess adult attachment style with mothers and with fathers, (2) based on responses to the attachment measure, categorized respondents into one of the following parent-adult attachment style groups: concordant secure, concordant insecure, and discordant, (3) identified how parent-adult attachment style groups relate to adult psychological adjustment, (4) identified how parent-adult attachment style groups relate to

romantic relationship adjustment, (5) identified the relationship between parent-adult attachment style groups and parental marital status, and (6) identified the relationships among parent-adult attachment style groups, respondents' gender, and psychological/relationship adjustment.

This study has relevance to counseling practice. Identification of the parent-adult attachment style groups which contribute most importantly to adult adjustment will assist counselors in their efforts to promote healthy adjustment. For instance, affirmative results would underscore the importance of assessing adult attachment styles with both parents in a standard assessment battery. In addition, affirmative results would suggest that counselors should address attachment relationships with both parents in the treatment of romantic relationship and psychological adjustment problems. This study also has relevance to theory development. The study's results will provide new information on the nature of adults' attachment styles with their parents. And, support for the study's hypotheses would strengthen the theoretical argument that attachment is best conceptualized as a relationship construct, and therefore should be measured accordingly. In that case, new directions would become available for research on attachment relationship networks (van IJzendoorn et al., 1992) or hierarchies (Collins & Read, 1994) in adult life.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter reviews select portions of adult attachment literature to provide a rationale for the study of the relationship between adults' current attachment style with both parents, considered jointly, and adult adjustment. Initial sections introduce basic concepts in attachment theory: internal working models, attachment styles, and adult attachment. Following that are rationales for the study of current adult attachment styles with parents, considered jointly. The next two sections critically review contemporary literature regarding the relationship between parent-adult attachment relationships and adult psychological adjustment (psychological symptoms and coping strategies) and between adult attachment relationships and romantic relationship adjustment. Next, is a discussion of the relationship between parental divorce and parent-adult relationship quality. Following a summary and critique of the literature, a pilot study that validated a novel measure of parent-adult attachment style will be described. The chapter concludes with a discussion of the research questions and hypotheses suggested by the review and examined in this dissertation.

Attachment Theory

Attachment theory is the result of the collaborative work of John Bowlby and Mary Ainsworth (Ainsworth & Bowlby, 1991). John Bowlby formulated the basic tenets of the theory (Bowlby, 1973, 1979, 1980, 1982, 1988a); Mary Ainsworth investigated

and expanded the theory's tenets through her empirical research (e.g., Ainsworth, 1967; Ainsworth, Blehar, Waters, & Wall, 1978). The central tenet of attachment theory is that humans are innately programmed to form and maintain *attachments*, or enduring affectional bonds, with others.

Historically, attachment theory has focused on infant attachment with parents and its influence on early personality development. A critical mass of empirical studies found that attachments with parents are associated with important aspects of psychological and relationship adjustment throughout childhood (Egeland & Farber, 1984; Erickson, Sroufe, & Egeland, 1985; Lamb, 1977; Main & Weston, 1981; Matas, Arend, & Sroufe, 1978; Sroufe, 1988; Waters, Whippman, & Sroufe, 1979). Recently, attachment theory and research have been extended to adult development and adjustment (Ainsworth, 1989; Bowlby, 1988a; Hazan & Shaver, 1987, 1994; Shaver & Hazan, 1993).

Internal working models. Bowlby claimed that the infant's early attachment experiences gradually develop into an internalized set of beliefs, called *internal working models*, which actively organize perceptions and shape behavior. He suggested that these models are composed of two, interdependent representations of attachment-related events: 1) the view of other, namely whether the attachment figure is reliable and dependable, and 2) the view of self, namely whether the self is the sort of person toward whom others are likely to be helpful (Bowlby, 1973).

Working models of attachment are secure when an individual expects psychological availability from others, views the self as worthy of positive treatment from others, and behaves in ways that are consistent with those beliefs. Bowlby (1980) believed that secure working models of attachment promote psychological well-being, adaptive

coping, and healthy relationships. Working models of attachment are insecure when an individual expects neglect, rejection, or unreliability in significant relationships, views him/herself as unworthy of positive treatment from others, and behaves in ways that are consistent with either or both of those beliefs. Bowlby (1980) claimed that insecure working models of attachment are likely to interfere with healthy psychological and relationship adjustment.

Attachment styles. Mary Ainsworth (1967, 1982) and her colleagues (Ainsworth et al., 1978) developed the original typology of infant attachment styles. Much of the research on adult attachment is an extension and elaboration of their typology. Ainsworth and her colleagues assessed individual differences in infant attachment relationships by using the *strange situation*, an experimental procedure involving infants and their mothers, designed to activate the attachment system and its related behaviors. The procedure was based on the assumption that attachment is a relationship construct, not a personality construct. As such, attachment was thought to be unique to each infant-caregiver relationship.

Based on the infants' responses to the procedure, Ainsworth et al. (1978) identified three distinct styles of attachment in infant relationships: secure, anxious-ambivalent, and avoidant. Each attachment style was presumed to represent a distinct working model of the self and of others (attachment figure) (Main et al., 1985). The modal group of infants displayed *secure* attachment. These infants showed signs of distress when the mother left the room, were comforted by her return, and engaged in active exploration in the mother's presence. The group with an *anxious-ambivalent* attachment style attempted to keep the mother close and attentive by displaying intense

signs of protest, anxiety, and anger. On one hand they sought contact and proximity, while, on the other hand, they appeared resistant and angry following reunion episodes. The group with an *avoidant* attachment style appeared to be detached from their mothers. They focused their attention on objects in the environment, showed minimal signs of distress with separation, and seemed unresponsive to the mother following reunions.

Hazan and Shaver (1987) pioneered the extension of the infant attachment typology to the consideration of adult attachment relationships. They postulated that romantic love is an attachment process in which the bond formed between romantic partners is parallel to that formed between parent and child. They created a self-report measure of adult attachment styles in intimate/close relationships by translating infant attachment styles into analogous adult attachment styles. Unlike Ainsworth et al. (1978), Hazan and Shaver conceptualized attachment styles as a personality construct. Their assumption was that attachment styles would be consistent across an individual's close relationships. In their typology, people, not relationships, are considered to be either secure, ambivalent, or avoidant. Studies using the Hazan and Shaver measure have provided validity for adult manifestations of Ainsworth et al.'s infant typology (e.g., Carnelley et al., 1994; Collins & Read, 1990; Feeney & Noller, 1990). Until recently the majority of research on adult attachment styles used the Hazan and Shaver typology and measure.

In Hazan and Shaver's (1987) typology, a *secure* attachment style is characterized by comfort with intimacy and an ability to place trust in others, an *ambivalent* attachment style (analogous to the anxious-ambivalent infant attachment style) is characterized by a desire to merge with others coupled with a fear of abandonment, and an *avoidant*

attachment style is characterized by discomfort with closeness, interdependency, and trust in relationships.

Bartholomew (1990) proposed an alternative typology for adult attachment styles, which Hazan and Shaver (1994) now support. Like Hazan and Shaver (1987), Bartholomew conceptualized adult attachment as a personality construct. Bartholomew proposed a two dimensional model of adult attachment "in close relationships", based on Bowlby's working model construct: view of self and view of others. The self and other dimensions represent, respectively, expectations about the worthiness of the self and the availability of others. She proposed that the two dimensions result in a four category attachment style model: secure (positive self and other), preoccupied (negative self, positive other), dismissive (positive self, negative other), and fearful (negative self and other). The *secure* attachment style is characterized by a sense of self-worth and a comfort with interpersonal relationships. The *preoccupied* attachment style is characterized by a sense of unworthiness, coupled with a strong desire for closeness in relationships. The preoccupied attachment style is analogous to Hazan and Shaver's ambivalent style. The model differentiates the avoidant attachment style in Hazan and Shaver's model into two distinct styles: dismissing and fearful. The *fearful* attachment style is characterized by a sense of unworthiness coupled with distrust in others and an avoidance of intimacy. The *dismissive* attachment style is characterized by a sense of worthiness and avoidance of intimacy.

The three- and four-category typologies of adult attachment in intimate/close relationships have produced inconsistent findings on gender differences (Shaver & Hazan, 1993). No significant gender differences in the distribution of respondents across adult

attachment style categories have been found when Hazan and Shaver's (1987) three-group model of attachment style was employed (Brennan & Shaver, 1993; Feeney & Noller, 1990; Hazan & Shaver, 1987). However, gender differences have been found when Bartholomew's (1990) four-category model of adult attachment was used. One study found that more females than males report a fearful attachment style, whereas more males than females report a dismissive attachment style (Brennan, Shaver, & Tobey, 1991). Another study found females receive higher ratings than males on an interview-based preoccupied rating, whereas males receive higher ratings that females on an interview-based dismissive rating (Bartholomew & Horowitz, 1991). Other studies, however, did not find gender differences across the four-category model of attachment styles (Kunce & Shaver, 1994; Lopez et al., 1997). The relationship between respondent's gender and adult attachment styles with parents needs to be investigated in view of the inconsistent findings with regard to gender differences across attachment styles in intimate/close relationships and because gender differences across parent-adult attachment styles have not been investigated.

Adult attachment. Weiss (1982) noted that, across the lifespan, attachment relationships meet three criteria: 1) a desire for closeness to the attachment figure, especially when distressed, 2) a sense of security derived from contact with the attachment figure, and 3) distress or protest when separated from the attachment figure. In addition, Weiss noted three important differences between childhood and adult attachment relationships. First, adult attachment can occur with attachment figures that are equals or peers and for whom the individual is capable of reciprocating care, whereas infant attachments occur with individuals that are "stronger and wiser" and for whom the infant

is not capable of reciprocating care (Hazan & Shaver, 1994). Second, adult attachment is not dominant over other behavioral systems, such as caregiving and feeding. In infancy, attachment threats effectively shut down other behavioral systems, pending resolution of the distress. Adults, however, are able to address other relationships and concerns despite threats to attachment. Third, healthy adult attachments, but not infant attachments, can be derived from a relationship that is sexual in nature.

Parents meet Weiss' criteria for adult attachment figures. Adult children often desire access to their parents, seek their support when distressed, and feel anxious or sad when separated from them. In addition, adults are likely to view their parents as equals in many ways and, in fact, may provide support and care for their parents. It is also likely that adults' attachment with parents is not so dominant as to prevent healthy functioning of other behavioral systems such as caregiving and sexual mating with a romantic partner.

Attachment with Parents Considered Jointly

A replicated finding in the infant attachment literature is that infants have different attachment styles in different relationships (Goossens & van IJzendoorn, 1990; Lamb, 1977; Main & Weston, 1981). However, that possibility has received scant attention in the adult attachment literature. The adult attachment literature generally assumes continuity of attachment style across relationships. However, recent research indicates that the assumption of continuity across relationships may be faulty (Baldwin et al., 1996; Trinke & Bartholomew, 1995). Baldwin et al. (1996) found evidence of multiple attachment styles in a college-aged sample (median age = 19). Specifically, when asked to identify their attachment style(s) in ten important relationships, 88% of their college-aged sample listed relationships corresponding to two of the three attachment styles and 47%

listed relationships corresponding to all three attachment styles. Thus, most young adult respondents experienced multiple attachment styles in their significant relationships. In addition, the data showed poor overlap between attachment style in intimate/close relationships (attachment measured as a personality trait) and attachment styles in any one relationship. Specifically, forty-one percent of the sample reported a different attachment style in "close relationships" than their attachment style with their mother. Forty-six percent of the sample reported a different attachment style in "close relationships" than their attachment style with father. And, for 33% of the respondents there was discordance between attachment style in "close relationships" and attachment style with a romantic partner. Similar findings were observed in the pilot study that will be described in a later section.

Baldwin et al.'s (1996) finding that most adults exhibit multiple attachment styles in their close relationships has far-reaching implications. Specifically, the finding challenges the assumption prevalent in the adult attachment literature that attachment is a personality construct and prompts new research questions about the interrelatedness of multiple attachment relationships. For instance, do adults integrate some attachment relationships into systems (e.g., parental, sibling, peer) which are part of a larger hierarchy or network (Collins & Read, 1994; van IJzendoorn et al., 1992)? Is the overall quality of an attachment system more predictive of socio-emotional adjustment than any one attachment relationship? And, more specifically, do attachment styles with parents, considered jointly, have any bearing on adult relationship adjustment or psychological adjustment? Do those who have concordant secure attachment styles with parents (secure attachment styles with both parents) differ from those who have concordant insecure

attachment styles with parents (insecure attachment styles with both parents) in terms of psychological and relationship adjustment? And, does either group differ from those who have discordant attachment styles with parents (secure with one parent, insecure with the other parent) in terms of psychological and relationship adjustment?

Infant attachment research provides a precedent for the study of adult attachment style with parents, considered jointly. In their study of infants and parents, Main and Weston (1981) found discordance of mother-infant and father-infant attachment style. In addition, they observed that children with a secure relationship with both parents showed the most readiness to establish new relationships, whereas children with insecure relationships with each parent showed the least, and those with a secure relationship with one parent but not the other fell somewhere in the middle. They concluded that different attachment relationships can be formed with each parent and that the "effects" of an insecure attachment with one parent can be mitigated by a secure attachment with the other parent. Like Main and Weston (1981), van IJzendoorn et al. (1992) found, in their longitudinal, cross-cultural study of infant and childhood attachment relationships, that a child benefits most from secure attachment styles with both parents, least from insecure attachment styles with both parents, and moderately from discordant attachment styles with parents. In addition, they found that the combination of infant-mother and infant-father attachments, but neither of the separate attachment relationships, was predictive of later cognitive and socio-emotional adjustment (resilience, goal direction, independence). These findings underscore the importance of studying conjoint attachment styles with parents as a unit of analysis.

Current Attachment with Parents

Much of the work in adult attachment has been premised on the assumption of continuity between attachment experiences in childhood and later adult attachment (e.g., Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987). With the continuity of working models over time as their rationale, many researchers have assessed attachment in adulthood via retrospective accounts of the parent-child relationship (Carnelley et al., 1994; Collins & Read, 1990; de Ruiter & van IJzendoorn, 1992; Feeney & Noller, 1990; Greenberger & McLaughlin, 1993; Hazan & Shaver, 1987; Parker, 1983; Sarason, Sarason, & Shearin, 1986; Torgensen & Alnaes, 1992).

A number of investigators have questioned the assumption of continuity prevalent in the adult attachment literature, primarily because it has not been investigated in an adult population (Hendrick & Hendrick, 1994; Main et al., 1985; Sroufe, 1988). Based on attachment theory, these researchers have argued that the "effects" of childhood attachment relationships on adult adjustment are indirect and mediated by later, adult attachment relationships. To further buttress this argument, they underscore Bowlby's belief that in times of dramatic change, such as the beginning or ending or a romantic relationship or a significant life transition, working models of attachment can be modified in response to new information about the self and the other. Bowlby referred to this as revising or "updating" the working model (Bowlby, 1988a).

The findings of several studies indicate that later life adult relationships, whether they be with a therapist or a mate, have the potential to allay psychological or relationship problems that may have been due to insecure childhood attachments with parents (Carnelley et al., 1994; Egeland et al., 1988; Main et al., 1985; Pearson et al., 1994). In

fact, Carnelley et al. (1994) wrote: "...adult working models may be more powerful predictors (of adult relationship adjustment) because they are likely to incorporate not only early childhood experiences but also later experiences with attachment figures..."(p.137).

Two recent prospective studies provide support for the notion that attachment models can change in adolescence and adulthood. In a follow up study of 44 adolescents, Zimmerman (cited in van IJzendoorn, 1995) found that attachment measured in childhood was not related to attachment measured in adolescence. The majority of the variance in adolescent attachment style was explained by life events, such as parental divorce, parental illness, and parental support. Rutter et al. (1990) conducted a follow-up study of adult males who had been institutionally reared in childhood, due to extreme, chronic family breakdown. They found that there was a marked variance in adult psychosocial adjustment within the sample, and that negative effects of adverse childhood experiences could be mitigated later in life by healthy relationships.

Based on the foregoing, retrospective accounts of early attachment relationships may not capture the quality of the current, adult relationship between parent and child. These findings underscore the importance of studying parent-adult attachment style in terms of the current relationship.

Adult Attachment and Psychological Adjustment

Attachment theory proposes that the nature and quality of attachment relationships are the source of an individual's "resilience or vulnerability to stressful life events" (Bowlby, 1988b, p.8). Bowlby (1988a) claimed that secure attachments promote adaptive

coping and psychological well-being. The following sections will review the empirical research related to Bowlby's claim.

Attachment and psychological functioning. There is accumulating evidence of a link between underlying dimensions of attachment relationships with parents and psychological functioning in adolescent and adult populations. A number of studies have used the Parental Bonding Instrument (PBI; Parker et al., 1979) to examine adolescents' and adults' retrospective accounts of early attachment experiences with mothers and with fathers. The PBI has two scales: care, which measures parental responsiveness and warmth, and overprotection, which measures parental intrusiveness. Secure attachments are indicated by high care and low overprotection scores on the PBI. In studies of psychiatric clients, low levels of parental care coupled with high levels of parental overprotection were positively associated with psychiatric disorders such as depression, anxiety, agoraphobia, and borderline personality disorder (de Ruiter & van IJzendoorn, 1992; Parker; 1983; Parker et al., 1979; Torgensen & Alnaes, 1992). College students who reported that their mothers and fathers provided high levels of care in childhood reported high self-esteem, strong social support, and healthy interdependency later in life, whereas students who reported high levels of overprotection by mothers and fathers in childhood reported high levels of depressive symptoms and an external locus of control later in life (Flaherty & Richman, 1986; Richman & Flaherty, 1987; Sarason et al., 1986).

Another group of studies examined the association between underlying dimensions of current attachment relationships with parents and psychological functioning. Results found via this measurement approach were similar to the results found in the literature examining retrospective accounts of early attachment relationships with parents.

Adolescents who were less secure in their attachments with parents (measured as the parental couple), as measured by their report of trust, communication, and alienation, reported higher incidences of depressive symptoms, maladaptive attributional styles, anxiety disorder, and suicidal ideation than their more secure peers (Armsden et al., 1990; Papini et al., 1991). Conversely, adolescents and young adults who were more secure in their attachments with parents (measured as the parental couple) reported higher levels of self-esteem, social support, life satisfaction, college adjustment, and social identity than their less secure peers (Armsden & Greenberg, 1987; Lapsley et al., 1990; Papini et al., 1991; Rice, 1993). Bradford and Lyddon (1993) found that college students' report of alienation, trust, and communication with parents (measured as the parental couple) accounted for approximately 24% of the variance in reported psychological distress. The researchers noted that the results of the study highlight the importance of college students' attachment bonds with parents, especially in regards to students' responses to the developmental tasks associated with the college experience.

Several studies extended the research by investigating the associations among recalled childhood attachment experiences with parents, adult attachment relationships, and adult psychological functioning. As a whole, these studies found that adult attachment relationships, whether they be with a therapist, parent, or romantic partner, have the potential to ameliorate mental illness (Rutter et al., 1990), depression (Pearson et al., 1994), irrationality of discourse (Main et al., 1985), and perpetration of child abuse (Egeland et al., 1988) that may have been due to insecure childhood attachments with parents.

Rice (1990) conducted a meta-analytic review of 28 empirical studies on the relationship between parental attachment and psychological functioning in adolescence and young adulthood. The studies included in the meta-analysis conceptualized and measured attachment in a variety of ways. Rice found that the average strength of relationship between parental attachment and psychological adjustment was modest, but not significant. It is important to note two points when interpreting this finding. First, only three of the aforementioned studies were included in Rice's meta-analysis (Armsden & Greenberg, 1987; Lapsley et al., 1990; Richman & Flaherty, 1987). Second, many studies conducted since Rice's have found significant, positive associations between parental attachment and psychological adjustment in adolescent and young adult samples (e.g., Armsden et al., 1990; Papini et al., 1991; de Ruiter & van IJzendoorn, 1992; Rice, 1993).

In summary, a number of studies show that underlying dimensions of secure attachment relationships with parents are associated with measures of psychological well-being. The research also shows that current dimensions of adult attachment relationships with parents are more predictive of psychological adjustment than are retrospective accounts of early attachment dimensions with parents. What has not been studied in this line of research is the relationship between current parent-adult attachment styles and psychological functioning and the impact of mother- and father-adult attachment styles, considered jointly, on psychological functioning.

Attachment and coping. Bowlby believed that secure attachment relationships foster the development of adaptive coping skills (Bowlby, 1980, 1988a, 1988b). Individuals who have secure attachment relationships are expected to have an enhanced ability to cope adaptively with internal and environmental stressors because of their strong

sense of self worth. In addition, individuals with secure attachment relationships are likely to appropriately place trust in others, thereby enhancing their resources for coping with distress.

One study examined the relationship between current parental attachment dimensions and coping in a college student population (mean age = 18 years) (Brack, Gay, & Matheny, 1993). Consistent with Bowlby's theory, the results indicated that secure parent-adult attachment relationships are associated with adaptive coping strategies. In addition, the data indicated that different types of coping strategies were associated with secure mother-adult and/or father-adult attachment relationships. Specifically, self-direction, confidence, and physical health predicted underlying dimensions of a current, secure attachment relationship with mothers, and self-disclosure, social support, and problem solving predicted underlying dimensions of current, secure attachment relationships with mothers and fathers.

Additional, albeit indirect, support for a link between parent-adult attachment style and coping is demonstrated in studies which have found relationships between attachment styles in intimate/close relationships (attachment style measured as a personality trait) and coping strategies. Generally these studies have found that attachment style predicts the use of specific coping strategies. People who report a secure attachment style in intimate/close relationships tend to use more positive and constructive coping strategies than do people who report insecure attachment styles (Greenberger & McLaughlin, 1993; Lopez, 1996; Lussier, Sabourin, & Lambert, 1994; Lussier, Sabourin, & Turgeon, 1997; Mayseless, Danieli, & Sharabany, 1996). When experiencing distress, people with a secure attachment style in intimate/close relationships tend to use support-seeking

strategies (Bartels & Frazier, 1991; Blain, Thompson, & Whiffen, 1993; Mikulincer Florian, & Weller, 1993; Simpson, Rholes, & Nelligan, 1992), effective emotional modulation, (Kobak & Hazan, 1991), and appropriate self-disclosure (Mikulincer & Nachshon, 1991). When coping with separation, they tend to persevere with the separation process while relying on romantic partners and others for support (Mayseless et al., 1996).

People with an ambivalent attachment style in intimate/close relationships appraise themselves as less capable of adaptive coping than people with a secure attachment style (Mikulincer & Florian, 1995; Mikulincer et al., 1993). In addition, individuals with an ambivalent attachment style in intimate/close relationships report greater stress and anxiety when coping with relationship problems. When experiencing conflict, individuals with this adult attachment style, more so than people with a secure style, oblige their partner (Pistole, 1989) and appraise their relationships less positively (Simpson, Rholes, & Phillips, 1996).

People with an avoidant attachment style in intimate/close relationships use less support seeking than people with a secure attachment style (Mikulincer & Florian, 1995; Mikulincer et al., 1993; Simpson et al., 1992). In addition, they use strategies to avoid or displace the stress, as evidenced by higher levels of somatization, denial, and hostility (Mikulincer et al., 1993).

Lussier et al. (1994) and Lussier et al.'s (1997) studies merit special mention, given that they used the Coping Inventory for Stressful Situations (CISS: Endler & Parker, 1990), which was used in the present study to assess coping strategies. The CISS has scales that assess task-, emotion-, and avoidance-oriented coping. Task-oriented

coping includes strategies designed to reconceptualize a problem or to solve it. Emotion-oriented coping includes strategies such as self-preoccupation, daydreaming, or emotional regulation responses. Previous studies on coping found that emotion-oriented coping is positively associated with various measures of psychopathology and task-oriented coping is negatively associated or unrelated with various measures of psychopathology (Endler & Parker, 1990; Endler, Parker, & Butcher, 1993). Avoidance-oriented coping includes two distinct strategies (and subscales): distraction, engaging in a substitute task, and social diversion, seeking social support.

In their study of college students (mean age = 18 years), Lussier et al. (1994) found positive correlations between a secure attachment style in intimate/close relationships (measured as a personality trait) and task- and avoidance-oriented coping and between insecure attachment styles and emotion-oriented coping. In their study of married couples (mean age = 38), Lussier et al. (1997) study found positive correlations between a secure attachment style in intimate/close relationships (measured as a personality trait) and task-oriented coping and between insecure attachment styles and emotion- and avoidance-oriented coping. Thus, Lussier et al.'s (1997) results differed from those of Lussier et al. (1994) in regards to the association between avoidance-oriented coping and attachment styles. Lussier et al. (1997) offered no explanation for the discrepancies between the two studies. Either finding is plausible given that the avoidance-oriented coping scale is comprised of two subscales that assess different constructs: social diversion and distraction. Unfortunately, because neither study reported distraction and social diversion subscale scores of the avoidance scale, it is not possible to ascertain the degree to which each subscale contributed to the findings.

One study extended this line of research by comparing the relative ability of early attachment dimensions with parents and current attachment dimensions in intimate/close relationships to predict global constructive thinking, or the ability to solve life problems with minimum stress, with a college population (mean age = 24 years) (Lopez, 1996). The association between retrospective accounts of childhood attachment dimensions with parents (care and overprotection) and global constructive thinking was mediated by current attachment dimensions in intimate/close relationships. This finding supports the claim that adult attachment relationships can mitigate the negative effects of insecure early attachment relationships with parents.

In summary, this group of studies with college students indicates that attachment styles in intimate/close relationships are directly associated with the use of specific coping strategies and that early parental attachment dimensions are indirectly associated with the use of specific coping strategies. Specifically, secure attachment styles are associated with the use of adaptive coping strategies (e.g., task-oriented coping, support seeking, constructive thinking, self-disclosure) and insecure attachment styles are associated with less adaptive coping strategies (e.g., emotion-oriented coping, denial). However, there is a dearth of research on coping strategies and parental attachment with an adult population. Only two studies have examined the relationship between parental attachment relationships and adult coping strategies (Brack et al., 1993; Lopez, 1996). Neither study assessed current parent-adult attachment styles, per se, nor mother-adult and father-adult attachment styles, considered jointly. Further research is needed to clarify the relationship between current mother- and father- adult attachment styles, considered jointly, and coping strategies.

Gender differences. Studies have found gender-specific patterns regarding the association between attachment relationships with parents and psychological functioning (Berman & Sperling, 1991; Kenny, 1987, 1990; Kenny & Donaldson, 1991; Mallinckrodt, 1992; Papini et al., 1991; Rice, 1990, 1993). Rice (1993) found that attachment to parents was associated with academic adjustment for college males and social adjustment for college females. This finding is consistent with the gender socialization literature which suggests that, in current Western cultures, women are primarily socialized to value relationships whereas men are primarily socialized to value achievement (Gilligan, 1982; Maccoby, 1990; Miller, 1991). In their sample of undergraduate students, Kenny and Donaldson (1991) found that current parental attachment dimensions were related to the presence or absence of psychological symptoms and to the quality of social behavior among women, but not among men. In a few studies, women reported that their parents had a greater role in providing emotional support than did men (Kenny & Donaldson, 1991; Kenny, 1987, 1990). One study found that overly close parental attachments were actually psychologically harmful for males, but not females (Berman & Sperling, 1991). Taken together, these findings suggest that attachment relationships with parents may be more salient for women than for men. However, these studies need to be placed in the larger context of studies that did not find main gender differences in the parental attachment-adjustment relationship (e.g., Armsden & Greenberg, 1987; Lapsley et al., 1990; Pearson Cowan, Cowan, & Cohn, 1993; Shaver & Brennan, 1992; Torgensen & Alnaes, 1992) and in the context of other studies which glossed over gender effects in their data analysis (Kobak & Sceery, 1988; Lussier et al., 1994; Mikulincer & Orbach, 1995; Mikulincer et al., 1993). The role of gender differences in the association between

parent-adult attachment styles and psychological functioning is in need of further investigation.

The role of respondents' gender in the association between attachment relationships and coping styles likewise needs further research attention. Some studies found no gender differences (Bartels & Frazier, 1991; Brack et al., 1993; Simpson et al., 1996), others did not evaluate the effects of gender (Lussier et al., 1994; Mallinckrodt, 1992; Mikulincer & Florian, 1995; Mikulincer & Nachshon, 1991; Mikulincer et al., 1993), and some found significant gender differences. Greenberger and McLaughlin (1993) found that early parental attachments had a modest effect on coping strategies along gendered lines: secure attachments between fathers and sons were associated with a higher likelihood of coping by seeking emotional and instrumental support, whereas secure attachments between mothers and daughters were associated with a higher likelihood of coping by seeking emotional support. Blain et al. (1993) found that females perceived more social support from friends than did males. Kobak and Hazan (1991) found similar results with their married sample: husbands relied less on their wives for support than wives relied on their husbands for support. Because these findings are rather piecemeal, additional study is needed to clarify the interrelationships of gender, parent-adult attachment style, and various coping strategies.

Adult Attachment and Romantic Relationship Adjustment

Hazan and Shaver (1987) pioneered the application of attachment theory to adult romantic love. They argued that attachment styles in intimate/close relationships (measured as a personality construct) were a product of attachment relationships with parents established early in life. In their landmark study, they found that retrospective

accounts of childhood relationships with parents were associated with adult attachment styles in intimate/close relationships. Respondents who reported a secure attachment style in intimate/close relationships reported warm relationships with parents in childhood, whereas those who reported an avoidant or ambivalent attachment style in intimate/close relationships reported cold, rejecting, or unfair relationships with parents in childhood. Hazan and Shaver's finding has been replicated in numerous studies (Birtchnell, 1993; Carnelley & Janoff-Bulman, 1992; Carnelley et al., 1994; Collins & Read, 1990; Feeney & Noller, 1990), thus establishing a link between retrospective reports of the early parent-child attachment bond and attachment style in intimate/close relationships. Recent research has extended this line of research by establishing a link between the current parent-adult relationship and adult attachment style in intimate/close relationships (Levy, Blatt, & Shaver, 1998). Specifically, Levy et al. found that persons who reported a secure attachment style in intimate/close relationships were more likely to view their parents as benevolent and nonpunitive than those who reported an insecure attachment style in intimate/close relationships.

In studies of adult attachment in intimate/close relationships, secure attachment has been consistently associated with positive romantic relationship experiences and outcomes. Individuals with a secure attachment style in intimate/close relationships describe their romantic relationships as intimate, committed, well-adjusted, and satisfying (Fiala & Pietromonaco, 1991; Levy & Davis, 1988; Pistole, 1989; Senchak & Leonard, 1992; Simpson, 1990). The anxious/ambivalent intimate attachment style (also referred to as anxious or preoccupied) is associated with obsessive preoccupation with the partner, falling in love quickly and easily, extreme jealousy, intense feelings of fear and anxiety in

relationships, dysfunctional expressions of anger, ineffective problem-solving strategies, and high rates of relationship dissolution (Collins & Read, 1990; Feeney & Noller, 1990; Fiala & Pietromonaco, 1991; Hazan & Shaver, 1987; Kobak & Hazan, 1991). People with this attachment style want intimate, passionate, and committed love, but report that their relationships fall short of their desires (Mikulincer & Erev, 1991). Adults with an avoidant attachment style in intimate/close relationships report low levels of commitment, intimacy, and satisfaction in romantic relationships (Feeney & Noller, 1990; Klohnen & Bera, 1998; Kobak & Sceery, 1988; Levy & Davis, 1988). They resist intimacy, hold pessimistic views of relationships, and have a high rate of relationship dissolution (Feeney & Noller, 1990; Hazan & Shaver, 1987). Of the three attachment styles, people with an avoidant style of attachment have the lowest incidence of positive experiences (enjoyment, positive emotions, positive experiences, positive interactions) in romantic relationships (Hazan & Shaver, 1987; Tidwell, Reis, & Shaver, 1996).

Carnelley et al. (1994) examined the relationships among retrospective accounts of early attachment relationships with parents, attachment style in intimate/close relationships, and romantic relationship adjustment in a sample of college-aged women. Attachment style in intimate/close relationships mediated the link between early attachment experiences with mother and romantic relationship adjustment. Apparently, the influence of early experiences with mother may be linked indirectly to current romantic relationship adjustment through current intimate/close attachment relationships.

One study extended this line of research by examining the relationship between college students' (mean age = 21 years) underlying dimensions of current attachment relationships with parents (measured as the parental couple) and romantic relationship

satisfaction (Bradford & Lyddon, 1993). Results indicated that current dimensions of attachment relationships with parents (alienation, trust, and communication) did not predict romantic relationship satisfaction. This finding warrants further research attention because it is inconsistent with those of other studies which offer indirect support for the association between parent-adult attachment style and romantic relationship adjustment. It is possible, for example, that aggregate or composite assessments of parent-adult attachment relationships (i.e., both parents assessed as a couple) may obscure important within-relationship contributions to such outcomes.

In summary, the data from these studies indicate that retrospective accounts of parent-child attachment relationships (e.g., care, overprotection, warmth) are associated with adult attachment styles in intimate/close relationships, which, in turn are associated with romantic relationship adjustment. A secure attachment style in intimate/close relationships is thought to stem from secure early parent-child attachment relationships and to be associated with positive romantic relationship outcomes and processes. On the other hand, insecure attachment styles in intimate/close relationships are thought to stem from insecure early parent-child attachment relationships and to be associated with negative romantic relationship outcomes and processes. The literature, however, has paid scant attention to a possible association between current parent-adult attachment relationships and romantic relationship adjustment. Although one study (Bradford & Lyddon, 1993) has examined that association, it contained some basic limitations. First, the study assessed underlying dimensions of the attachment relationship, not parent-adult attachment styles, per se. Second, the study did not assess the participants' attachment

styles with their parents, measured separately or jointly. Instead, the attachment relationship was assessed in the context of the parental unit or couple.

Gender differences. Several studies have found gender differences in the relationship between attachment styles in intimate/close relationships and romantic relationship adjustment. Taken together these studies indicate that avoidantly attached men and anxiously attached women experience dissatisfaction and poor adjustment in their romantic relationships (Collins & Read, 1990; Fiala & Pietromonaco, 1991; Kirkpatrick & Davis, 1994; Simpson, 1990). The relationship between attachment styles in intimate/close relationships and relationship adjustment is moderated by gender, in a manner that conforms to social stereotypes. To characterize it, when a jealous, intensely emotional woman is paired with an aloof, "unemotional" male, both partners report negative relationship experiences.

Parental Divorce

It is important to consider the effects of parental divorce on parent-adult attachment style, given that 25 - 40% of college students have experienced parental divorce at some point in their development (Haskey, 1996). The attachment literature suggests that parental divorce and discord are likely to create a negative view of relationships for the offspring, which could result in insecure attachment relationships.

Research on the association between parental divorce and attachment styles in intimate/close relationships has produced mixed results. Some studies found no association (Brennan & Shaver, 1993; Hazan & Shaver, 1987). Other studies found that parental divorce was negatively associated with a secure attachment style in intimate/close relationships (Brennan & Shaver, in press; Mickelson, Kessler, & Shaver, 1997).

The relationship between parental divorce and parent-adult attachment styles has not been investigated. However, research supports the notion that parental conflict (Black & Pedro-Carroll, 1993; Emery, 1989; Lopez, Campbell, & Watkins, 1989) and post-divorce arrangements (Cooney, Smyer, Hagestad, & Klock, 1986; Lopez, 1991; Parish & Wigle, 1985; Webster & Herzog, 1995) impact children's and adults' post-divorce relationships with their parents. Regarding the former, one study found that when martial conflict existed, the parent-offspring relationship, and particularly the relationship with the father, became more distant and conflicted (Lopez et al., 1989). Regarding the latter, the research indicates that when post-divorce arrangements led to "father absence" (Parish & Wigle, 1985), the quality of the fathers' relationships with their children was poor, compared to those who had not experienced parental divorce (Lopez, 1991; Parish & Wigle, 1985; Webster & Herzog, 1995). Two studies found that the father-daughter relationship, more than the father-son relationship, is especially vulnerable to disruption when parental conflict (Black & Pedro-Carroll, 1993) and post-divorce father absence occur (Cooney et al., 1986). This line of research suggests that the experience of parental divorce should be examined as a possible confound of parent-adult attachment styles.

Summary and Critique

A critical mass of literature indicates that there are links between parent-adult attachment relationships and adult psychological well-being, coping strategies, and romantic relationship adjustment. However, there are some measurement and conceptual weaknesses in the literature.

First, self-report measures of parent-adult attachment relationships vary widely, in terms of constructs, underlying theory, and temporal orientation (past, present)

contributing to a lack of clarity and precision in the research literature. For instance, one measure assesses parent-offspring attachment relationships via retrospective accounts of parental control and care (Parker et al., 1979) whereas another measure assesses parent-offspring attachment relationships via current accounts of the affective quality of the relationship and the degree to which parents foster autonomy and provide emotional support (Kenny, 1987). Heiss, Berman, and Sperling (1996) found that five frequently used self-report measures of parent-adult attachment relationships assessed only the general affective quality of relationships with parents, not attachment quality or style, per se. They recommended that newly developed measures of parental attachment relationships use a style-specific conceptualization. Thus far, an adequate measure of (current) parent-adult attachment style has not been developed.

Second, the vast majority of attachment research on coping and relationship adjustment does not assess current parent-adult attachment relationships. Instead, most of the studies conceptualize adult attachment in the context of intimate/close relationships. As such, relatively little is known about the relationship that parent-adult attachment styles have with coping and romantic relationship adjustment.

Third, most studies conceptualize parent-adult attachment relationships in terms of retrospective accounts, premised on the assumption of continuity between attachment relationships formed in childhood and later adult attachment relationships. However, Bowlby's (1988a) hypothesis on the continuity of attachment over time has not been empirically tested (Hendrick & Hendrick, 1994). In fact, recent research suggests that adult attachment relationships may predict adult adjustment better than childhood attachment relationships (Carnelley et al., 1994; Egeland et al., 1988; Main et al., 1985;

Pearson et al., 1994; Rutter et al, 1990) and provides indirect support for the malleability of attachment working models. Given that adults can revise their previously established models of attachment (Main et al., 1985; Pearson et al., 1994), there is a need to investigate parent-adult attachment styles, in the context of the current relationships.

Fourth, the research literature has paid scant attention to the possibility that adults can exhibit multiple attachment styles in their close relationships. The focus on adult attachment as a personality construct has led researchers to virtually ignore the extent to which attachment styles are specific to particular relationships (Kobak, 1994). There is a dearth of information on mother-adult and father-adult attachment styles as well as on the correlates of concordant versus discordant parent-adult attachment styles. Studies with children suggest that attachment relationships with both parents, considered jointly, are salient factors in psychological and relationship adjustment (Main & Weston, 1981; van IJzendoorn et al., 1992). By extension, these findings suggest that adults who have secure attachment styles with both parents may be best positioned to enjoy psychological health and healthy romantic relationships. However, further research is needed to clarify the relationship between parent-adult attachment style, considered jointly, and adult functioning.

Fifth, demographic/background factors (respondents' gender and parental divorce) may influence the relationship between parent-adult attachment styles and adult adjustment. Research indicates that attachment relationships with parents may be more predictive of psychological functioning and coping for women than for men. Furthermore, research shows that gender differences exist in the relationship between attachment style in intimate/close relationships and romantic relationship adjustment. It is

therefore likely that gender differences are present in the relationship between parent-adult attachment styles and romantic relationship adjustment. Another body of literature shows that parental divorce and post-divorce factors have a bearing on adults' relationships with parents, especially fathers. Both factors need to be investigated further and will be considered in data analyses of the proposed study. However, before pursuing clarification of these relationships, it was necessary to develop and initially validate a measure of (current) parent-adult attachment style.

Pilot Study

A pilot study was conducted to (1) validate a novel measure of parent-adult attachment style for use in the main study, (2) explore the prevalence of discordant/concordant parent-adult attachment styles and, (3) explore whether parent-adult attachment style group predicted one aspect of psychological functioning, self-esteem. The novel measure was designed to separately assess participants' current attachment styles in their relationships with their mothers and fathers. As such, it sought to capture aspects of these attachment relationships not captured by retrospective reports of earlier parent-child bonds or by more generic measures of attachment in close relationships.

Pilot study participants and procedures. One hundred and twelve students from three colleges in the West participated in the pilot study. Five of the respondents' packets were not used because they were not complete. The mean age of the sample was 27.5 years. Eighty nine percent of the sample was white, 40% was male, and 48% were married. The majority of the sample was currently involved in a romantic relationship (80%). The average length of the participants' romantic relationships was 6 years.

Participants were solicited from undergraduate nursing, psychology, business, education, and study skills classes to participate in two testing sessions held one week apart. At the first session, all participants completed a packet containing a demographic information form, the novel measure of parent-adult attachment style (mother and father forms), a measure of attachment style in intimate/close relationships, and four self-report measures used to establish construct validity. At the second session, eighty-four of the original 107 participants again completed the novel measure of parent-adult attachment style (mother and father forms). The data from the second administration were used to establish the test-retest reliability of this novel measure.

Pilot study measures. A novel measure of parent-adult attachment style was adapted from an existing self-report measure of intimate adult attachment styles created by Bartholomew and Horowitz (1991). Using the Bartholomew and Horowitz (1991) measure, Scharfe and Bartholomew (1994) found, in their young adult sample, that 63% of females and 56% of males reported the same attachment style classification over an eight month interval. And, in a series of three studies Griffin and Bartholomew (1994) found strong support for the construct, discriminant, and convergent validity of the self- and other-model attachment dimensions which underlie the measure. In the present pilot study, the original Bartholomew and Horowitz (1991) measure was used to assess attachment styles in intimate/close relationships.

Two forms of the novel measure of parent-adult attachment style were created: one to assess adult attachment style with mother (Parent-Adult Attachment Style Questionnaire - Mother; P-AASQ-M, Appendix A) and one to assess adult attachment with father (Parent-Adult Attachment Style Questionnaire - Father; P-AASQ-F, Appendix

B). Both forms direct participants to indicate the type of parent to whom they refer when completing the questionnaire (i.e., biological, step, adoptive, foster, other). Both the mother and father forms of the P-AASQ consist of four short paragraphs, each of which describes a different attachment style. The *secure parent-adult attachment style* indicates a sense of love worthiness combined with an expectation that the parent is trustworthy and dependable. The *preoccupied parent-adult attachment style* indicates a sense of love unworthiness combined with an expectation that the parent is generally trustworthy and dependable. The *dismissing parent-adult attachment style* indicates a sense of love worthiness combined with an expectation that the parent is untrustworthy and undependable. The *fearful parent-adult attachment style* indicates a sense of love unworthiness combined with an expectation that the parent is untrustworthy and undependable. The measure is scored in two ways. First, respondents are instructed to select the most descriptive (i.e., "Best Choice") paragraph. Second, respondents are asked to indicate the degree to which each paragraph is descriptive of their relationship with the parent (scale of 1 - 7). The scoring methods allow for continuous and categorical scoring and data analyses appropriate to both types of scales.

The Parental Bonding Instrument (PBI; Parker et al., 1979), Parental Attachment Questionnaire (PAQ; Kenny, 1987), Trust Scale (Remple & Holmes, 1986), and Self-Esteem Scale (SES; Rosenberg, 1965) were used to examine the construct validity of the P-AASQ. Each of these established instruments has demonstrated acceptable internal consistency, test-retest reliability, and validity coefficients in previous research (Fleming & Courtney, 1984; Kenny, 1987, 1990; Parker et al., 1979; Parker, 1989; Remple, Holmes, & Zanna, 1985).

The PBI is a frequently used self-report measure of underlying dimensions of early attachment relationships with each parent (Lopez & Gover, 1993). The PBI contains a mother and father form and two factor analytically derived scales for each form. The care scale measures the adult's retrospective report of the amount of emotional responsiveness and expression of warmth provided by the parent. The overprotection scale measures the recalled amount of parental control and resistance to the child's attempts to gain autonomy. Research indicates that secure attachment is associated with high care and low overprotection (e.g., Mallinckrodt, 1991; Truant, Herscovitch, & Lohrenz, 1987).

The PAQ adapts Ainsworth et al's. (1978) conceptualization of attachment for use with adolescents and adults (Kenny, 1987) and has been frequently used in research studies for that purpose (Lopez & Gover, 1993). It contains three factor-analytically derived scales which are associated with secure attachment: affective quality of attachment, parental fostering of autonomy, and parental role in providing emotional support. In a revised version, ratings for two of the three scales, affective quality of attachment and parental fostering of autonomy, are provided for each parent. Separate ratings for each parent on the third scale, parental role in providing emotional support, are not available (M. Kenny, personal communication, June 23, 1996).

The SES and the Trust Scale were used to provide additional validity information for the novel measure of parent-adult attachment styles. The SES assesses global feelings of self-worth or self-acceptance. The Trust Scale measures trust in romantic relationships. Recalling Bartholomew and Horowitz's (1991) assertion that adult attachment styles are based on two key dimensions, view of self and view of others, the SES taps into the former, and the Trust Scale the latter. Secure and dismissive parent-adult attachment

styles were expected to be associated with high self-esteem (positive view of self), whereas preoccupied and fearful parent-adult attachment styles were expected to be associated with low self-esteem (negative view of self). In addition, secure and preoccupied parent-adult attachment styles were expected to be associated with high trust (positive view of others), whereas fearful and dismissive parent-adult attachment styles were expected to be associated with low trust (negative view of others).

Finally, items from a demographic questionnaire were used to further assess the validity of the novel measure. Using Likert scale formats, the frequency of contact, frequency of discussions, amount of tension, and degree of satisfaction with each parent were assessed. A relationship satisfaction score was created for the mother- and father-adult relationships by summing the scores on demographic items measuring degree of satisfaction and amount of tension (inverse scored).

Pilot study results. The results of the pilot study are presented in this section. First, preliminary descriptive statistics for the sample are presented. The results on the test-retest reliability of the measure are then presented, followed by the correlational findings between mother- and father-adult attachment style categories and the independent measures of parent-adult relationship quality. Next are two sets of analyses that investigated the construct validity of the P-AASQ. The first set of analyses examined mother- and father-adult attachment style category differences on independent measures emotional bonds with each parent (PAQ and PBI) and demographic items assessing the quality of the respondents' relationship with each parent. Significant MANOVA results were followed by univariate F tests and Tukey tests of between group differences. Univariate post hoc analysis (Tabachnick & Fidell, 1996) was chosen over multivariate

post hoc analysis (Stevens, 1996) because the purpose of the analyses was to localize the effect on specific measures of construct validity. The second set of analyses examined mother- and father- adult attachment style category differences on independent measures of the self (SES) and other (Trust Scale) models. The purpose of this set of analyses was to provide additional validity information on the self and other dimensions which underlie attachment style categories (Bartholomew & Horowitz, 1991). Last, the relationship between self-esteem and attachment style with parents, considered jointly, was examined. The purpose of this analysis was to explore whether adult's attachment styles with their parents, considered jointly, predicted an important aspect of adult functioning.

Prior to analysis, each variable was examined for missing values, skewness, outliers, and accuracy of data entry. Scale mean substitution was used to account for missing values on the dependent measures. The number of missing values for a scale item ranged from 1 to 5. One case was deleted because the respondent did not complete the P-AASQ forms correctly.

Table 1 presents the frequencies and percentages of respondents in each mother- and father- adult attachment style category. The observed distribution of parent-adult attachment style category frequencies is similar to that observed for adult attachment styles in intimate/close relationships (Bartholomew & Horowitz, 1991; Mickelson et al., 1997).

Table 1

Frequencies and Percentages of Mother- and Father-Adult Attachment Style Categories

	Mother		Father	
	n	%	n	%
Secure	73	68.87	57	53.77
Dismissive	12	11.32	21	19.81
Preoccupied	8	7.55	12	11.32
Fearful	13	12.26	16	15.09
Totals	106	100.00	106	99.99

Note. Percentages may not total 100.00% due to rounding errors.

Forty-four percent of the sample reported concordant secure attachment styles with parents (secure attachment styles with both parents), 23% reported concordant insecure attachment styles with parents (insecure attachment styles with both parents), and 32% reported discordant attachment styles with parents (secure attachment style with only one parent). These findings indicate that adults can have multiple, discordant attachment styles in their relationships with parents. Similar rates of discordance were found between attachment styles with each parent and attachment styles in intimate/close relationships (mother-close relationship attachment style discordance = 42%, father-close relationship attachment style discordance = 46%).

The novel measure's test-retest reliability was assessed over a one week interval with 84 respondents. The test-retest reliability coefficients for the P-AASQ-Father

continuously scored items were significant at the $p<.01$ level: secure, .73; fearful, .76; preoccupied, .71; and dismissive, .55. The test-retest reliability coefficients for the P-AASQ-Mother continuously score items were also significant at the $p<.01$ level : secure, .83; fearful, .74; preoccupied, .68; and dismissive, .61. The test-retest reliability of secure versus insecure (dismissive, preoccupied, and fearful) responses using a Kappa coefficient, was .85 for the Father form and .76 for the Mother form (both $ps<.01$).

As shown in Tables 2 and 3, correlational data were supportive of construct validity for both forms of the P-AASQ. All relationships between the novel measure and the attachment constructs were in the expected direction. Ratings on the father-adult secure attachment style and mother-adult secure attachment style (continuous scores) had a significant positive association with care, affective quality, fostering autonomy, emotional support, and self-esteem and a significant negative association with overprotection. In addition, ratings on the father-adult secure attachment style and mother-adult secure attachment style had a significant positive association with items on the demographic information form: frequency of contact with the parent, frequency of discussions with the parent, and the degree of relationship satisfaction. The correlation between the Trust Scale and secure attachment style was positive, though not significant, for the P-AASQ-Father and P-AASQ-Mother forms. Correlations between the insecure attachment styles (dismissive, fearful, preoccupied) and the measures used to establish construct validity were also in the expected direction.

Table 2

Pearson Correlations Between Construct Validity Measures and Father-Adult Attachment Styles (Continuous Scores)

	Attachment Style			
Measure	Secure	Dismissive	Preoccupied	Fearful
Care	.54*	-.40*	-.35*	-.54*
Overprotection	-.37*	.09	.17	.47*
Affective Quality	.65*	-.50*	-.29*	-.60*
Fostering Autonomy	.44*	-.28*	-.21*	-.45*
Emotional Support [a]	.52*	-.40*	-.27*	-.47*
Frequency of Contact	.44*	-.32*	-.13	-.35*
Frequency of Discussions	.58*	-.43*	-.23*	-.28*
Relationship Satisfaction	.63*	-.35*	-.28*	-.52*
Self-Esteem	.25*	-.14	-.45*	-.41*
Trust [b]	.10	-.11	.01	-.23*

Note. n = 104-107.

[a] Pertains to adults' relationship with both parents. [b] Pertains to romantic relationship.

*$p < .05$.

Table 3

Pearson Correlations Between Construct Validity Measures and Mother-Adult Attachment Styles (Continuous Scores)

	Attachment Style			
Measure	Secure	Dismissive	Preoccupied	Fearful
Care	.63*	-.48*	-.47*	-.69*
Overprotection	-.56*	.44*	.38*	.53*
Affective Quality	.66*	-.49*	-.33*	-.55*
Fostering Autonomy	.57*	-.46*	-.23*	-.52*
Emotional Support [a]	.53*	-.45*	-.26*	-.50*
Frequency of Contact	.30*	-.25*	-.21*	-.27*
Frequency of Discussions	.52*	-.52*	-.21*	-.31*
Relationship Satisfaction	.67*	-.40*	-.44*	-.61*
Self-Esteem	.33*	-.30*	-.36*	-.51*
Trust [b]	.18	-.12	-.15	-.15

Note. n = 104-107.

[a] Pertains to adults' relationship with both parents. [b] Pertains to romantic relationship.

*$p < .05$.

A one-way MANOVA was conducted to examine father-adult attachment style category ("Best Choice" scores) differences on the group of construct validity measures that assessed emotional bonds and relationship quality of the father-adult relationship. The construct-related variables pertaining to participants' relationship with their fathers were care, overprotection, affective quality of attachment, fostering of autonomy, parental role in providing emotional support (mother and father scores combined), frequency of discussions with father, frequency of contact with father, and relationship satisfaction. All assumptions relevant to MANOVA were checked and met.

Using the Wilks' criterion, the results of the one-way MANOVA of the P-AASQ-Father form revealed a significant multivariate effect, F (24, 267) = 4.58, $p < .001$). Table 4 presents the means and standard deviations of scores on the construct validity measures across the father-adult attachment styles. All univariate tests of the association between the P-AASQ-Father and construct validity measures were significant at the .01 level, indicating that father attachment style differences were evident across each of the dependent measures. Note that the overprotection and frequency of contact with father scales failed to meet the homogeneity of variance assumption. However, ANOVA is believed to be robust to this violation, under conditions of normality (Ferguson, 1981; Wilcox, 1996).

Differences between the four father-adult attachment style groups on each dependent measure were explored using Tukey's test with the significance level set at $p<.05$. The secure father-adult attachment style group had higher scores on relationship satisfaction, frequency of discussions with father, affective quality, parental emotional support, and paternal care than did all three insecure father-adult attachment

Table 4

Means and Standard Deviations of Scores on Construct Validity Measures across the Father-Adult Attachment Styles ("Best Choice" score)

	Attachment Style							
	Secure		Dismissive		Preoccupied		Fearful	
Measure	M	SD	M	SD	M	SD	M	SD
Care	37.76	6.82	30.24	7.93	30.83	9.16	25.75	6.86
Overprotection	22.13	5.32	25.81	9.58	24.83	6.70	31.00	9.72
Affective Quality	112.02	16.27	86.43	21.66	94.25	18.83	76.69	20.20
Fostering Autonomy	59.24	7.59	52.00	12.70	52.50	11.20	47.37	10.89
Emotional Support [a]	69.30	11.69	55.24	12.16	58.42	13.69	52.44	12.43
Frequency of Discussions	2.56	.79	1.62	.50	1.75	.62	1.75	.86
Frequency of Contact	5.31	.61	4.24	1.30	4.67	.78	3.94	1.18
Relationship Satisfaction	7.15	1.04	5.71	1.79	5.42	1.44	4.31	1.45
Self-Esteem	34.93	4.13	32.67	5.82	31.00	5.41	29.87	6.96
Trust [b]	93.91	19.86	88.71	25.58	99.00	14.59	79.50	29.50

Note. n = 104 - 107.

[a] Pertains to relationship with both parents. [b] Pertains to romantic relationship.

style groups. In addition, the secure father-adult attachment style group reported that their fathers fostered autonomy and maintained contact more than did the dismissive and fearful father-adult attachment style groups and showed lower amounts of overprotection than the fearful father-adult attachment style group. One significant difference was found between insecure father-adult attachment style groups. The dismissive father-adult attachment style group reported a higher rate of relationship satisfaction than did the fearful father-adult attachment style group.

A one-way MANOVA was conducted to examine the mother-adult attachment style category ("Best Choice" score) differences on the group of measures that assessed emotional bonds and relationship quality of the mother-adult relationship. The construct-related variables pertaining to participants' relationship with their mothers were care, overprotection, affective quality of attachment, maternal fostering of autonomy, parental role in providing emotional support (mother and father scores combined), frequency of discussions with mother, frequency of contact with mother, and relationship satisfaction. All assumptions relevant to MANOVA were checked and met.

Results of the one-way MANOVA of the P-AASQ-Mother form revealed similar results to that of the P-AASQ-Father form. There was a significant multivariate effect, Wilks's $\underline{F}$ (24, 276) = 4.85, $\underline{p}<.001$. Table 5 presents the means and standard deviations of scores on the construct validity measures across the mother-adult attachment styles. All univariate tests of the association between the P-AASQ-Mother and construct validity measures were significant at the .01 level, suggesting that mother attachment style differences were evident across each of the dependent measures. Note that the care and

Table 5

Means and Standard Deviations of Scores on Construct Validity Measures across the Mother-Adult Attachment Styles ("Best Choice" score)

	Attachment Style							
	Secure		Dismissive		Preoccupied		Fearful	
Measure	M	SD	M	SD	M	SD	M	SD
Care	41.60	6.11	33.17	7.66	32.50	13.43	27.00	8.50
Overprotection	24.44	5.74	29.33	7.41	30.25	7.07	35.14	5.38
Affective Quality	113.21	16.54	91.67	20.99	94.50	23.96	77.00	16.94
Fostering Autonomy	59.10	9.18	52.42	8.71	54.00	7.50	42.57	8.55
Emotional Support [a]	67.08	11.72	52.92	9.38	62.75	18.12	47.64	10.50
Frequency of Discussions	3.20	.74	1.58	.67	2.75	.89	2.53	1.16
Frequency of Contact	5.25	.88	4.50	1.31	4.88	.64	4.36	1.15
Relationship Satisfaction	7.25	1.08	5.92	1.62	5.63	1.30	4.71	1.59
Self-Esteem	34.72	4.63	33.33	5.52	32.00	4.54	26.21	4.14
Trust [b]	93.21	22.64	88.25	26.71	95.50	16.94	83.93	23.57

Note. n = 104 - 107.

[a] Pertains to relationship with both parents. [b] Pertains to romantic relationship.

frequency of discussions with mother scales failed to meet the homogeneity of variance assumption. However, as noted earlier, ANOVA is believed to be robust to this violation, under conditions of normality (Ferguson, 1981; Wilcox, 1996).

Differences between the four mother-adult attachment style groups on each dependent measure were explored using Tukey's test with the significance level set at $p<.05$. The secure mother-adult attachment style group reported higher amounts of relationship satisfaction, affective quality, and maternal care than did all three insecure mother-adult attachment style groups. In addition, the secure mother-adult attachment style group reported that their parents were more supportive than the parents of the dismissive and fearful mother-adult attachment style groups, that they had more frequent contact and discussions with their mothers than did the fearful mother-adult attachment style group, and that their mothers fostered autonomy and were less overprotective compared to the fearful mother-adult attachment style group. Significant differences were found between insecure mother-adult attachment style groups. The fearful mother-adult attachment style group reported that their parents provided less support than did the preoccupied mother-adult attachment style group and that their mothers fostered autonomy less than did the dismissive and preoccupied mother-adult attachment style groups. In addition, the dismissive mother-adult attachment style group reported that they had less frequent discussions with their mother than did the preoccupied and fearful mother-adult attachment style groups.

The second set of construct validity analyses examined mother- and father- adult attachment style category differences on independent measures of the self and other models. Univariate ANOVAs, with the alpha level adjusted to .025, were conducted to

investigate mother- and father-adult attachment style categories differences in SES scores and Trust Scale scores. All assumptions relevant to ANOVA were checked and met, with one exception. The SES lacked homogeneity of variance across P-AASQ-Father attachment style categories. However, the SES was considered appropriate for univariate analysis because the observed heteroscedasticity was not expected to result in an increased probability of Type I errors (Ferguson, 1981; Wilcox, 1996).

Father-adult attachment style category was significantly related to SES scores, F (3,102) = 5.21, $p<.01$, but was not related to Trust Scale scores, F (3, 102) = 2.33, p = .08. Similarly, mother-adult attachment style category was significantly related to SES scores, F (3,102) = 13.18, $p<.001$ but was not related to Trust Scale scores, F, (3, 102) = .81, p = .49.

Tables 4 and 5 present the means and standard deviations on the Trust Scale and SES across the father- and mother-adult attachment styles. Tukey tests of between group differences indicated that the fearful father-adult attachment style category was significantly different from the secure, preoccupied, and dismissive father-adult attachment style categories on the measure of the self model (SES scores). Tukey tests of between group differences indicated that the fearful mother-adult attachment style category was significantly different from the secure mother-adult attachment style category on the measure of the self model (SES scores). No significant between group differences were found on the measure of the other model (Trust Scale scores) for either the father- or mother-adult attachment style categories. Large standard deviations in Trust Scale scores for each attachment style category (See Tables 4 and 5) may have obscured existing group differences.

Although between group differences were not optimal, the mean scores line up as expected on both the self and other model measures (See Tables 4 and 5). Respondents in the secure and dismissive mother- and father-adult attachment style categories reported higher scores on the measure of self model (SES) than did respondents in the preoccupied and fearful mother- and father-adult attachment style categories. And, respondents in the secure and preoccupied mother- and father-adult attachment style categories reported higher scores on the measure of other model (Trust Scale) than did respondents in the dismissive and fearful mother- and father-adult attachment style categories. These findings offer some support for the construct validity of the P-AASQ because they indicate that meaningful differences between parent-adult attachment style groups exist in relation to self and other models.

The last set of data analyses examined the relationship between self-esteem and parent-adult attachment style groups (concordant secure, concordant insecure, and discordant). A one-way (parent-adult attachment style group) ANOVA reached significance, F (2, 103) = 10.4, $p < .001$. Tukey tests, with an alpha level set at .05, indicated that self-esteem differences between the concordant secure and concordant insecure groups and between the concordant insecure and discordant groups were significant. The concordant secure parent-adult attachment style group reported the highest self-esteem (M = 35.32, SD = 3.92), the concordant insecure parent-adult attachment style group reported the lowest (M = 29.68, SD = 6.35), and the discordant parent-adult attachment style group fell in between (M = 33.08, SD = 5.20).

Pilot study discussion. The P-AASQ augments the available inventory of adult attachment measures by permitting specific assessment of parent-adult attachment styles.

The measure demonstrated adequate construct validity. Within the mother- and father-adult relationship, P-AASQ scores were significantly related in theoretically expected directions with independent measures of emotional bonds and relationship quality. Relative to their peers reporting an insecure attachment relationship with a parent, participants who reported a secure attachment style with a parent were more likely to report that that parent provided high levels of care and low levels of intrusiveness, and that the current relationship was characterized by frequent contact and communication, affective expression, encouragement of independence, and high relationship satisfaction. Furthermore, although between group differences were not optimal, there is some evidence that parent-adult attachment style categories function as self and other models of the mother- and father-adult relationship.

These data revealed that a sizable proportion of participants acknowledged having different attachment styles with each parent. Furthermore, the data indicate that a sizable proportion of participants reported having a different attachment style in their intimate/close relationships than they had with either parent. This finding underscores the potential value of conceptualizing parent-adult attachment style as a relationship construct.

In addition, parent-adult attachment style groups (concordant secure, discordant, concordant insecure) were systematically related to differences in self-esteem. This finding provides preliminary support for the notion that parent-adult attachment styles, considered jointly, may predict aspects of adult functioning.

The test-retest reliability of the measure was moderate and comparable to other measures of adult attachment, measured at intervals up to two months (Collins & Read, 1990; Levy & Davis, 1988). In fact, the test-retest reliability correlations for the P-AASQ

were comparable to those reported for the Bartholomew and Horowitz (1991) measure on which it was based (Scharfe & Bartholomew, 1994).

Recent research indicates that the moderate test-retest reliability of self-report measures of adult attachment may be reflective of instability in the attachment construct (Scharfe & Bartholomew, 1994). For instance, Bartholomew found in her unpublished study, cited in Bartholomew and Scharfe (1994), that adult attachment demonstrated the following stability coefficients at a two month interval: secure, .71; fearful. 64; preoccupied, 59; dismissive, 49. Furthermore, the stability scores of continuously-scaled, dimension based elaborations of Hazan and Shaver's (1987) original measure of adult attachment style, at intervals up to nine months, have been in the .5 - .6 range (Collins & Read, 1990; Feeney, Noller, & Callan, 1994; Shaver & Brennan, 1992). Furthermore, researchers have found that approximately 30% of the population changes attachment styles over a two year period (Davila, Burge, & Hammen, 1997). In the context of these findings, it is reasonable to conclude that the moderate test-retest reliability of the P-AASQ may reflect some construct instability.

Research Questions: Main Study

Given the pilot study's preliminary support of the psychometric adequacy of the P-AASQ, the primary purpose of the main study was to examine whether differences in attachment styles with parents, considered jointly, were related to the psychological and relationship adjustment of adults. Secondary purposes of the study were to examine the respondents' gender in the relationships between parent-adult attachment style groups and psychological and relationship adjustment and to examine the relationship between parental marital status and parent-adult attachment style groups.

The study will address the following questions.

1) Are parent-adult attachment style groups related, in theoretically consistent ways, to adult relationship and psychological adjustment? Specifically, do those who report concordant secure parent-adult attachment styles cope more adaptively, experience less psychological distress, and have better romantic relationship adjustment than those who report discordant or concordant insecure parent-adult attachment styles?
2) Do associations between parent-adult attachment style groups and measures of adult adjustment (psychological symptoms, coping strategies, romantic relationship adjustment) differ depending upon the respondents' gender?
3) Are respondents from divorced family backgrounds more likely than those from married family backgrounds to report discordant and concordant insecure parent-adult attachment styles?
4) Are there gender differences with regard to mother- and father-attachment style categories or parent-adult attachment style groups?

Research Hypotheses

Hypothesis regarding attachment styles with parents, considered jointly, and parental marital status.

Hypothesis 1. Parental marital status and parent-adult attachment style groups will covary. It was expected that there would be disproportionately more respondents from divorced family backgrounds in the discordant and concordant insecure groups than in the concordant secure group.

Hypotheses regarding attachment styles with parents, considered jointly, and psychological adjustment.

Hypothesis 2a. There will be a significant relationship between parent-adult attachment style group and psychological symptoms. Participants in the concordant secure group will report fewer psychological symptoms than will participants in either the discordant and concordant insecure groups.

Hypothesis 2b. There will be a significant relationship between parent-adult attachment style group and each of the coping strategies. Participants in the concordant secure group will report higher levels of task-oriented coping and social diversion coping, and lower levels of emotion-oriented coping and distraction coping, than will participants in either the discordant and concordant insecure groups.

Hypothesis 3a. Parent-adult attachment style group and respondents' gender will significantly interact in the prediction of psychological symptoms. It is expected that parent-adult attachment style group will be more predictive of the amount psychological symptoms for women than men. Women in the concordant secure group will report lower psychological symptom scores than will their male counterparts. And, women in the concordant insecure and discordant groups will report higher psychological symptom scores than will their male counterparts.

Hypothesis 3b. Parent-adult attachment style group and respondents' gender will significantly interact in the prediction of coping strategies. It is expected that parent-adult attachment style group will be more predictive of coping strategies for women than for men. Women in the concordant secure group will report higher task-oriented and social diversion coping and lower emotion-oriented and distraction coping scores than will their

male counterparts. Women in the concordant insecure and discordant groups will report higher emotion-oriented and distraction coping and lower task-oriented and social diversion coping scores than will their male counterparts.

Hypotheses regarding attachment styles with parents, considered jointly, and relationship adjustment.

Hypothesis 4. There will be a significant relationship between parent-adult attachment style group and relationship adjustment. Participants in the concordant secure group will report a higher level of romantic relationship adjustment than will participants in the discordant and concordant insecure groups.

Hypothesis 5. Parent-adult attachment style group and respondents' gender will significantly interact in the prediction of romantic relationship adjustment. It is expected that parent-adult attachment style group will be more predictive of romantic relationship adjustment for women than for men. Women in the concordant secure group will report higher romantic relationship adjustment scores than their male counterparts. And, women in the concordant insecure and discordant groups will report lower romantic relationship adjustment scores than their male counterparts.

CHAPTER III

METHODOLOGY

Participants

Three hundred and ninety-five students from undergraduate classes at two college sites in the West were recruited to participate in this study and were provided with survey materials as discussed below. Of this group, 351 returned their survey packets, resulting in a 89% return rate. Twenty of the returned packets were not used: 5 because the respondents did not meet the study's criteria (not adults, not in a romantic relationship) and 15 because the packets were incomplete. Useable survey packets were obtained from 331 volunteers (140 males, 191 females). This study's sample exceeded the sample size (N = 200) needed for power of .80 and a medium effect size, with α = .05 (Cohen, 1992).

Frequencies and percentages of background and demographic information for the sample are reported in Table 6. Respondents ranged in age from 18 to 58 ($\underline{M}$ = 26.87, $\underline{SD}$ = 8.67). Over half (57%) of the sample was comprised of students who were older than the "traditional" college student (>22 years). Ninety-one percent of the sample were White and 76% were from intact family backgrounds (i.e., both parents married and still living together). Approximately 30% of the sample had been involved in their romantic relationship for less than one year, 43% had been involved for 1 to 5 years, and 27% had

Table 6

Frequencies and Percentages of Sample Background/Demographic Information

Variable		n [a]	% [b]
Gender			
	Males	140	42.3
	Females	191	57.7
Age (in years)			
	18-22	133	40.3
	23-27	79	23.7
	28-32	46	13.8
	33-37	22	6.6
	38-42	21	6.3
	43-47	8	2.4
	48-52	7	2.1
	53-57	6	1.8
	58	1	.3
	Missing data	8	2.4
Year in college			
	Freshman	55	16.6
	Sophomore	90	27.2
	Junior	104	31.4
	Senior	53	16.0
	Other	26	7.9
	Missing data	3	.9
College attending			
	Westminster	139	42.0
	Salt Lake Community	192	58.0
Course enrolled			
	Psychology	139	42.0
	Health Sciences	105	31.7
	Trade Sciences	87	26.3

(Table continues)

Table 6 (cont'd).

Variable		n	%
Ethnicity			
	Asian American	6	1.8
	Caucasian/White	302	91.2
	Hispanic/Latino	9	2.7
	Native American	3	.9
	Multiracial	11	3.3
Parental marital status			
	Married	251	76.1
	Divorced	74	22.1
	Separated	5	1.5
	Other	1	.3
Relationship status			
	Married	166	50.2
	Committed relationship/engaged	84	25.4
	Dating one, no commitment	76	23.0
	Other	5	1.5
Length of romantic relationship			
	1 - 6 months	48	19.5
	7 months - 1 year	33	10.0
	1 year - 5 years	142	42.8
	5 years - 10 years	52	15.8
	10 years - 20 years	26	8.4
	20 years - 30 years	10	3.0
	30 years - 40 years	1	.3

Note. N = 331. [a] This column may not total 100.0 due to rounding errors. [b] Percent refers to percentage of total.

been involved for more than five years. Approximately one half of the respondents were married (50.2%).

The sample was generally representative of the student populations from which it was drawn, in terms of race, age, gender, marital status, and class standing (Office of Institutional Research, 1998; Summers, 1998). Furthermore, the sample was generally representative of the Utah population, in terms of age, marital status, and race (U.S. Bureau of the Census, 1997).

Procedures

Volunteers were recruited from 9 health science (nursing and physical education) and 10 trade science (Drafting, Electricity, Computer Graphics, and Aviation) classes at Salt Lake Community College. Volunteers were also recruited from 11 psychology classes at Westminster College, a small, private Western college. In each class, the researcher read the "Request for Participation" script (Appendix C), that indicated that the survey packet took approximately 20 minutes to complete and that the study examined adult adjustment and relationships with parents. In addition, students were told that all volunteers must be of majority age and must be involved in a romantic relationship. All volunteers provided written informed consent (Appendices D and E) and their names and addresses, for follow up mailings. Volunteers were given a research packet and a stamped return envelope. They were instructed to complete the packet on their own time and to mail it to the researcher within one week. Ten days after the distribution of packets a follow-up postcard was mailed to all volunteers (Appendix F). The purpose of the postcard was to thank those persons who had returned their surveys and to serve as a

reminder for those who had not year returned them. Three weeks after the distribution of survey packets, a second reminder notice was mailed to volunteers who had not returned their survey packets (Appendix G). The notice informed volunteers that their survey packet had not been received and briefly reiterated the purpose of the study. A second copy of the survey and another stamped return envelope were also included in this mailing. In exchange for participation, volunteers received either (1) extra credit points to be added to their course grades, or (2) entry into a raffle for two $100.00 cash awards. In a series of ANOVAs (corrected for alpha inflation), no significant differences on the dependent measures or the predictors were found between the raffle and extra course credit groups.

Measures

The survey packets included the following materials: demographic/background information form, two measures of adult attachment styles with parents (Parent-Adult Attachment Style Questionnaire-Mother and Parent-Adult Attachment Style Questionnaire-Father), and one measure each of relationship adjustment, psychological symptoms, and coping strategies. To control for possible order and fatigue effects, five versions of the survey packet were developed that differed only with respect to the ordering of the measures.

Demographic/Background Information Form (Appendix H). Respondents were asked to provide the following demographic information: gender, age, year in college, ethnicity, and marital/dating relationship status. In addition, respondents were asked to answer items pertaining to the length of their current romantic relationship and their parents' marital status.

Parent-Adult Attachment Style Questionnaire (Appendices A and B). The mother and father forms of the Parent-Adult Attachment Style Questionnaire (P-AASQ) were used to assess adult's current attachment style with each parent (Cf. Chapter II, Pilot Study for a detailed description of the P-AASQ).

Dyadic Adjustment Scale (Appendix I). The Dyadic Adjustment Scale (DAS; Spanier, 1976) was used to measure romantic relationship adjustment. The DAS is a 32-item measure that uses a Likert response format. Respondents are asked to indicate the extent of agreement or disagreement between them and their partner on each item. Most items are rated on a 6-point rating scale (0 = all the time; 5 = never). However, several items are rated on a 7-point (0 = extremely unhappy; 6 = perfect), 5-point (e.g., 4 = every day; 0 = never), or a 2-point (0 = yes; 1 = no) scale.

The DAS has four factor analytically derived subscales: dyadic cohesion, dyadic consensus, dyadic satisfaction, and affectional expression. Dyadic cohesion contains 5 items and measures the degree to which the couple engages in activities together (e.g., "Laugh together" and "Work together on a project"). Scores on this subscale can range from 0 to 24. Dyadic consensus contains 13 items and measures the degree to which the couple agrees on matters of importance to the relationship (e.g., "Handling family finances" and "Religious matters"). Scores on this subscale can range from 0 to 65. Dyadic satisfaction contains 10 items and measures the degree to which the partner is satisfied with the relationship (e.g., "How often do you and your mate 'get on each other's nerves?'"). Scores on this subscale can range from 0 to 50. Affectional expression contains 4 items and measures the degree to which the partner is satisfied with the expression of sex and affection in the relationship (e.g., "Not showing love" and "Being

too tired for sex"). Scores on this subscale can range from 0 to 12. High scores on each subscale reflect better adjustment.

For the purposes of the present study, "Not applicable" response options were added to four DAS items (Items #6, #13, #20, #29) that referred to behaviors or issues applicable only to cohabiting/married couples (e.g., "Sex relations" and "Household tasks"). Items #6 and #29 are from the affectional expression subscale, item #13 is from the dyadic consensus subscale, and item #20 is from the dyadic satisfaction subscale.

The DAS subscales can be summed to produce a total relationship adjustment score. The total score can range from 0 and 151, with higher scores reflecting better relationship adjustment. The overall adjustment score has been shown to discriminate between distressed and nondistressed couples (Margolin & Wampold, 1981). In the proposed study, the total DAS score was used as the measure of relationship adjustment. DAS subscales were used only in the post hoc analyses.

The DAS subscales have demonstrated adequate to excellent internal consistency (i.e., affectional expression, .73; dyadic cohesion, .86; dyadic consensus, .90; dyadic satisfaction, .94) (Spanier, 1976). The internal consistency for the total DAS score has been reported in the .90s (Kobak & Hazan, 1991; Spanier, 1976; Spanier & Thompson, 1982). In the present study the obtained Cronbach alphas were: DAS total score, .93; affectional expression, .65; dyadic cohesion, .80; dyadic consensus, .84; and dyadic satisfaction, .87. The instrument has demonstrated adequate construct and criterion validity in prior investigations (Margolin & Wampold, 1981; Spanier, 1976).

Hopkins Symptom Checklist (Appendix J). The Hopkins Symptom Checklist (HSCL; Derogatis, Lipman, Rickles, Uhlenhuth, & Covi, 1974) was used to measure

psychological adjustment. The HSCL is a 58-item measure that uses a Likert response format to assess psychological symptoms and distress. Respondents are instructed to rate the extent to which each symptom (e.g., "Headaches" and "Bad dreams") has bothered them in the last two weeks. The Likert scale ranges from 1 ("not at all") to 4 ("very frequently"). The total HSCL score can range from 58 to 232, with higher scores reflecting greater symptomatic distress.

The HSCL yields scores on five scales (somatization, obsessive-compulsivity, interpersonal sensitivity, depression, anxiety) which, because of high intercorrelations among the subscales, can be summed to yield an overall symptomatic distress score (Folkman, Lazarus, Gruen, & DeLongis, 1986). In the proposed study, the overall symptom distress score was used as the measure of psychological adjustment.

Test-retest reliability coefficients for the total HSCL score, with an 8 month interval, were .76 for men and .66 for women (Kanner, Coyne, Schaefer, & Lazarus, 1981) and for the five subscales, with a one week interval, ranged from .75 to .84 (Derogatis et al., 1974). Scores on the HSCL have been shown to correlate with clinical ratings of the severity and type of psychiatric diagnosis (Derogatis et al., 1974) and have demonstrated sensitivity to low levels of symptoms in normal populations (Rickels, Lipman, Garcia, & Fisher, 1972). In the present study, obtained Cronbach alphas were: total HSCL, .95; anxiety, .77; depression, .85; interpersonal sensitivity, .78; obsessive-compulsive, .82, somatization, .82.

Coping Inventory for Stressful Situations. The Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1990) was used in the present study to measure coping strategies. The CISS is a 48-item proprietary measure that uses a Likert scale

format to assess four types of coping strategies: task-oriented coping, emotion-oriented coping, distance coping, and social diversion coping. Respondents are instructed to indicated how much they engage in each activity when encountered with a difficult, stressful, or upsetting situation. The Likert scale ranges from 1 ("not at all") to 5 ("very much"). Individuals who score high on task-oriented coping (16 items) use cognitive or behavioral problem solving techniques when confronted with stress (e.g., "Schedule my time better" and "Adjust my priorities"). Individuals who score high on emotion-oriented coping (16 items) are likely to respond to stress with emotional responses, self-preoccupation, or fantasy (e.g., "Become very tense" and "Wish I could change what has happened or how I felt"). Emotion-oriented coping is associated with various measures of psychopathology and task-oriented coping is negatively associated or unrelated with various measures of psychopathology (Endler & Parker, 1990; Endler et al., 1993). The avoidance-oriented coping scale (16 items) has two subscales: distraction and social diversion. Individuals who score high on social diversion coping (5 items) are likely to rely on their social support systems in times of distress (e.g., "Visit a friend" and "Talk to someone whose advice I value"). Individuals who score high on distraction coping (8 items) are likely to distract themselves from a stressful situation through involvement in other activities (e.g., "Watch T.V." and "Buy myself something"). In the proposed study, the task- and emotion-oriented scales and the distraction and social diversion subscales were used as measures of coping strategies.

Cronbach alpha reliabilities for the CISS scales with an adult population have been found to be adequate to excellent (i.e., emotion-oriented, .90; task-oriented, .89; distraction, .72; social diversion, .76) (Endler & Parker, 1990). In the present study

obtained Cronbach alphas were: emotion-oriented, .90; task-oriented, .90; distraction, .78; social diversion, .81. Six week test-retest reliabilities are adequate, with correlations ranging from .51 to .73 (Endler & Parker, 1990). There is strong support for the factor structure of the CISS (Endler & Parker, 1990). The construct validity of the CISS is well established (Endler & Parker, 1990). For instance, the CISS scales are associated in theoretically consistent ways with scales of the Ways of Coping Questionnaire (Endler & Parker, 1990), Coping Strategy Indicator (Endler & Parker, 1994), MMPI-2 Content Scales (Endler et al., 1993), and Basic Personality Inventory (Endler & Parker, 1994).

Data Analyses

The Statistics Package for Social Sciences (SPSS, Version 7.0) was used to conduct all data analyses. Descriptive statistics and preliminary analyses of the dependent and independent measures were examined. Pearson intercorrelations were examined to identify significant bivariate relationships among relevant demographic, independent, and dependent variables. These analyses were conducted to detect any significant demographic variables for subsequent hypothesis testing and to explore additional relationships other than the ones proposed in this study. Chi-square analyses were conducted to investigate whether respondents' gender covaried with parent-adult attachment style group, mother-adult attachment style category, and father-adult attachment style category.

A chi-square test was conducted to determine whether parental marital status (married versus separated/divorced) was significantly different across parent-adult attachment style groups (Hypothesis 1). Then, frequencies and percentages were calculated to determine the nature of group differences.

A 2 (respondents' gender) x 3 (parent-adult attachment style group) MANOVA was used as a initial test of Hypotheses 2 and 3. The MANOVA tested whether reported psychological symptoms, task-oriented coping, emotion-oriented coping, social diversion coping, and distraction coping, as a group of psychological adjustment variables, varied across parent-adult attachment style group and respondents' gender. The value of using multivariate analyses, over a series of univariate analyses, is that it controls for Type I error and Type II error inflation, and intercorrelation among the dependent variables, before group effects on each of the dependent measures are examined (Haase & Ellis, 1987).

A 2 (respondents' gender) x 3 (parent-adult attachment style group) ANOVA was used as a test of Hypotheses 4 and 5. The ANOVA tested whether romantic relationship adjustment varied across parent-adult attachment style group and respondents' gender. Where significant effects on parent-adult attachment style group were observed, between group contrasts (Scheffe) were conducted to test hypotheses regarding group differences.

Last, several post hoc analyses were conducted as suggested by the outcomes of the a priori analyses. The purpose of these analyses was to explore possible post hoc explanations for the study's findings.

CHAPTER IV

RESULTS

This chapter presents the results of data analyses. Initial sections discuss the treatment of missing data and present preliminary descriptive statistics for the sample. Following that, the correlational findings among relevant demographic, independent, and dependent variables are presented. The results pertaining to the relationship between parental marital status and parent-adult attachment style are then presented, followed by results describing the relations of parent-adult attachment styles and respondents' gender to the indexes of adult psychological and relationship adjustment. The final section describes the results of post hoc analyses suggested by the forgoing analyses.

Treatment of Missing Data

Prior to data analysis, all variables were examined for missing values and accuracy of data entry. Six data entry errors were identified and subsequently corrected.

Scale mean substitution was used to account for missing values on the dependent measures. The missing values for a scale item ranged from 1 - 7. Missing values were found on some demographic/background items, but were not substituted nor eliminated, because data analyses would not be affected by them: age (n = 8), type of father (n = 5), months in romantic relationship (n = 2), type of mother (n = 1), and year in college (n = 3).

Six respondents failed to indicate the most descriptive attachment style ("Best Choice" score) with mother or father on the P-AASQ. The most descriptive attachment style was assigned when it could logically be derived from responses to the continuously scored P-AASQ items (n = 4). Two missing values on the parent-adult attachment group variable remained.

A high rate of missing data was detected on five items of the DAS. Four of the DAS items had high rates of missing data due to "Not applicable" responses (#6, n = 21; #13, n = 49; #20, n = 98; #29, n = 55). One other DAS item had a high rate of missing data (#31, n = 30). The ambiguous format of the item may have caused participants to overlook it (Cf. Appendix H). A group mean substitution method of single imputation was used to adjust for the DAS missing data. [1]

Preliminary Descriptive Statistics

Table 7 contains the full name, mean, standard deviation, skewness, and range of the study's dependent variables. The descriptive data are consistent with those found in validation studies of each measure (Derogatis et al., 1974; Endler & Parker, 1990; Spanier, 1976).

[1] The DAS item most highly correlated with the target item (item with missing values) was identified. Next, for each case with a missing value in the target item, the value on the correlated item was identified. Then, a group was created of all same-value cases on the correlated item. Using that group, a mean score was calculated on the target item and entered in the target item's empty cell. For example, DAS item #13 had missing values. Of all the DAS items, DAS item #13 had the highest correlation with DAS item #14. Case 3 had an empty cell on DAS item # 13 and a "2" on DAS item #14. All cases with a score of " 2" on DAS item # 14 were grouped. The mean score on DAS item #13 was calculated for the newly formed group and entered in the empty cell for DAS #13. This method of was selected over regression, subscale mean substitution, and random imputation because it preserved the integrity of the data to the greatest extent. Note that DAS items use 6-, 5-, 4- and 2- point rating scales. The aforementioned methods could have produced imputations that exceeded or restricted the range of the Likert scale for the target item. The series mean substitution was not selected because, given the relatively large number of "missing data", it may have unduly limited the items' variance.

Table 7

Descriptive Statistics for Dependent Variables

Variable Name	M	SD	SK	Range
Distraction Coping	19.84	6.41	.22	8.00 - 37.00
Emotion-Oriented Coping	40.71	11.93	.16	16.00 - 75.00
Social Diversion Coping	15.60	4.67	.08	5.00 - 25.00
Task-Oriented Coping	56.75	10.47	-.46	18.00 - 80.00
Dyadic Adjustment Scale	112.16	16.49	-.99	28.00 - 148.00
Hopkins Symptom Checklist	93.84	23.86	1.10	58.00 - 187.00

Approximately 50% of the sample reported a concordant secure parent-adult attachment style, 33% reported a discordant parent-adult attachment style, and 16% reported an insecure concordant parent-adult attachment style. These data are similar to those of the pilot study (Cf. Chapter II, Pilot study results section).

In view of the conflicting findings in the research literature and in light of Question 4, a chi-square analysis was conducted to determine whether parent-adult attachment style group and respondents' gender covaried. The results indicated that parent-adult attachment style group was not systematically related to respondents' gender: X^2 (2, N = 328) = 4.91, p = .09. Table 8 presents the frequencies and percentages of males and females in each parent-adult attachment style group.

Table 8

Frequencies and Percentages of Parent-Adult Attachment Style Group by Gender

	Males		Females	
Attachment Group	n	%	n	%
Concordant Secure	79	57.66	87	45.54
Discordant	38	27.77	72	37.69
Concordant Insecure	20	14.59	32	16.75
Total	137	100.02%	191	99.98%

Note. $N = 328$. Percentages do not total 100.00% due to rounding errors.

Another chi-square analysis was conducted to determine whether mother- and father-adult attachment style category ("Best Choice" score) and respondents' gender covaried. The results of separate analyses indicated that mother- and father-adult attachment style were systematically related to respondents' gender : X^2 (3, $N = 329$) = 18.63, $p < .001$ and X^2 (3, $N = 327$) = 16.76, $p < .001$, respectively. Table 9 presents the frequencies and percentages of males and females in each mother- and father-adult attachment style category. In relation to both parental relationships, proportionally more males than females reported secure and dismissive attachment styles and proportionally more females than males reported preoccupied and fearful attachment styles.

Table 9

Frequencies and Percentages of Mother- and Father-Adult Attachment Style Category by Gender

	Mother				Father			
	Males		Females		Males		Females	
	n	%	n	%	n	%	n	%
Secure	107	77.54	135	70.68	90	66.18	111	58.12
Dismissive	26	18.84	21	10.99	35	25.74	32	16.75
Preoccupied	1	.72	15	7.85	6	4.41	26	13.61
Fearful	4	2.90	20	10.47	5	3.68	22	11.52
Totals	138	100.00%	191	99.99%	136	100.01%	191	100.00%

Note. Percentages do not total 100.00% due to rounding errors.

Correlational Findings

Pearson intercorrelations among key measures used in the study can be found in Table 10. This discussion of data will be limited to those correlations that were significant at the .01 level, unless otherwise noted. The alpha level was set at .01 to adjust for possible Type I error inflation due to the large number of intercorrelations.

Several significant correlations among the CISS scales were present. The strength and direction of the correlations are consistent with those observed in prior validation studies on the CISS (Endler & Parker, 1990). In addition, both the distraction and

Table 10

Intercorrelation Matrix

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. CISS.Dis	-													
2. CISS.Emo	.35**	-												
3. CISS.Soc	.44**	.19**	-											
4. CISS.Task	.00	-.03	.23**	-										
5. DAS	-.21**	-.24**	.14*	.24**	-									
6. HSCL	.35**	.69**	.11*	-.09	-.30**	-								
7. P-AASQ.M Secure	-.06	-.06	.08	.11	.21**	-.15**	-							
8. P-AASQ.F Secure	.08	.00	.12*	.07	.14*	-.04	.22**	-						
9. Gender	.14*	.23**	.21**	.00	-.07	.14*	.01	-.08	-					
10. Parental marital status	-.09	-.05	-.14*	-.03	-.07	-.03	-.11*	-.28**	.10	-				
11. Age	-.05	-.04	-.22**	-.02	-.16**	-.01	-.17**	-.04	-.00	-.02	-			
12. Months in relationship	-.08	-.05	-.25**	.03	-.15**	-.02	-.13*	.01	-.00	.01	.61**	-		
13. Marital status	.17**	.14*	.36**	-.03	-.06	.08	.03	-.04	-.28**	-.02	-.34**	-.48**	-	
14. Year in college	-.09	.01	-.12*	.04	-.05	.05	-.12*	-.07	.25**	-.03	.35**	.22**	-.22**	-

Note. n = 294 - 301. CISS.Dis = Distraction Coping, CISS.Emo = Emotion-Oriented Coping, CISS.Soc = Social Diversion Coping, CISS.Task = Task-Oriented Coping, DAS = Dyadic Adjustment Scale, HSCL = Hopkins Symptom Checklist, P-AASQ.M Secure = Parent-Adult Attachment Style Questionnaire- Mother form, Secure scale, P-AASQ.F Secure = Parent-Adult Attachment Style Questionnaire- Father form, Secure scale. Coding for categorical variables was: Gender: 1 = male, 2 = female; Parental marital status: 1 = married, 2 = separated/divorced; Marital status: 1 = married, 2 = single; Year in college: 1 = Freshman, 2 = Sophomore, 3 = Junior, 4 = Senior. Cases that had "other" as the selection for "Year in School" were eliminated from analyses.
* $p<.05$; ** $p< .01$.

emotion-oriented coping scales had significant positive relationships with the HSCL (r = .35 and .69, respectively) and a negative relationship with the DAS (r = -.21 and -.24, respectively). These data indicate that participants who frequently cope by using self-preoccupation, fantasy, emotional responses or diversion are likely to report psychological distress and poor relationship adjustment. In addition, the emotion-oriented coping scale had a significant positive relationship with respondents' gender (r = .23), indicating that women reported using emotion-oriented coping more than did men. The distraction coping scale was positively correlated with respondents' marital status (r = .17), suggesting that single respondents reported that they use diversionary strategies to cope with stress more often than did those who are married. The social diversion coping scale, a measure of social support seeking, was negatively correlated with age (r = -.22) and months in romantic relationship (r = -.25) and positively correlated with marital status (r = .36) and respondents' gender (r = .21). This suggests that individuals who frequently cope by using social support are likely to be females, young, single, and in short-term romantic relationships. Task-oriented coping had a positive correlation with the DAS (r = .24), which suggests that persons who frequently cope by using cognitive or behavioral problem solving techniques report high levels of romantic relationship adjustment.

The DAS was negatively correlated with age (r = -.16), HSCL (r =-.30), and months in romantic relationship (r = -.15), and positively correlated with secure attachment style with mother (r = .21). This suggests that individuals who report high levels of romantic relationship adjustment are likely to be young, report low levels of psychological distress, be in short-term romantic relationships, and report high levels of security in their attachment relationships with their mother. The DAS was positively

correlated with levels of security in the attachment relationship with father (r = .14), but did not meet the adjusted significance level.

The HSCL was negatively correlated with secure attachment with mother (r = -.15), indicating that individuals who report high levels of psychological symptoms report low levels of security in their attachment relationships with mother. There was not a significant relationship between HSCL scores and levels of security in the attachment relationship with father.

Relations between Parent-Adult Attachment Style Group and Parental Marital Status

Hypothesis 1 stated that parental marital status and parent-adult attachment style groups would covary. Specifically, it was expected that there would be disproportionately more respondents from separated/divorced family backgrounds in the discordant and concordant insecure groups than the concordant secure group.

A chi-square test was conducted to determine whether parental marital status (married versus separated/divorced) was significantly different across parent-adult attachment style groups. Results indicated that parent-adult attachment groups were systematically related to parental marital status: X^2 (2, N=328) =14.99, $p < .001$. As reported in Table 11, the majority of respondents from married family backgrounds reported a secure attachment relationship with both parents whereas the majority of respondents from separated/divorced family backgrounds reported an insecure attachment relationship with one or both parents.

Table 11

Frequencies and Percentages of Parent-Adult Attachment Style Group by Parental Marital Status

	Parents Married		Parents Separated/Divorced	
Attachment Group	n	%	n	%
Concordant Secure	141	59.00	25	31.00
Discordant	73	28.00	37	47.00
Concordant Insecure	35	13.00	17	22.00
Total	249	100.00%	79	100.00%

Point-biserial correlations for parental marital status and mother- and father-adult attachment style categories were computed. The purpose of these analyses was to explore the nature of the relationships between parental marital status (1 = married; 2 = separated/divorced) and attachment styles (continuous scores) with each parent. Parental marital status was negatively correlated with a secure mother-adult attachment style (r = -.11, p <.05). and positively correlated with a fearful mother-adult attachment style (r = .12, p <.05). Parental marital status was negatively correlated with a secure father-adult attachment style (r = -.28, p<.01) and negatively correlated with dismissive (r = .18, p<.01) and fearful (r = .17, p<.01) father-adult attachment styles.

Following transformation of r scores into z scores, Fisher Exact Tests were used to investigate whether the differences in z scores were significant. First, the association between parental marital status and secure mother-adult attachment style was compared to

the association between parental marital status and secure father-adult attachment style. The difference was significant: $z = 3.23$, $p<.01$. However, the difference between the correlations of parental marital status and fearful mother-adult attachment style and parental marital status and fearful father-adult attachment style was not significant, $z = .93$, $p>.05$. These results indicate that the strength of the association between parental marital status and attachment insecurity with a parent, though significant for both the mother and father relationship, is stronger for the father-adult attachment relationship. Taken together, the chi-square test and Fisher Exact test results indicate that individuals from divorced/separated family backgrounds report lower levels of security in their attachment relationships with their parents, and especially their fathers, than individuals from intact family backgrounds.

Relations between Parent-Adult Attachment Style Group and Psychological Adjustment

Significant relationships were hypothesized between parent-adult attachment style group and psychological symptoms (Hypothesis 2a) and between parent-adult attachment style group and each of the coping strategies (Hypothesis 2b). Interaction effects were hypothesized between parent-adult attachment style groups and respondents' gender on psychological symptoms (Hypothesis 3a) and on each of the coping strategies (Hypotheses 3b). A MANOVA was used as an initial test of these hypotheses.

All assumptions relevant to MANOVA were checked. Using Mahalanobis distance with $p< .001$, one case was identified as a multivariate outlier; this case was deleted.

The normality of the distribution of the variables was checked by histograms, tests of skewness and kurtosis, stem and leaf plots, and probability plots and were found, with the exception of the HSCL, to be fairly normal. The HSCL had a moderate positive skew, but was not transformed because the MANOVA analysis, even with unequal ns, is robust to violations of normality when sample sizes are large and when the violation is created by skewness rather than by outliers (Tabachnick & Fidell, 1996). Note that the positive skew indicates that the majority of respondents reported few psychological symptoms.

Pairwise linearity was satisfactory based on examination of bivariate scatterplots of all combinations of the dependent variables. Multicollinearity was assessed with collinearity diagnostics of the SPSS REGRESS program. All condition indexes, related variance proportions, and tolerance levels were satisfactory.

Box's M produced $\underline{F}$ (75, 39497) = 1.13, $\underline{p}$ = .20, providing strong evidence for homogeneity of the variance-covariance matrices. This finding indicates that the variance-covariance matrices can be pooled to create a single estimate of error without distorting alpha levels (Tabachnick & Fidell, 1996). This may arguably be the most important assumption to meet for this study's data analyses, given that there was unequal group sizes in the sample.

A 2 (respondents' gender) x 3 (parent-adult attachment style group) MANOVA was performed on five dependent variables: psychological symptoms, distraction coping, emotion-oriented coping, social-diversion coping, and task-oriented coping. An alpha level of .05 was selected. The means and standard deviations of the coping and

psychological symptoms measures by parent-adult attachment style groups are presented in Table 12.

Table 12

Means and Standard Deviations of the Coping and Psychological Symptom Measures by Parent-Adult Attachment Style Groups

	Concordant Secure		Discordant		Concordant Insecure	
Measures	M	SD	M	SD	M	SD
Distraction Coping	19.16	6.20	20.90	6.63	19.71	6.48
Emotion-Oriented Coping	39.34	11.76	42.42	11.05	41.62	13.97
Social Diversion Coping	15.80	4.70	15.55	4.35	14.96	5.27
Task-Oriented Coping	57.78	9.73	56.39	10.37	54.44	12.69
Hopkins Symptom Checklist	90.40	21.42	97.36	25.26	97.56	27.29

With the use of the Wilks' criterion, the combined dependent variables were significantly affected by respondents' gender, F (5, 318) = 5.43, $p < .001$, but not by parent-adult attachment group, F (10,636) = 1.37, $p = .19$ nor the interaction effect of respondents' gender and parent-adult attachment style group, F (10, 636) = .76, $p = .67$.

Contrary to the hypotheses, there was not a significant relationship between parent-adult attachment style group and the group of psychological adjustment measures (psychological symptoms and coping strategies). Furthermore, the results do not support

the hypothesized interaction between parent-adult attachment style group and respondents' gender on psychological symptoms nor coping strategies. Between group comparisons were not conducted because the MANOVA failed to show a significant main effect for parent-adult attachment style groups.

Relations between Parent-Adult Attachment Style Group and Romantic Relationship Adjustment

Hypothesis 4 postulated a significant relationship between parent-adult attachment style group and romantic relationship adjustment. Hypothesis 5 postulated an interaction effect between parent-adult attachment style groups and respondents' gender on romantic relationship adjustment.

A 2 (respondents' gender) x 3 (parent-adult attachment style group) ANOVA was conducted to investigate the effects of parent-adult attachment style group and respondents' gender on reported romantic relationship adjustment. All assumptions relevant to ANOVA were checked and met. One univariate outlier, due to extremely low score on the DAS, was detected by boxplot, histogram, and normal probability plot, and was subsequently deleted. The normality of the DAS was supported by a histogram, tests of skewness and kurtosis, a stem and leaf plot, and a probability plot. Homogeneity of variance was established by the Levene statistic.

The results of the ANOVA are presented in Table 13. There was a significant between group difference for parent-adult attachment style group (F (2, 322) = 10.15, p <.001), but there was no interaction between parent-adult attachment style group and respondents' gender on romantic relationship adjustment. The results reflected a

moderate association between parent-adult attachment style group and scores on the DAS, $n^2 = .06$.

Table 13

Analysis of Variance of DAS Total Scores by Gender and Parent-Adult Attachment Style Group

Source of Variation	SS	df	MS	F
Parent-Adult Attachment Style Group	5266.10	2	2633.05	10.15**
Gender	26.64	1	26.64	.10
Interaction	70.62	2	35.31	.14
Residual	83548.70	322	259.47	

Note. N = 330.
* p < .05; **p<.01

Table 14 presents the means and standard deviations of scores on the DAS across the parent-adult attachment style groups. Differences between the three parent-adult attachment groups on relationship adjustment were explored using the Scheffe test, with the significance level set at p<.05. Scheffe data indicated that the concordant secure parent-adult attachment style group reported significantly better relationship adjustment than both the discordant and concordant insecure groups, t (274) = 6.45, p < .001 and t (216) = 10.45, p < .001, respectively.

Table 14

Means and Standard Deviations of DAS Total Scores by Parent-Adult Attachment Style Group

	M	SD
Concordant secure	115.93	15.18
Discordant	109.47	16.49
Concordant insecure	105.47	17.69

Post-Hoc Analyses

Post hoc analyses were conducted to explore the study's findings. An alpha level of .05 was used for all post hoc statistical analyses. The first set of analyses explored the possibility that the conceptual grouping of the dependent measures into psychological adjustment and romantic relationship adjustment clusters did not adequately capture existing between group differences. A principal components factor analysis was conducted to explore whether a different combination of the same dependent measures was more statistically appropriate for testing differences between and among parent-adult attachment style groups on the dependent measures.

The second set of post hoc analyses explored the nonsignificant findings between parent-adult attachment style group and measures of psychological adjustment. The purposes of the analyses were (1) to explore whether mother- and/or father-adult attachment style category was associated with the grouping of measures of psychological adjustment, but was obscured by the parent-adult attachment style groups, and (2) to

explore whether respondents' marital status interacted with mother- and father-adult attachment style category in the prediction of psychological adjustment.

The third set of post hoc analyses examined parent-adult attachment style group differences on the DAS subscales. The purpose of these analyses was to explore whether parent-adult attachment style groups predicted different aspects or dimensions of romantic relationship adjustment (i.e., expression of affect, consensus, satisfaction, cohesion).

The fourth set of post hoc analyses examined whether the age diversity of the sample influenced the a priori findings. Attachment theory suggests that the emotional influences of parental attachment relationships might be less powerful in middle and late adulthood than in young adulthood (Ainsworth, 1989). The purpose of these post hoc analyses to explore whether the data from younger respondents (age< 30) was disparate from that of the total sample.

Post hoc analyses of all dependent measures. Principal components factor analysis, using an oblique rotation, was conducted on the entire set of coping, symptom, and relationship adjustment measures. The results indicated a two factor solution that accounted for 61.9% of the variance. The factors were essentially uncorrelated (r = -.03). The factor loadings are presented in Table 15. Factor 1 had an eigenvalue of 2.24 and accounted for 37.3% of the variance. Factor 1 was labeled "Unhealthy Functioning" and is characterized by romantic relationship distress, psychological distress, and reliance on emotion-oriented and distraction coping. Factor 2 had an eigenvalue of 1.48 and accounted for 24.6 % of the variance. Factor 2 was labeled "Healthy Functioning" and is

characterized by high romantic relationship adjustment, psychological well-being, and reliance on task-oriented and social diversion coping.

Table 15

Factor Pattern for the Dependent Variables using Oblique Rotation

	Rotated Factor Pattern	
Dependent Variable	Factor 1	Factor 2
Distraction Coping	.72	.30
Emotion-Oriented Coping	.82	-.05
Social Diversion Coping	.41	.76
Task-Oriented Coping	-.11	.70
Dyadic Adjustment Scale	-.46	.54
Hopkins Symptom Checklist	.81	-.16

Note: N = 330.

Two 2 (respondents' gender) x 3 (parent-adult attachment style group) ANOVAs were conducted using regression scores of Factors 1 and 2 as the dependent measures. For Unhealthy Functioning (Factor 1), the main effect of parent-adult attachment style group reached significance, F (2, 322) = 3.56, $p < .05$, as did the main effect of respondents' gender, F (1, 322) = 15.53, $p < .001$. The interaction of parent-adult attachment style group and respondents' gender was not significant, F (2, 322) = 1.07, $p = .35$. For Healthy Functioning (Factor 2), the main effect of parent-adult attachment style

group reached significance, F (2, 322) = 6.04, $p<.01$, as did the main effect of respondents' gender, F (1, 322) = 3.71, $p < .05$. The interaction of parent-adult attachment style group and respondents' gender was not significant, F (2, 322) .16, p = .85.

Differences between the parent-adult attachment style groups on Factors 1 and 2 were explored using Scheffe's tests with the significance level set an $p<.05$. On Unhealthy Functioning (Factor 1) the concordant secure and discordant groups were significantly different, t (274) = -3.08, $p < .01$. The concordant secure group reported a lower degree of unhealthy functioning than did the discordant group. On Healthy Functioning (Factor 2), the concordant secure and concordant insecure groups were significantly different, t (216) = 3.18, $p< .01$. The concordant secure group reported a higher degree of healthy functioning than did the concordant insecure group.

Table 16 presents the means and standard deviations of regression scores on Factors 1 and 2 by parent-adult attachment style group. The relative mean scores were ordered as expected. The discordant and concordant insecure groups reported higher scores on the Unhealthy Functioning factor than did the secure concordant group. And, the concordant secure group reported higher scores on the Healthy Functioning factor than did the concordant insecure and discordant groups.

Table 16

Means and Standard Deviations of Regression Factor 1 and 2 Scores by Parent-Adult Attachment Style Group

	Concordant Secure		Discordant		Concordant Insecure	
Factors	M	SD	M	SD	M	SD
Unhealthy Functioning	-.17	.96	.19	.97	.15	1.11
Healthy Functioning	.15	.93	-.07	.99	-.35	1.20

Post hoc analyses of psychological adjustment measures. Two 2 (respondents' gender) x 2 (respondents' marital status) x 4 (parent-adult attachment style category) MANOVAs were conducted to explore other post hoc explanations for the nonsignficant findings in the relationships between mother- and father-adult attachment style category and each of the measures of psychological adjustment. One MANOVA used mother-adult attachment style category ("Best Choice" score) as an independent variable, the other used father-adult attachment style category ("Best Choice" score) as an independent variable. Both MANOVAs used the five measures of psychological adjustment as dependent variables: task-oriented coping, emotion-oriented coping, social diversion coping, distraction coping, and psychological symptoms.

With the use of the Wilks' criterion, the combined dependent variables were not significantly affected by father-adult attachment style category, F (15, 847) = 1.00, p = .46

nor any of the other main or interaction effects. These data indicate that father-adult attachment style categories were not associated with the grouping of variables of psychological adjustment and that respondents' marital status did not interact with father-adult attachment style categories in the prediction of psychological adjustment.

With the use of the Wilks' criterion, the combined dependent variables were not significantly affected by mother-adult attachment style category, $\underline{F}$ (15, 859) = 1.05, $\underline{p}$ = .40, but were significantly affected by the interaction of mother-adult attachment style category and relationship status, $\underline{F}$ (15, 859) = 2.05, $\underline{p} < .01$. These results indicate that mother-adult attachment style category was not related with the grouping of variables of psychological adjustment. However, respondents' marital status moderated the effect of mother-adult attachment style category on the grouping of psychological adjustment measures. Univariate tests indicated that the differences can be localized to the following measures: distraction coping, emotion-oriented coping, social diversion coping, and HSCL. Examination of group means (See Table 17) indicated that most married respondents reported less reliance on distraction and emotion-oriented coping and less psychological distress than single respondents. However, married respondents who reported a fearful attachment style with mother reported more use of emotion-oriented and distraction coping and more psychological distress than did their single counterparts. Furthermore, married respondents who reported a preoccupied attachment style with mother reported more use of emotion-oriented coping than their single counterparts. In addition, married respondents reported less use of social support (social diversion) than

Table 17

Means and Standard Deviations of Psychological Functioning Measures by Mother-Adult Attachment Style Category and Marital Status

Mother-Adult Attachment Style Category	Distraction		Emotion-Oriented		Social Diversion		HSCL	
	M	SD	M	SD	M	SD	M	SD
Secure								
Single	20.63	6.26	42.04	11.42	17.42	4.37	94.59	20.37
Married	18.43	6.14	37.94	11.50	14.03	4.20	90.34	24.36
Dismissive								
Single	21.70	5.80	43.65	13.80	17.17	4.07	98.96	22.68
Married	17.46	5.97	37.63	11.53	12.50	4.25	88.08	26.91
Preoccupied								
Single	25.80	7.66	41.20	12.93	15.60	5.87	103.70	23.30
Married	22.67	9.42	45.00	9.67	17.00	4.90	96.17	18.99
Fearful								
Single	18.17	6.38	43.00	9.35	17.08	4.87	94.42	25.50
Married	22.67	4.56	52.00	12.75	14.58	4.81	114.92	36.44

did single respondents, unless they reported a preoccupied attachment style category with mother. In that case, married individuals reported more use of social support than did single respondents.

Post hoc analyses of DAS subscale scores. Follow-up analyses were conducted to determine whether the three parent-adult attachment style groups differentially explained significant variance across the four DAS subscales (affectional expression, cohesion, consensus, satisfaction). A 2 (respondents' gender) x 3 (parent-adult attachment style group) MANOVA was performed using the four DAS subscales as dependent variables. The multivariate approach to MANOVA post hoc analysis (Stevens, 1996) was selected over the univariate approach (Tabachnick & Fidell, 1996) because it afforded protection against Type I errors by testing parent-adult attachment style group differences on the grouping of DAS subscales before examining group differences on each DAS subscale.

With the use of the Wilks' criterion, the combined dependent variables were significantly affected by parent-adult attachment group, F (8,638) = 2.81, $p < .01$, but not by respondents' gender, F (4, 319) = .44, $p = .77$, nor their interaction, F (8, 638) = .66, $p = .74$. The association between parent-adult attachment style group and the DAS subscales was moderately small, partial $\eta^2 = .03$.

Hotelling T^2 statistics were conducted to determine which pairs of parent-adult attachment style groups differed on the set of DAS subscales. The experimentwise alpha was set at .15 to control for Type I error (Stevens, 1996). Two of the three multivariate t-tests were significant at $p < .0375$: concordant secure versus discordant ($T^2 = 12.94$, $p < .01$) and concordant secure versus concordant insecure ($T^2 = 16.67$, $p < .01$). Tukey's

procedure, adjusted for unequal group sizes, was used to examine the differences between these groups on each of the independent variables. Significantly higher scores on each of the DAS subscales were observed for the concordant secure group when compared with the concordant insecure group: affectional expression, F (1, 214) = 8.74, $p < .01$; cohesion, F (1, 214) = 10.26, $p < .01$; consensus, F (1, 214) = 12.99, $p < .01$; satisfaction, F (1, 214) = 9.19, $p < .01$. Significantly higher consensus scores were observed for the concordant secure group than the discordant group, F (1,272) = 12.41, $p < .001$. Table 18 reports the means and standard deviations of scores on the DAS subscales across the parent-adult attachment style groups.

Table 18

Means and Standard Deviations of Scores on DAS Subscales by Parent-Adult Attachment Style Group

	Concordant Secure		Discordant		Concordant Insecure	
DAS Scales	M	SD	M	SD	M	SD
Affectional Expression	9.32	1.94	8.67	2.20	8.26	2.34
Cohesion	17.27	3.62	16.25	3.45	15.19	4.21
Consensus	48.89	6.99	46.88	7.10	45.77	7.27
Satisfaction	39.44	6.37	37.67	6.76	36.25	7.15

Post hoc analyses of respondents under 30 years of age. Exploratory statistics were conducted to determine whether the a priori findings may have been obscured by the age diversity of the sample in general, and the older portion of the sample in particular. A 2 (respondents' gender) x 3 (parent-adult attachment style group) MANOVA on the set of psychological adjustment measures was conducted using only those respondents under 30 years of age. With the use of the Wilks' criterion, the combined dependent variables of psychological functioning were significantly affected by respondents' gender, F (5, 221) = 6.87, $p<.001$, but not by parent-adult attachment group, F (10, 442) = 1.49 , $p = .14$ nor the interaction effect of respondents' gender and parent-adult attachment group, F (10, 442) = .39, $p = .95$. In addition, a 2 (respondents' gender) x 3 (parent-adult attachment style group) ANOVA on romantic relationship adjustment was conducted using only those respondents under 30 years of age. There was a significant between group difference for parent-adult attachment style group, F (2, 225) = 5.46, $p <.01$, but not for respondents' gender, F (1, 225) = 1.00, $p = .318$ nor the interaction between parent-adult attachment style group and respondent's gender, F (2, 225) = 2.29, $p = .14$.

Both the MANOVA and ANOVA analyses that used respondents between 18 and 29 years of age produced results that were consistent with those of the a priori MANOVA and ANOVA analyses that used respondents between 18 and 58 years of age. These findings indicate that the age diversity of the sample did not influence the findings and provide support for using the entire sample in the data analyses.

Summary of Findings

Parent-adult attachment style group was significantly related to parental marital status. Specifically, most respondents from married family backgrounds reported a secure attachment relationship with both parents, whereas most respondents from separated/divorced family backgrounds reported an insecure attachment relationship with one or both parents.

There were no significant gender differences in the relationships between parent-adult attachment style group and the measures of adult functioning (psychological symptoms, coping strategies, romantic relationship adjustment).

Parent-adult attachment style group was significantly related to participants' current relationship adjustment with their romantic partners. Respondents reporting secure attachment relationships with both parents reported higher rates of romantic relationship adjustment than did those who reported insecure attachment relationships with one or both parents. Follow-up analyses demonstrated that participants reporting secure attachment relationships with each parent reported higher rates of affectional expression, consensus, cohesion, and satisfaction in their romantic relationships than did their peers who reported insecure attachment relationships with each parent. Moreover, post hoc analyses demonstrated that participants reported secure attachment relationships with each parent reported higher rates of consensus in their romantic relationship than did their peers who reported insecure attachment relationships with one parent.

Parent-adult attachment style group was not significantly related to the measures of psychological adjustment (psychological symptoms and coping strategies). However,

the grouping the dependent measures into psychological and relationship categories used in the a priori analyses was not statistically meaningful and in fact obscured some important between group differences that were detected using factor-analytically derived dimensions of Healthy and Unhealthy Functioning. Differences between the parent-adult attachment style groups on Healthy and Unhealthy Functioning Factors were significant. The concordant secure parent-adult attachment style group reported the highest rates of healthy functioning and the lowest rates of unhealthy functioning.

CHAPTER V

DISCUSSION

The primary purpose of this study was to investigate the relationship of adult attachment styles with both parents, considered jointly, to broad measures of adult adjustment. To accomplish this purpose, a new measure, the Parent-Adult Attachment Style Questionnaire (P-AASQ), was developed and initially validated in a pilot study. In this pilot study, the measure was administered to a sample of 107 college students, along with independent measures of retrospective and current emotional bonds with parents, attachment style in intimate/close relationships, trust, self-esteem and several demographic items assessing the quality of student's relationships with each parent. The data offered preliminary psychometric support for the measure: within each relationship (father-adult, mother-adult), attachment styles were significantly related in theoretically expected ways to the independent measures of attachment constructs. The measure evidenced moderate test-retest reliability with a subsample ($\underline{n}$ = 84) of respondents who were readministered the novel measure after a one week interval. Furthermore, the results indicated the presence of multiple, discordant attachment styles for a sizable portion of the sample and that parent-adult attachment styles, considered jointly, predicted differences in self-esteem.

In the main study, the P-AASQ was used to investigate the relationships of parent-adult attachment styles to adult functioning within a larger, independent sample of adult

college students. Based on categorical responses to the P-AASQ, respondents were placed into one of the following parent-adult attachment style groups for analyses: concordant secure (secure attachment styles with both parents), discordant (secure attachment style with only one parent), and concordant insecure (insecure attachment styles with both parents). The study identified how parent-adult attachment style groups related to adult psychological adjustment (psychological symptoms and coping strategies) and to romantic relationship adjustment. In addition, the study investigated the role of gender in the relationship between parent-adult attachment style groups and measures of adult functioning and the linkage between parental marital status and parent-adult attachment style groups.

Parent-Adult Attachment Style

In both the pilot and main study, approximately one third of participants reported discordant attachment styles with parents. This study extended the research by using a four category parent-adult attachment style measure to detect the presence of multiple attachment styles. The finding is consistent with Baldwin et al.'s (1996) findings which were obtained using an adapted form of Hazan and Shaver's (1987) three category adult attachment style measure, and with the findings in the infant/childhood attachment literature, using the strange situation procedure (Fox et al., 1991; Lamb, 1977; Main & Weston, 1981).

Two conclusions follow from this finding. First, adults can have multiple models of attachment relationships. An adult's attachment style with one parent does not always correspond to his or her style with the other parent. Second, and following from the first,

the data support the assumption that attachment style is a relationship construct rather than a trait or personality construct (Kobak, 1994; Lewis, 1994).

Chi-square analysis indicated that there were no gender differences between parent-adult attachment style groups. However, Chi-square analyses of the mother- and father-adult attachment style categories ("Best Choice" scores) indicated that more males than females reported secure and dismissive attachment styles and more females than males reported preoccupied and fearful attachment styles. These findings are consistent with studies which found gender differences using Bartholomew and Horowitz's four category measure of adult attachment in intimate/close relationships (e.g., Bartholomew & Horowitz, 1991; Brennan et al., 1991) on which this study's measure was based. It appears that gender differences between mother- and father-adult attachment style categories were lost when the data were combined to form parent-adult attachment style groups.

Parent-Adult Attachment Style Groups and Parental Marital Status

This study extended the research by providing new information on the association between parent-adult attachment relationships and parental marital status. It was hypothesized that parental marital status and parent-adult attachment style groups would covary. Results indicated that parental marital status was significantly different across the parent-adult attachment style groups. Respondents from separated/divorced family backgrounds reported proportionally less security in parent-adult attachment relationships than did respondents from married family backgrounds. It is important to keep in mind, however, that the sample was drawn from a region that is known to be conservatively

minded on marriage and family relationships. As such, there may be some limitation to the generalizeability of these findings to diverse populations.

Correlational analyses showed that the association between parental marital status and attachment style category was stronger for the father-adult relationship than the mother-adult relationship. These data are compatible with research that has shown that factors associated with divorce (parental conflict, reduced parental contact, and post-divorce arrangements) are related to a reduced quality of parent-offspring, and especially father-offspring, relationships (Black & Pedro-Carroll, 1993; Cooney et al., 1986; Emery, 1989; Lopez et al., 1989; Parish & Wigle, 1985; Webster & Herzog, 1995). This study's findings support the notion that parental divorce is especially likely to disrupt the father-adult relationship.

Attachment theory suggests that internal working models of attachment are formed in childhood and thereafter remain relatively stable. However, significant life events, such as the beginning or ending of a relationship or a major life transition, may promote a revision of internal working models (Bowlby, 1988a). The results of the present study suggest that parental separation/divorce may function as a disruptive life event that may dispose affected offspring toward greater insecurity in the parent-child relationship.

Parent-Adult Attachment Style Groups and Psychological Adjustment

Surprisingly, no significant relationships were observed between parent-adult attachment style group and the set of psychological adjustment measures (psychological symptoms and coping strategies). However, post hoc analyses detected one finding, which though not central to the study's hypotheses, bears mentioning. Respondents' marital status interacted with mother-adult attachment style category in the prediction of

coping strategies and psychological symptoms. Most married respondents reported more favorable use of emotion-oriented and distraction coping and less psychological distress than single respondents. However, married respondents who reported a fearful attachment style with mother reported more reliance on emotion-oriented and distraction coping and more psychological distress than their single counterparts. And, married respondents who reported a preoccupied attachment style with mother reported more use of emotion-oriented coping than did their single counterparts. It appears that married respondents who have unresolved attachment issues may be vulnerable to maladaptive coping and psychological distress. Research outside of the realm of attachment theory supports this notion. McGoldrick's (1980) review of marital theory and research suggests that unresolved parent-child issues (e.g., conflict, distance, enmeshment) typically interfere with healthy functioning and coping during marriage.

The null findings for the hypotheses related to psychological adjustment can be explained by key aspects of attachment theory and by statistical findings in the present study. First, the positive skew of the HSCL may explain the null findings, in regards to psychological symptoms. The sample appears to be a relatively high functioning one: they reported low levels of psychological distress. The skew may have restricted the variation of scores resulting in a failure to detect a between group effect.

Second, recent research indicates that some insecure respondents' responses to self-report measures of psychological adjustment are biased by defensive perceptual processes. Research has demonstrated that people with avoidant attachment styles deny negative affect (Mikulincer & Orbach, 1995). One study, which used an experimental design, found that adults with dismissive attachment styles demonstrated significant

physiological activity while simultaneously denying the experience of negative affect (Dozier & Kobak, 1992). In another study, peer ratings, but not self-report ratings, indicated that people with dismissive attachment styles had poor psychological adjustment compared to people with secure attachment styles (Kobak & Sceery, 1988). Based on this research, it is reasonable to hypothesize that systematic differences between parent-adult attachment style groups on measures of psychological adjustment (symptoms and coping strategies) were obscured, to some degree, by dismissive and/or fearful respondents' defensive denial.

Third, the present study may have failed to detect an effect for psychological adjustment because it did not incorporate romantic attachment style in the analyses. It is possible that the link between parent-adult attachment style groups and adult psychological adjustment is indirect and mediated by attachment styles with romantic partners. Attachment theory and research offers some insight in this regard. Attachment theory suggests that adults' attachment figures typically include parents and romantic partners. Ainsworth (1989) claimed that at some point during or after adolescence, romantic attachment bonds become primary over those of parents and the attachment base thereby becomes broader, with attachment needs diffused across relationships. However, she acknowledged that the relative influence of these attachment figures is largely unknown. It is reasonable to assert that people revise their internal working models of attachment on the basis of their experiences with romantic partners thereby making attachment-related experiences with parents less central to adult psychological adjustment.

A number of investigations offer indirect support for the mediational role of romantic attachment style in the link between parent-adult attachment style and

psychological adjustment. Studies have demonstrated that adult romantic attachment relationships can allay psychological problems that may have been related to insecure parent-child attachment bonds (Carnelley et al., 1994; Egeland et al., 1988; Main et al., 1985; Pearson et al., 1994; Rutter et al., 1990). It is therefore reasonable to hypothesize that adult romantic attachment relationships can mitigate psychological problems that may have been related to insecure parent-adult attachment bonds. However, this assertion has not been investigated. It would be of value to clarify the relationships among parent-adult attachment style, romantic attachment style, and psychological adjustment in future research.

Fourth, the linear composite of scores on the indices of psychological symptoms and coping strategies, used in the MANOVA, may not have been a sufficiently sensitive index of adjustment to capture existing differences in parent-adult attachment style groups. Rice's (1990) meta-analytic study offers some support for this notion. He found that the relationship between psychological adjustment and parental attachment varied depending upon the indices of adjustment used. Rice's findings are consistent with the findings of the present study. In the pilot study, self-esteem scores had a significant positive association with parent-adult attachment style, whereas, in the main study, the linear composite scores on measures of psychological adjustment (psychological symptoms and coping strategies) had no association with parent-adult attachment style. These findings highlight the importance of using sensitive indices of psychological adjustment.

Last, and probably most importantly, post hoc analyses indicated that the a priori grouping of coping and symptom measures into a psychological adjustment domain separate from overall relationship adjustment obscured important between-group

differences. When indices of psychological adjustment (psychological symptoms and coping strategies) were considered along with overall relationship adjustment scores and factor analyzed, two discrete factors emerged that respectively reflected healthy and unhealthy functioning. The factors provided more integrated and perhaps more meaningful indices of adjustment than did the psychological and romantic relationship adjustment domains considered separately.

Using the factor-analytically derived dimensions, interesting and interpretable between group differences were found which are tied logically to the study's original hypotheses. Persons who reported a secure attachment style with only one parent, compared to persons who reported secure attachment styles with both parents, reported higher scores on the Unhealthy Functioning factor (a score reflecting more emotion-oriented and distraction coping, more psychological symptoms, and lower relationship adjustment). And, persons who reported secure attachment styles with both parents, compared to persons who report insecure attachment styles with both parents, reported higher scores on the Healthy Functioning factor (a score reflecting more task-oriented and social diversion coping, fewer psychological symptoms, and higher relationship adjustment). Consistent with the original hypotheses, these findings suggest that adults who report secure attachment styles with both parents are best positioned to enjoy healthy adult functioning.

Parent-Adult Attachment Style Groups and Romantic Relationship Adjustment

As hypothesized, parent-adult attachment style group was linked with the quality of romantic relationships. Specifically, those who reported secure attachment styles with both parents (concordant secure group) reported significantly better romantic relationship

adjustment than those who reported insecure attachment relationships with one or both parents (discordant and concordant insecure groups). Further analyses indicated that attachment relationships with parents also predicted respondents' report of specific types of romantic relationship adjustment. In particular, respondents who reported secure attachment relationships with both parents reported significantly higher rates of consensus than those who reported insecure attachment styles with one or both parents, and respondents who reported secure attachment styles with both parents reported higher rates of affectional expression, cohesion, and relationship satisfaction than those who reported insecure attachment styles with both parents.

This study extended research by directly linking current parent-adult attachment styles to romantic relationship adjustment. Prior studies examined the relationship between parental attachment and romantic relationship adjustment indirectly. These studies found that retrospective and current accounts of parent-child attachment relationships were associated with adult attachment in intimate/romantic relationships (e.g., Collins & Read, 1990, Hazan & Shaver, 1987), which in turn were associated with romantic relationship adjustment (e.g., Brennan & Shaver, 1992; Kirkpatrick & Davis, 1994; Kobak & Hazan, 1991).

Only one study examined the association between current parent-adult attachment relationships and romantic adjustment (Bradford & Lyddon, 1993). Findings from Bradford and Lyddon's study indicated that, when psychological adjustment was controlled, romantic relationship adjustment was not related to adult attachment relationship with parents. Two factors could account for the discrepancy between the results of that study and the present study. Bradford and Lyddon's sample was comprised

of traditionally aged college students (mean age = 21) who, based on their age, were likely to be single, although marital status was not reported. The present study was comprised primarily of non-traditionally aged college students, the majority of whom were involved a long-term, committed relationship. In addition, Bradford and Lyddon assessed parental attachment in the context of the parental couple (e.g., "my parents") which could not account for the possibility of discordance between attachment relationships with mother and father. The present study assessed attachment with mother and father separately which allowed for the possibility of discordant attachments with parents. It is possible that age or marital status differences between the samples, or the loss of important data on discordant parent-adult attachment relationships, may have contributed to the discrepancy in results.

Two theoretical interpretations of the significant findings follow. First, it is possible that attachment relationships with parents serve as a model for romantic relationships. For instance, secure attachment relationships with parents may foster healthy romantic relationships by modeling trust and interdependence in the context of a reliable relationship. On the other hand, insecure attachment relationships with parents may hinder the development of healthy romantic relationships by modeling unreliability and unavailability in close relationships. This assertion is supported by research in marital and family therapy. McGoldrick (1980) wrote, in her review of marital and family research, "Issues that the partners have not resolved with their own families will tend to be factors in marital choice and are very likely to interfere with establishing a workable marital balance" (p. 97). Further inquiry is needed to elucidate the processes by which

parent-offspring attachment issues become transferred to the offspring's intimate relationships.

Second, respondents may have been systematically primed to evaluate their romantic relationship simply by describing their parent-adult attachment style. Baldwin et al. (1996) found that respondents described romantic relationships in a way that was theoretically consistent with a previously "activated" attachment style, regardless of their self-reported attachment style (measured as a personality trait). This finding suggests that priming can influence self-report of relationship appraisals. In three of the five versions of the survey packets at least one P-AASQ form preceded the DAS. It is possible that there was a priming effect for the majority of the sample.

Gender Differences in the Relationships Between Parent-Adult Attachment Style Group and Adult Psychological and Romantic Relationship Adjustment

Taken as a whole, the research literature has produced inconclusive data on gender differences in the association between attachment relationships and psychological symptoms and between attachment relationships and coping strategies. Therefore, although it was hypothesized that parent-adult attachment style group would be more predictive of the reported use of coping strategies and the reported amount of psychological symptoms for women then for men, the null findings are not without precedent (Armsden & Greenberg, 1987; Brack et al., 1993; Lapsley et al., 1990; Pearson et al., 1993; Shaver & Brennan, 1992; Simpson et al., 1996). Data from the present study indicate that men and women report comparable (nonsignificant) relationships between attachment with their parents and measures psychological adjustment. In addition, gender differences in the relationship between parent-adult attachment relationships and romantic

relationship functioning were not observed. The null findings of this study offer new information because the data on gender differences in the association between attachment relationships and romantic relationship functioning had previously been limited to the context of romantic attachment relationships (Collins & Read, 1990; Fiala & Pietromonaco, 1991; Kirkpatrick & Davis, 1994; Simpson, 1990).

Limitations

Although the findings clarify the relationships between parent-adult attachment styles and adult adjustment, some limitations should be noted. First, there are limitations related to the sample and design of this study. The correlational nature of this study precludes any interpretation of causal relationships between and among the variables under investigation. Therefore, it would be incorrect to assert that parent-adult attachment styles play a causative role in affecting romantic relationships outcomes. In addition, although the sample included respondents from a variety of courses (trade science, health sciences and psychology), in different college settings (large community college, small private college), it was not randomly selected. Non-random selection may have introduced an unknown bias. For instance, individuals holding negative views of self or others in their parental attachment relationships may have opted not to participate in the study. Further limiting the generalizability of the results are the characteristics of the larger population from which the sample was drawn. The larger population primarily consists of members of a conservative religion which emphasizes family cohesion and discourages divorce. These cultural norms may have had some bearing on the attachment relationships and romantic relationships of respondents. Additionally, the local

population, in general, and the sample, in particular, is primarily Caucasian. Generalizations of these findings to more diverse groups should be made with caution.

There are a number of limitations pertaining to measurement. First, the study exclusively used self-report measures to assess the constructs. It is possible that the associations could have been confounded with shared method variance, which could have exaggerated or minimized the relationships between the dependent and independent variables. In addition, it is possible that the categorical measure of attachment (P-AASQ) has inherent flaws, such as moderate reliability and stability and susceptibility to response biases, which account for the findings.

Implications for Theory

The results of this study have implications for attachment theory. First, the findings provide new information on the nature of adult attachment relationships with parents. Although this study cannot speak to relative importance of parental and romantic attachment relationships, its findings lend support to the notion that adults' attachment bonds with parents have a bearing on adult romantic relationship adjustment and overall functioning (composite indices of coping, symptoms, and romantic relationship adjustment). The data are consistent with Ainsworth's (1989) suggestion that the parent-adult bond, though different from the parent-child bond, remains salient nonetheless. Much remains unknown about parent-adult attachment bonds and their correlates. In fact, Ainsworth (1989) noted that most of our theory on adult attachment is based on inference from infant attachment, "despite obvious differences in their behavioral manifestations" (p.715). Additional research is needed to inform attachment theory on the nature of parent-adult attachment.

Second, the finding of multiple parent-adult attachment styles prompts new theoretical issues on the interrelationships of multiple attachment styles. We might wonder what happens when, across a set of attachment figures, the adult has different styles of attachment. It may be that, as van IJzendoorn et al. (1992) and Lewis (1994) have theorized, adults integrate attachment relationships into systems or networks, in which secure attachments may compensate for insecure attachments. Or, it may be, as Collins and Read (1994) theorized, that individuals prioritize their attachment relationships into a hierarchy. In that case, the impact of the lower-prioritized attachments is marginal, compared to that of higher-prioritized attachments. Further theory development is needed to direct adult-attachment research on these questions.

The data support the theoretical notion that adult attachment relationships with parents, considered jointly, are similar for men and women, in regards to their contribution to the quality of adult romantic relationships. Furthermore, the data support the theoretical notion that family disruptions (i.e., parental divorce) contribute to insecure adult attachment relationships with parents (Bowlby, 1988).

Implications for Practice

The finding that adults' attachment relationships with parents, considered jointly, are associated with romantic relationship adjustment, as well as with composite indexes of coping, symptoms, and relationship adjustment indicative of healthy and unhealthy functioning, should encourage counselors to be sensitive to parental attachment issues when counseling clients. Counselors may choose to assess adult attachment styles with both parents when clients present with adjustment or romantic relationship problems. The treatment plan may differ depending on the outcome of that assessment. For instance,

counselors can use parent-adult attachment relationships as a frame of reference for understanding romantic relationship difficulties. When treating romantic relationship problems, counselors can use discussion and interventions related to parental attachments. For instance, counselors could explore the ways in which clients' adjustment and romantic relationship problems reflect difficulties in their current relationships with one or both parent(s). Or, they may advise clients to talk with romantic partners about unmet attachment needs with their parents.

On a positive note, clients presenting with romantic relationship difficulties or signs of overall unhealthy functioning and concurrently involved in secure attachment relationships with parents may be experiencing situational crises and may find it helpful to use their parents as resources for promoting healthy outcomes. The parents may be in a position to provide constructive social support given that secure parent-adult attachments suggest the presence of healthy emotional boundaries which permit caregiving that is neither invasive nor rejecting. By encouraging these clients to access parental support, counselors could promote client strengths to maximize change, in a solution-focused manner (Berg, 1994; de Shazer, 1985).

Counselors can identify clients "at risk" for distress by a formal or informal assessment of parent-adult attachment styles. Clients from divorced family backgrounds or clients reporting insecure attachment styles with one or both parents may be at risk for adjustment and romantic relationship difficulties. Counselors could offer special programs or groups to those individuals to enhance their coping skills and encourage the development of healthy attachments.

Recommendations for Future Research

The P-AASQ needs to be transformed into a more elaborated, continuously-scaled measure of parent-adult attachment style. The original Hazan and Shaver (1987) categorical measure of romantic attachment style was subsequently decomposed into continuously-scaled dimensions, with favorable results on validity and reliability (Collins & Read, 1990; Simpson, 1990). That precedent suggests that doing the same with the P-AASQ would likely be beneficial. Furthermore, Scharfe and Bartholomew (1994) recommend the use of continuous self-report measures, because continuous scores can be adjusted for unreliability via statistical procedures such as structural equations modeling.

There is a need to extend the validity and reliability support of the P-AASQ to interview methods of assessing adult attachment style with parents. Investigators have found that interview-based assessments of adult attachment are more stable than self-report assessments (Borman & Cole, 1993; Scharfe & Bartholomew, 1994).

In addition, future studies should combine self-report, parental reports, and interview assessments in order to more sensitively assess parent-adult attachment styles. The response biases and limited stability possibly inherent in self-report measures may confound measurement and require this multi-measurement approach for more definitive findings (Bartholomew & Horowitz, 1991; Scharfe & Bartholomew, 1994).

Future research should use factor analysis to identify underlying dimensions of adjustment. Absent strong a priori evidence that selected dimensions of adjustment are relatively independent, factor analysis may prove to be a useful data analytic strategy. This was true in the present study.

Enough evidence has amassed to underscore the value of assessing attachment styles as a relationship construct. Therefore, future studies would do well to use attachment measures that are designed to capture the unique aspects of each type of relationship (e.g., romantic partner, parent, sibling). Such measures would allow for detailed study of various systems of attachment (e.g., family of origin, peer groups) and the interrelationships of multiple attachment relationships .

This study examined the relationship between parent-adult attachment and broad outcomes of adult functioning. Future studies should follow the direction of the romantic attachment literature by examining the associations between cognitive process variables, such as attention, priming, and memory (Baldwin et al., 1996; Collins & Read, 1994; Mikulincer 1997), and parent-adult attachment styles. Studies have found significant relationships between adult attachment styles in intimate/close relationships and cognitive processes in romantic attachment relationships. It would be of interest to study those differences in the context of parental attachments.

Further study of the role of respondents' gender and parental marital status in parental attachments is needed. The role of respondents' gender in the relationships between parental attachment and adult outcomes is largely unknown. Researchers are advised to include gender as a variable in their designs. Furthermore, the data show a pattern of insecurity in parent-adult attachment relationships when parental divorce has occurred. Longitudinal research would offer more insight into the process and onset of attachment style change subsequent to this disruptive life event.

The present study was an attempt to respond to Bowlby's (1988a) and Ainsworth's (1989) exhortations to extend research on parent-offspring attachment

throughout the lifespan. The results indicated that parent-adult attachment styles were related, in theoretically expected directions, with parental marital status, romantic relationship functioning, and overall functioning. The study's results suggest that continued inquiry into parent-adult attachment styles, considered jointly, holds promise for the extension of attachment theory in general and for the study of adult adjustment in particular.

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APPENDICES

APPENDIX A

Parent-Adult Attachment Style Questionnaire - Mother

The items on this page refer to your relationship with your mother. If you have more than one person who could be classified as a mother, think about the person with whom you have had the most contact over the course of your life.

When reference is made to "mother" I will thinking of my:

(1) biological mother
(2) stepmother
(3) adoptive mother
(4) foster mother
(5) other _____

Directions: Read each paragraph below and then, using the scale provided below, choose a number from 1 to 7 to rate how descriptive each paragraph is of your relationship with your **mother**.

Scale: 1 2 3 4 5 6 7
not at all descriptive — extremely descriptive

Next, place a checkmark (✓) next to the one paragraph that best describes your relationship with your mother, even though none may be completely appropriate. Note: If your mother is deceased, please answer the items in terms of your relationship with her before her death.

	Rate Each (Scale of 1 - 7)	**Most Descriptive (Check one only)**
1. It is easy for me to become emotionally close to my mother. I am comfortable depending on her and having her depend on me. I don't worry about being abandoned by her or having her not accept me	_____	_____
2. I am comfortable with not having a close relationship with my mother. It is very important for me to feel independent from her and self-sufficient, and I prefer not to depend on her or have her depend on me.....	_____	_____

P-AASQ-Mother, Cont.

	Rate Each (Scale of 1 - 7)	**Most Descriptive (Check one only)**
3. I want an emotionally close relationship with my mother, but I often find that she is reluctant to get as close as I would like. I am uncomfortable being without a close relationship with her, and I sometimes worry that she doesn't value me as much as I value her.....	_____	_____
4. I am uncomfortable getting close to my mother. I want an emotionally close relationship with her, but I find it difficult to trust her completely or to depend on her. I worry that I will be hurt if I allow myself to become too close to her.....	_____	_____

APPENDIX B

Parent-Adult Attachment Style Questionnaire - Father

The items on this page refer to your relationship with your father. If you have more than one person who could be classified as a father, think about the person with whom you have had the most contact over the course of your life.

When reference is made to "father" I will thinking of my:

(1) biological father
(2) stepfather
(3) adoptive father
(4) foster father
(5) other _____

Directions: Read each paragraph below and then, using the scale provided below, choose a number from 1 to 7 to rate how descriptive each paragraph is of your relationship with your **father**.

Scale: 1 2 3 4 5 6 7
not at all descriptive — extremely descriptive

Next, place a checkmark (✓) next to the one paragraph that best describes your relationship with your father, even though none may be completely appropriate. Note: If your father is deceased, please answer the items in terms of your relationship with him before his death.

	Rate Each (Scale of 1 - 7)	**Most Descriptive (Check one only)**
1. It is easy for me to become emotionally close to my father. I am comfortable depending on him and having him depend on me. I don't worry about being abandoned by him or having him not accept me.....	_____	_____
2. I am comfortable with not having a close relationship with my father. It is very important for me to feel independent from him and self-sufficient, and I prefer not to depend on him or have him depend on me.....	_____	_____

P-AASQ - Father, Cont.

	Rate Each (Scale of 1 - 7)	**Most Descriptive (Check one only)**
3. I want an emotionally close relationship with my father, but I often find that he is reluctant to get as close as I would like. I am uncomfortable being without a close relationship with him, and I sometimes worry that he doesn't value me as much as I value him.....	_____	_____
4. I am uncomfortable getting close to my father. I want an emotionally close relationship with him, but I find it difficult to trust him completely or to depend on him. I worry that I will be hurt if I allow myself to become too close to him.....	_____	_____

APPENDIX C

Request for Participation Script

I am here to ask you to participate in a research study that I am conducting by for my doctoral dissertation at Michigan State University. The dean of your college has given me permission to collect data at this college. The purpose of this research is to examine the association between adults' relationships with their parents and adult adjustment.

To participate, you must be an adult involved in a romantic relationship. Volunteers will be asked to complete a packet of questionnaires, which will take approximately 20 minutes. Completed questionnaires should be mailed to me, within the next week, using the provided stamped envelope. Each person who submits a completed packet will *(1) receive extra course credit or (2) have his/her name entered in a raffle for two $100.00 cash awards*.

Please note that your responses to the questionnaires will remain confidential. The questionnaire packet will have a code number on it, not your name. The code number will also be on the consent form, which will be the only connection between you and the data.

If you are interested in participating in this research, please take questionnaire packet, read the consent form, complete the bottom portion of the consent form, and return the bottom portion to me. Note that the consent form instructs you to provide your name and address. That information will be used to mail follow up/thank you letters and to *(1) notify your instructor that you have earned the extra credit points or (2) mail the raffle awards*. Do you have any questions?

APPENDIX D

Raffle Consent Form

Dear Student:

Thank you for your interest in my dissertation study. I am a doctoral candidate in the Department of Counseling, Educational Psychology, and Special Education at Michigan State University.

The purpose of this research is to examine the relationships among psychological adjustment, romantic relationship adjustment, and adult relationships with parents. You will be asked to complete a packet of questionnaires containing items regarding general information about yourself, your romantic relationship, your emotional well-being, and your relationship with your parent(s). It should take approximately 20 minutes of your time.

Your name will be entered in a raffle when I receive your packet. Two $100.00 awards will be given.

The study poses no foreseeable discomforts or identifiable risk to your physical or psychological well-being. Your participation is voluntary and you may withdraw at any time without penalty and/or refuse to answer any questions which you find invasive or objectionable.

The information gathered from the research will be safeguarded and remain confidential through: a) the use of subject code numbers, not names, on the data; b) ensuring that names/addresses will be used for the sole purpose of identifying to whom the $100.00 awards and reminder/thank you notices should be mailed; c) limiting access to subjects' names and respective code numbers to the study's investigator, d) securing data under lock and key. The study's results will be reported in terms of overall (group) findings. The data for individual participants will not be reported.

If you have any questions about the study, please contact me, by calling 572-6989. Thank you.

Sincerely,

Ellen N. Behrens, M.A.

Raffle Consent Form, Cont.

I agree to participate in the survey conducted by Ellen Behrens. I understand the nature of the research, that my participation is voluntary, and that I can terminate my participation at any time without penalty.

Code # _____

Date: _____

Signature: _____

Print your name: _____

Address: _____
Street

_____
City State Zip Code

APPENDIX E

Extra Credit Consent Form

Dear Student:

Thank you for your interest in my dissertation study. I am a doctoral candidate in the Department of Counseling, Educational Psychology, and Special Education at Michigan State University.

The purpose of this research is to examine the relationships among psychological adjustment, romantic relationship adjustment, and adult relationships with parents. You will be asked to complete a packet of questionnaires containing items regarding general information about yourself, your romantic relationship, your emotional well-being, and your relationship with your parent(s). It should take approximately 20 minutes of your time.

As a benefit for your participation you will receive extra credit points from your course instructor.

The study poses no foreseeable discomforts or identifiable risk to your physical or psychological well-being. Your participation is voluntary and you may withdraw at any time without penalty and/or refuse to answer any questions which you find invasive or objectionable.

The information gathered from the research will be safeguarded and remain confidential through: a) the use of subject code numbers, not names, on the data; b) ensuring that names/addresses will only be used to identify to whom reminder/thank you notices should be mailed and to notify the course instructor of students who have submitted a completed packet; c) limiting access to subjects' names and respective code numbers to the study's investigator, d) securing data under lock and key. The study's results will be reported in terms of overall (group) findings. The data for individual participants will not be reported.

If you have any questions about the study, please contact me, by calling 572-6989.
Thank you.

Sincerely,

Ellen N. Behrens, M.A.

Extra Credit Consent Form, Cont.

I agree to participate in the survey conducted by Ellen Behrens. I understand the nature of the research, that my participation is voluntary, and that I can terminate my participation at any time without penalty.

Code # _____

Date: _____

Signature: _____

Print your name: _____

Address: _____
Street

_____
City State Zip Code

APPENDIX F

Thank You/Reminder Notice

(For students whose names were entered in raffle)

Dear Student:

I am writing to follow up on my dissertation research study, for which you volunteered to participate two weeks ago. If you have already completed and returned the survey packet, thank you. $100 dollar raffle awards will be mailed when the data collection is complete.

If you have not returned the survey packet, please do so within the next week. It should only take about 20 minutes to complete the packet. If you have any questions or concerns, please contact me at 572-6989. Thank you.

Ellen Behrens, M.A.
Doctoral Candidate
Michigan State University

(For students receiving extra credit)

Dear Student:

I am writing to follow up on my dissertation research study, for which you volunteered to participate two weeks ago. If you have already completed and returned the survey packet, thank you.

I will notify your instructor that you have earned the extra credit points within three weeks of receiving your completed survey packet.

If you have not returned the survey packet, please do so within the next week. It should only take about 20 minutes to complete the packet. If you have any questions or concerns, please contact me at 572-6989. Thank you.

Ellen Behrens, M.A.
Doctoral Candidate
Michigan State University

APPENDIX G

Second Reminder Notice

(For students whose names were entered in the raffle)

Dear Student:

Thank you for agreeing to participate in my doctoral dissertation research on adult relationships with parents and adult functioning. I expect that the study will extend the research by providing some new, important information on adult relationships with parents.

If you have already completed and mailed your survey, thank you. If you have not completed the research survey, I would appreciate it if you do so within the next week. When you do so, your name will be entered in the $100.00 raffle.

I have enclosed another copy of the survey packet, in case you have lost or misplaced your copy. If you have questions or concerns, please feel free to contact me at 572-6989. Again, thank you for your participation in the study.

Sincerely,

Ellen Behrens, M.A.

(For students receiving extra credit)

Dear Student:

Thank you for agreeing to participate in my doctoral dissertation research on adult relationships with parents, psychological functioning, and relationship functioning. I expect that the study will extend the research by providing some new, important information on adult relationships with parents.

If you have not completed the research survey, I would appreciate it if you do so within the next week. When you do so, you will receive extra course credit from your instructor.

I have enclosed another copy of the survey packet, in case you have lost or misplaced your copy. If you have questions or concerns, please feel free to contact me at 572-6989. Again, thank you for your participation in the study.

Sincerely,

Ellen Behrens, M.A.

APPENDIX H

Demographic/Background Information Form

#_____

Please do not write your name on this packet, as this information is meant to be confidential. Return your completed packet by mailing it in the stamped, addressed envelope (provided).

The following questions ask about your background. Please circle the appropriate number under each of the questions below or enter the correct information in the blank spaces that are provided.

1. **Your sex:**
   (1) Male
   (2) Female

2. **Your age**: _____

3. **Your year in college**:
   (1) Freshman
   (2) Sophomore
   (3) Junior
   (4) Senior
   (5) Other _____

4. **Your ethnic/racial background**:
   (1) African-American
   (2) Asian-American
   (3) Caucasian/White
   (4) Hispanic/Latino
   (5) Native American
   (6) Multiracial _____
   (7) Other _____

6. **What is your current relationship/dating status?**
   (1) currently married
   (2) committed relationship/engaged
   (3) dating one person without a commitment
   (4) other _____

7. **For how long have you been involved in your current romantic relationship?**

   _____

8. **What is your (biological or adoptive) parents' marital status?**
   (1) married
   (2) separated
   (3) divorced (indicate your age at the time of the divorce _____)
   (4) mother deceased
   (5) father deceased
   (6) both parents deceased

APPENDIX I

Dyadic Adjustment Scale

Directions: Most persons have disagreements in their romantic 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	Occa-sionally Disagree	Frequently Disagree	Always Disagree	Almost Always Disagree	
1. Handling finances	5	4	3	2	1	0	
2. Matters of recreation	5	4	3	2	1	0	
3. Religious matters	5	4	3	2	1	0	
4. Demonstrations of affection	5	4	3	2	1	0	
5. Friends	5	4	3	2	1	0	
6. Sex relations	5	4	3	2	1	0	NA
7. Conventionality (correct or proper behavior)	5	4	3	2	1	0	
8. Philosophy of life	5	4	3	2	1	0	
9. Ways of dealing with parents or in-laws	5	4	3	2	1	0	
10. Aims, goals, and things believed important	5	4	3	2	1	0	
11. Amount of time spent together	5	4	3	2	1	0	
12. Making major decisions	5	4	3	2	1	0	
13. Household tasks	5	4	3	2	1	0	NA
14. Leisure time interests and activities	5	4	3	2	1	0	
15. Career decisions	5	4	3	2	1	0	

DAS, Cont.

	All of time	Most of the time	More often than not	Occa-sionally	Rarely	Never
16. How often do you discuss or have you considered divorce, separation, or terminating your relationship?	0	1	2	3	4	5
17. How often do you or your mate leave the house after a fight?	0	1	2	3	4	5
18. In general, how often do you think that things between you and your partner are going well?	5	4	3	2	1	0
19. Do you confide in your partner?	5	4	3	2	1	0

	All of time	Most of the time	More often than not	Occa-sionally	Rarely	Never	
20. Do you ever regret that you married? (or lived together)	0	1	2	3	4	5	NA
21. How often do you and your partner quarrel?	0	1	2	3	4	5	
22. How often do you and your mate "get on each other's nerves?"	0	1	2	3	4	5	

DAS, Cont.

	Every Day	Almost Every Day	Occa-sionally	Rarely	Never
23. Do you kiss your mate?	4	3	2	1	0

	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?	4	3	2	1	0

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

	Never	Less than once a month	Once or twice a month	Once or twice a week	Once a day	More often
25. Have a stimulating exchange of ideas	0	1	2	3	4	5
26. Laugh together	0	1	2	3	4	5
27. Calmly discuss something	0	1	2	3	4	5
28. Work together on a project	0	1	2	3	4	5

These are some things about which couples sometimes agree and sometime disagree. Indicate if either item below caused differences of opinions or were problems in your relationship during the past few weeks.

	Yes	No	
29. Being too tired for sex.	0	1	NA
30. Not showing love.	0	1	

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

0	1	2	3	4	5	6
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?

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

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

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

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

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

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

APPENDIX J

Hopkins Symptom Checklist

Directions: Using the scale below, fill in the number between 1 and 4 that best reflects the extent to which each symptom has bothered you in the last two weeks.

Scale:

1	2	3	4
not at all			**very frequently**

____ 1. Headaches

____ 2. Nervousness or shakiness inside

____ 3. Being unable to get rid of bad thoughts or ideas

____ 4. Faintness or dizziness

____ 5. Loss of sexual interest or pleasure

____ 6. Feeling critical of others

____ 7. Bad dreams

____ 8. Difficulty in speaking when you are excited

____ 9. Trouble remembering things

____ 10. Worried about sloppiness or carelessness

____ 11. Feeling easily annoyed or irritated

____ 12. Pains in the heart or chest

____ 13. Itching

____ 14. Feeling low in energy or slowed down

____ 15. Thoughts of ending your life

____ 16. Sweating

____ 17. Trembling

____ 18. Feeling confused

____ 19. Poor appetite

____ 20. Crying easily

____ 21. Feeling shy or uneasy with the opposite sex

Scale: **1** **2** **3** **4**
not at all **very frequently**

____ 22. A feeling of being trapped or caught

____ 23. Suddenly scared for no reason

____ 24. Temper outbursts you could not control

____ 25. Constipation

____ 26. Blaming yourself for things

____ 27. Pains in the lower part of your back

____ 28. Feeling blocked or stymied in getting things done

____ 29. Feeling lonely

____ 30. Feeling blue

____ 31. Worrying or stewing about things

____ 32. Feeling no interest in things

____ 33. Feeling fearful

____ 34. Your feelings being easily hurt

____ 35. Having to ask others what you should do

____ 36. Feeling others do not understand you or are unsympathetic

____ 37. Feeling that people are unfriendly or dislike you

____ 38. Having to do things very slowly in order to be sure you are doing them right

____ 39. Heart pounding or racing

____ 40. Nausea or upset stomach

____ 41. Feeling inferior to others

____ 42. Soreness of your muscles

____ 43. Loose bowel movements

____ 44. Difficulty in falling asleep or staying asleep

Scale: **1** **2** **3** **4**
not at all **very frequently**

____ 45. Having to check and double check what you do

____ 46. Difficulty making decisions

____ 47. Wanting to be alone

____ 48. Trouble getting your breath

____ 49. Hot or cold spells

____ 50. Having to avoid certain places or activities because they frighten you

____ 51. Your mind going blank

____ 52. Numbness or tingling in parts of your body

____ 53. A lump in your throat

____ 54. Feeling hopeless about the future

____ 55. Trouble concentrating

____ 56. Weakness in parts of your body

____ 57. Feeling tense or keyed up

____ 58. Heavy feeling in your arms or legs