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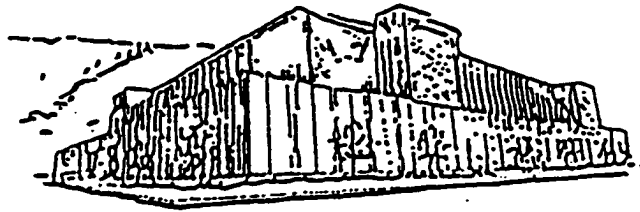
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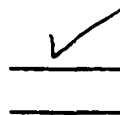
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ATTACHMENT STYLES IN OLDER WOMEN:  
COPING, WELL-BEING, AND  
ATTITUDES ABOUT ASSISTANCE

By

Pamela S. Ridgway

B.S., Fort Lewis College, 1978

M.A., The University of Montana, 1994

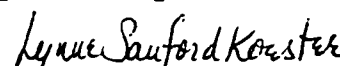
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## ABSTRACT

Ridgway, Pamela S., October 1996

Psychology

Attachment styles in older women: coping, well-being, and attitudes about attachment

Director: Lynne Sanford Koester LSK

Attachment theory was first developed by John Bowlby in the 1950's, and has since received a wide range of study and application. Although originally focused on infants and early childhood development, investigators have more recently begun to examine the implications of attachment theory in adulthood. Hazan and Shaver's (1987) seminal article suggested that adult romantic relationships may function in ways similar to those of early childhood, and this served to precipitate a rapid expansion of research in the field of adult attachment. In 1994 Hazan and Shaver also proposed a model depicting the gradual transfer of attachment behaviors from parents to peers.

The present study proposes a life-span extension of this attachment transfer process in which adult children are considered as possible attachment figures for their older parents. While research examining later-life attachment is relatively sparse at this time, investigation of this topic has begun, especially as it relates to the issues of caregiving and well-being in older individuals.

The current study sought to assess attachment in widows over the age of 65 by utilizing three self-report instruments. One of these measures was directed at general attachment styles, while two others focused specifically on attachment to adult children. As expected, results indicate that adult children play a major role in the provision of security for their older mothers. Results also provide some support for the hypothesis that women reporting more secure (or higher) attachment would also obtain higher scores on measures of well-being and willingness to asking for help. Unexpected findings from one attachment measure also suggest that women with higher attachment to adult children utilize more cognitive avoidance coping strategies. Limitations of the study and suggestions for future research are discussed.



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## DEDICATION

I wish to dedicate this work to the memory of three courageous women who helped inspire my work in this field: Marie Brand Sears, Margaret Brand Smith, and Martha Evans Morgan.

## CHAPTER I

### Introduction

#### **History and Basic Principles of Attachment Theory**

Attachment theory originated with the work of John Bowlby in the 1950's. In his report on the mental health of London's homeless children, Bowlby observed that early maternal deprivation and/or separation had a deleterious effect on children's mental and physical well-being. Although he had been trained as a psychoanalyst, his dissatisfaction with the interpretations provided by psychoanalytic theory prompted him to search for alternative explanations. This search eventually lead him to the field of ethology, which was to have a profound influence on his thinking. Almost twenty years later, Bowlby published the first of his three volumes on attachment theory (Bowlby, 1973, 1980, 1969/1982).

Much of the early work regarding attachment theory has focused on infants and their caregivers, but as Hazan and Shaver (1994) have noted, Bowlby conceptualized attachment as an integral part of human behavior throughout the life-span. The focus of this study will be the application of attachment theory to later-life issues, specifically those pertaining to older women and their adult children. However, before presenting issues specific to attachment in later-life, a brief review of the fundamental concepts of



attachment theory will provide the foundation needed for further discussion.

As noted earlier, Bowlby's writings are extensive and fill several volumes. Most books and review articles pertaining to attachment theory contain helpful summaries of its basic principles. A few of these include Berman and Sperling (1994), Colin, (1996), Hazan and Shaver (1994), and Shaver and Hazan (1993). A primary assumption of attachment theory is that because human infants are helpless at birth, the pressures of natural selection have resulted in the evolution of behaviors which serve to keep the infant close to his or her adult caregiver. These attachment behaviors are viewed together as a distinct behavioral system. Furthermore, the attachment system is complemented by a second behavioral system known as adult caregiving.

According to Bowlby, there are three defining features, or functions, of attachment. These are 1) proximity maintenance, 2) safe haven, and 3) secure base. In proximity seeking the infant stays in close physical proximity to the caregiver and protests at separation. This maintenance of proximity is thought to engender feelings of security and love, while separation from the caregiver brings about anxiety or sadness. Bowlby therefore asserted that attachment is an emotional bond. The second attachment function is that of the safe haven, which implies that the

caregiver is a haven of safety to which the infant can return whenever he or she becomes fearful or distressed. Thus the infant turns to the caregiver for comfort, support, and reassurance. The third function, that of secure base, describes the infant's utilization of the caregiver as a base from which to engage in nonattachment behaviors such as exploration and play.

Ainsworth (1989) recounts that attachment is not the same as relationship. Whereas relationships are dyadic and may be short-lived, attachment bonds are relatively long-lasting and characteristic of the individual (not the dyad). Ainsworth defines attachment as an affectional bond in which the attachment figure is never wholly replaceable by another, even though there may be others to whom one is attached. She notes that in both affectional bonds and attachment bonds there is distress upon separation, joy upon reunion, grief at loss, and a need for maintaining proximity. However, a critical criterion of the attachment bond (which is not necessarily present in affectional bonds) is the seeking of security and comfort from the attachment figure.

A concept which is fundamental to attachment theory is that of "internal working model". Over a period of time, and based on repeated interactions with the caregiver, the child learns what to expect. The internal working model is

the expectation or mental representation which the child forms about the caregiver, the environment, and him- or herself (Ainsworth, 1989).

### **Individual Differences: Patterns of Attachment**

In the 1970's Mary Ainsworth developed an observational method, termed the Strange Situation, which is used to classify different attachment patterns in infants between the ages of 11 to 18 months. With this procedure it was determined that the caregiver's availability and responsiveness toward the infant was empirically linked to three major patterns of infant-caregiver attachment. Ainsworth was especially interested in observing proximity-seeking, safe-haven, and secure-base behaviors in infants. In 1978 Ainsworth, Blehar, Waters, and Wall (as cited in Colin, 1996) described the procedure and instructions for coding the three patterns observed in the Strange Situation. These are described below:

Secure. In the first pattern, known as "secure", the typical infant was distressed when the mothers left the room, and comforted upon her return. When the mother was present in the room the child engaged in play and exploration. The caregivers of secure infants were judged to be available and responsive to their children's needs. This classification matches Bowlby's conceptualization of "nature's prototype" in terms of proximity-seeking, safe-

haven, and secure-base behaviors. The secure pattern is the most common, comprising approximately 60% of American samples.

Anxious/ambivalent. The second pattern, usually referred to as "anxious/ambivalent", described children who were both anxious and angry. These children were preoccupied with their caregiver to such a degree that it interfered with their exploration. The mothers of anxious/ambivalent children were judged to be inconsistently responsive to the child's signals, sometimes being unresponsive and unavailable, while at other times being overly intrusive. This pattern is the least common, averaging about 15% in American samples.

Anxious/avoidant. The third pattern is known as "anxious/avoidant". These infants appeared not to be distressed by separations from their mothers, and avoided contact with their caregivers. The infant's attention was directed towards their toys, (although with less enthusiasm than the securely attached infants). The caregivers of these infants were judged to be rejecting in the sense that they consistently rebuffed or deflected their infants' bids for comfort (especially for close bodily contact). Approximately 25% of American infants are classified as avoidant.

In recent years a fourth pattern of attachment has been identified by Main and Solomon (as cited in Hazan & Shaver, 1994). Referred to as "disorganized/disoriented", infants classified in this category are recognized by their lack of a coherent strategy for managing anxiety. This manifests in a combination of avoidant and ambivalent behaviors. Research has suggested that these infants have caregivers who are depressed, disturbed, or abusive in some way (Hazan & Shaver, 1994).

### **Stability of Attachment Patterns**

This section will address three closely related facets of attachment. These are 1) the continuity of attachment classifications throughout childhood and adolescence; 2) the extended continuity of attachment styles in adulthood; and 3) the transmission of attachment patterns from one generation to the next. Many studies have assessed the stability and continuity of attachment styles. A recent review of this topic is provided by Rothbard and Shaver (1994). These authors first review the basic premise of attachment theory which asserts that the internal working model is thought to be the mechanism through which continuity of attachment is achieved. They use the Piagetian concept of assimilation and accommodation as a useful analogy. During early development, the child's internal working model is more flexible, and tends to

accommodate (adjust) to new information about attachment figures, the environment, and the self. As the individual matures, however, the working models become more firmly established, and information relevant to attachment is then assimilated (incorporated) into the existing framework. Internal working models are thought to change only when there is disconfirming information which results in an extreme lack of fit between the existing model and reality.

Rothbard and Shaver (1994) cite several articles which have identified cognitive and socioemotional correlates of attachment styles in early childhood and preadolescence. Generally speaking, variables such as autonomy, self-confidence, affective sharing, ego-resiliency, and sociability have been found to correlate with secure attachment in children. The authors also review work by Main and Cassidy (1986) and Grossman and Grossman (1991) in which a classification scheme for six year olds was found to have 87% convergence with attachment ratings from the same children who were classified during infancy using the Strange Situation. More recent longitudinal findings are also cited by Colin (1996) who described a study by Waters, Merrick, Albersheim, Trebous, and Crowell (1995). This study found a 62% agreement rate between the past and present attachment ratings in a group of 20-22 year olds who had been classified during infancy. Generally speaking,

less stability has been shown with children living in socially and economically unstable environments. As noted earlier, attachment theory does not imply absolute stability of individual differences, but the internal working models developed in early childhood are thought to be resistant to change (Colin, 1996; Hazan & Shaver, 1994; Shaver & Hazan, 1993; Steele & Steele, 1994).

The degree of continuity of attachment patterns throughout adulthood is another area currently under investigation. Theorizing that infant attachment behaviors might parallel the experiences of romantic love in adulthood, Hazan and Shaver (1987) developed a self-report measure to test their prediction. They found that the percentages of the three adult attachment styles which they obtained were roughly equal to those obtained in studies of infant attachment. Rothbard and Shaver (1994) review additional studies which generally show that members from the three adult attachment groups recall their childhood relationships in ways which are predicted from the literature on infant-parent attachments. For example, members of the secure group generally report positive attributes regarding their mothers, describing them as caring, respectful, responsive, and accepting. Anxious/ambivalent subjects describe their mothers as unpredictable, inaccessible, unresponsive, and intrusive,

while the mothers of anxious/avoidant individuals are depicted as uninvolved, cold, and rejecting.

A great deal of work regarding adult attachment has been done by Mary Main and her associates at Berkeley. Main, Kaplan, & Cassidy (1985) developed the first method designed specifically for the assessment of adult attachment. This instrument, the Adult Attachment Interview (AAI), is used to classify adults into three (or sometimes four) major categories. The interview consists of a structured, 15-question semiclinical interview which taps into the individuals' early childhood attachment experiences and their current thoughts about them. Steele and Steele (1994) state that the AAI has provided a basis for "reliable and valid inferences as to the general organization of an adult's internal working model of relationships".

Bowlby stated (as cited in Steele & Steele, 1994) that parents adopt "the same patterns of behaviour that they themselves have experienced during their own childhood", and that because of this these "patterns of interaction are transmitted more or less faithfully from one generation to the next" (Bowlby, 1969, p. 323). Attachment-based research appears to support this belief. Steele & Steele (1994) note several studies which have extended the earlier findings of intraindividual stability by demonstrating that attachment patterns tend to be socially transmitted from one generation



to the next. Most research of this type focuses on the Adult Attachment Interview (AAI) which has been found to predict how an individual's child will be classified in the Strange Situation. Intergenerational agreements between the mothers' classification from the AAI and the infants' attachment styles as observed in the Strange Situation are consistently between 75-80 per cent. These associations are found to be equally strong, regardless of when the AAI is conducted (e.g. during the child's infancy, years after infancy data was collected, or even prior to the birth of the child).

### **Adult Attachment**

As noted earlier, Bowlby believed that attachment is an integral part of human behavior "from the cradle to the grave" (as cited in Hazan & Shaver, 1994). As research from infant and early childhood studies has revealed consistent findings regarding the continuity and correlates of attachment, growing attention has been directed toward topics related to attachment in adults. Entire subsections of this literature are evolving as this area expands rapidly. The concept of adult attachment has inspired research in such diverse areas as psychopathology (Parkes, 1982; Carnelley, Pietromonaco & Jaffe, 1994), personality (Shaver & Brennan, 1992), romantic attachment and close relationships (Hazan & Shaver, 1987; Hazan & Shaver, 1994),

attachment to God or religious belief (Kirkpatrick, 1994; Kirkpatrick & Shaver, 1992), attachment to place (Rubinstein & Parmelee, 1992), and even attachment to pets (Endenburg, 1995; Sable, 1995).

Colin (1996) notes that social psychologists have also written about attachment to supervisor, work group, company, recreation center, etc., but that these studies are only peripherally related to the construct of attachment as defined by Bowlby and Ainsworth.

### **Measurement of Adult Attachment**

No discussion of adult attachment would be complete without addressing the issue of measurement. Indeed, one of the major stumbling blocks inherent in the study of adult attachment is that of measurement. While infants have traditionally been classified using the Strange Situation procedure (Ainsworth, 1970), the investigation of adult attachment has been accompanied by the development of a variety of attachment measures. As a result, the measurement of adult attachment has become varied and complex. Assessment tools range from interviews to brief self-report questionnaires. The Adult Attachment Interview (AAI), mentioned earlier, focuses on an individual's childhood experiences with their own parents, and is used to predict that individual's caregiving behavior in relation to their infant. Self-report measures, such as those developed

by Hazan and Shaver (1987) focus on peer and/or romantic relationships. Collins and Read (1990) took individual components of Hazen and Shaver's three descriptors and transformed them into 18 Likert scales. Bartholomew (1990) developed a two dimensional, four category model based on the prototypes of secure, preoccupied, dismissing, and fearful. Feeney, Noller, and Hanrahan (1994) have also developed the Attachment Style Questionnaire (ASQ) which is composed of 40 items. This instrument yielded five factors: Confidence, Discomfort with Closeness, Need for Approval, Preoccupation with Relationships, and Relationships as Secondary.

While the above mentioned instruments measure an individual's general style of (or state of mind about) attachment, other measurement have been developed to assess the quality of one specific attachment. Among these are instruments by Kobak (as cited in Colin, 1996) Barnas, Pollina, and Cummings (1991), and Cicerelli, (1995). The first of these has been used to assess marital attachment, while the latter two have been used to measure attachment between elderly mothers and their adult children. Colin (1996) points out that these instruments are very new and that more research will be needed before their validity has been established; however, she also correctly observes that "researchers must start somewhere". Certainly, the process

of defining and refining these measurements has begun, and much work yet remains to be done.

### **Hazan and Shaver's Model of Attachment Transfer**

In their paper reviewing attachment theory as an organizational framework for research on close relationships, Hazan & Shaver (1994) proposed a model which depicts the gradual transfer of attachment from parents to adult peers. They suggested that beginning with proximity maintenance, and following through with the safe haven and secure base, each of the attachment functions is gradually shifted from parents to peers. It is important to note that this does not mean the attachment to parents disappears altogether. Parents are never completely relinquished as attachment figures, but their place in the hierarchy naturally changes by adulthood (Hazan & Shaver, 1994; Ainsworth, 1989). Hazan and Shaver's model of attachment transfer appears in Figure 1.

The notion of role reversals between older parents and their adult children in later life has been addressed by Antonucci (1994) and Colin (1996) who suggest that the adult child may become the secure base for the aging parent. In addition, several authors have also addressed the concept of continued reciprocity between adult child and older adult, with the parent becoming the recipient as well as a provider of security (Barnas, Pollina, & Cummings, 1991; Cicirelli,

1989; Cicirelli, 1991; Horowitz & Shindelman, 1983; Thompson & Walker, 1984). Mary Ainsworth (1989) also addressed the issue of reciprocity and role reversals with regard to attachment in later life, noting that systematic research into this area is needed.

It appears then, that a logical extension of Hazan and Shaver's model would include the continued transfer of attachment bonds which are likely to occur in later life. For example, when an older adult is widowed (or less commonly divorced), an additional transfer in attachment is likely to occur, with an adult child or children becoming the attachment figure(s). Figure 2 is a modification of Hazen and Shaver's model which illustrates the continued process of attachment transfer occurring in later life.

### **Attachment in Later Life**

A few studies have begun to explore attachment theory specifically as it relates to issues of aging. It is important to recognize that even within this sub-section of literature related to older adults, different types of attachment bonds may exist. These may include the older adults' recalled early childhood attachment experiences, the older adults' attachment to their adult children, and the adult children's past and/or current attachment to their older parents. Therefore, keeping in mind the concepts of intraindividual continuity and stability, intergenerational

transmission, role-reversals, and reciprocity of attachment, it becomes clear that numerous facets of attachment are available for study when dealing with older adults. Figure 3 illustrates these various attachment bonds, all of which may have relevance in later life.

The following section will review literature specific to attachment in later life. Thus far, this research has addressed such topics as physical and mental well-being (Andersson & Stevens, 1993), well-being and socio-emotional functioning (Barnas, Pollina, & Cummings, 1991), and caregiving or assistance patterns between older parents and their adult children (Cicirelli, 1983; Cicirelli, 1991; Cicirelli, 1993; Thompson & Walker, 1984; Whitbeck, Simons, & Conger, 1991).

### **Health and Well-being**

Andersson and Stevens (1993) explored the impact of early experiences with parents on health and well-being in old age. Their sample consisted of 267 elderly community dwelling residents between the ages of 65 and 74. Measures of health, self-esteem, anxiety, depression, and loneliness were included as dependent variables. The recalled quality of parenting was assessed using the care dimension of the Parental Bonding Instrument (Parker, Tupling, & Brown; 1979). Current attachment status was simply dichotomized into "attached" and "unattached" (by combining information

about marital status, the presence of a close confidant, and recent tension in the relationship).

It was hypothesized that the presence of a current attachment figure was expected to diminish the effect of recalled quality of parenting on various measures of health and well-being. Likewise, they predicted that when no current attachment figure was available, the internal working model of parents would be more likely to remain or be reinstated. Thus, in the latter case they predicted that the recalled quality of parental care would be associated with measures of health and well-being.

Results of this study partially confirmed the hypothesis concerning the interaction between current attachment status and recalled parenting. Multiple regression analysis indicated that current attachment status did influence the effect that quality of parental care had on anxiety and loneliness. In other words, for those individuals who were unattached, the recalled quality of parental care had a greater effect on anxiety and loneliness. This difference occurred in the expected direction: for the unattached individuals, negative recalled parenting was associated with higher levels of anxiety and loneliness, whereas positive recalled parenting was associated with less anxiety and loneliness. The same was not found for measures of depression, self-esteem, or the

health variables. The authors also found that among the unattached, there were more significant effects of parental care on well-being for men than for women. Noting that the women reported a greater sense of attachment than men, the authors suggested that in the women's case the impact of recalled parenting may have been diluted by the influence of other close relationships. Andersson and Stevens (1993) summarized by concluding that early experiences with parents have an impact on the well-being of elderly persons. This effect appears to be stronger among those older persons who lack a current attachment figure, and stronger for unattached older men than for unattached older women.

Barnas, Pollina, and Cummings (1991) conducted a study in which 48 elderly women (65 years or older) were interviewed to examine the role of adult children as attachment figures for the older mothers. It should be noted that this is the only known study of this type, to date which has attempted to assess older mothers' attachment to their adult children. Security of parent-child attachment was assessed using a structured interview (mentioned earlier) developed specifically for the study. The authors chose two domains which they considered to be most important for assessing that attachment relationship: (1) avoidance or resistance, and (2) the provision of security. Other variables assessed were the place of adult



children in the elder's social support network, the elder's physical, psychological and social well-being, and the elder's patterns of coping with stress. Noting that this was a new area of study with this population (and that this was therefore an exploratory investigation), the authors predicted that quality of attachment to adult children would predict general well-being.

Analysis of the women's social support networks revealed that 94% of the subjects placed at least one adult child in the "primary circle" of relationships. The majority of women had a secure attachment with at least one child. This distribution was skewed toward the secure end, with only 10% falling in the extremely insecure range. The quality of these relationships did vary, however, when the women had more than one child; half of the participants had insecure attachments with at least one of their children. Classification of the participants' attachment patterns revealed the following: Secure attachment patterns were seen in 40% of the sample. These individuals had secure attachment relationships with all of their children. Another 40% of the sample were classified as having insecure/mixed attachment patterns. This group exhibited various signs of insecurity across relationships. They did not consistently avoid or resist interaction with their children, but they often had both secure and insecure

relationships with different children. Twenty percent of the women had insecure-avoidant attachments with all of their children. This group exhibited the most problematic relationships; they were highly avoidant during both stressful and nonstressful situations.

One-way analyses of variance were conducted to examine possible differences between attachment styles with respect to the well-being subscales. No significant differences were found on measures of physical and psychological well-being. A trend was noted for social well-being, reflecting poorer social well-being in the avoidant group. An analysis of variance was also conducted with the total number of extreme scores across each of the three well-being measures (defined as one standard deviation below the mean) as the dependent variable. This revealed significant results: it was found that the avoidant group had the highest number of extreme scores, followed by the mixed/insecure group, and then the secure group. Thus, individuals with insecure attachments were consistently more likely to report relatively poor functioning across the three measures of well-being. Analyses of coping patterns revealed that women with insecure relationships generally utilized more coping strategies than those with secure relationships. The authors noted that the direction of this finding was

unanticipated, and suggested that further research is warranted.

### **Caregiving**

One of the obvious issues which is directly related to attachment in later life is that of caregiving. As seen in the model by Hazan and Shaver (1994) the relationship between parent and child gradually becomes more bi-directional and reciprocal in nature as a child reaches adulthood. In later life the caregiving roles may become reversed; if an older adult needs assistance the adult child is likely to become the provider of care.

Although not all have been conceptualized specifically in terms of attachment theory, a few studies have looked at assistance patterns and normative obligations between adult children and older parents. Whitbeck, Simons, and Conger (1991) examined the influence of early parent-child relationships on current relationships and the assistance patterns between adult child and their parents. In this study a path analysis was conducted on data gathered from 270 men and 270 women (the adult children). No data were collected directly from the older parents. The authors measured early parent-child relationships by asking questions related to parental rejection, harsh discipline, and parental monitoring, as well as parental substance abuse, depression, and hostility. The quality of the

current relationship and the level of current assistance provided to parents were assessed with single item questions presented with Likert scales.

This study found that for both sons and daughters, early parental rejection was negatively associated with the quality of the current relationship, and all effects of the parent-child history on later helping behavior were mediated through their impact on the current relationship. The quality of current relationship was found to affect assistance patterns between adult children and their parents; three of the four path models (all except daughters and fathers) showed a weak positive relationship between the current relationship and the assistance provided from adult child to parent. The authors suggested that future studies should include controls for geographic proximity when measuring assistance patterns, and they noted that information from both generations would be helpful.

A few studies have conducted research in which intergenerational data were collected. Rossi and Rossi (1990, 1991) undertook a huge study in the Boston area which involved over 1,400 personal interviews. Three generations were ultimately included by contacting an additional 323 (older) parents and 278 adult children from the main (middle aged) sample. Although a substantive discussion of this study is beyond the scope of this paper, Rossi and Rossi

(1991) did find an "asymmetrical tilt" toward the mother's side of the family with respect to normative obligations. They also found that adult children gave more help to parents who are widowed or in poor health, and that higher levels of kin obligation were associated with more varied and reciprocal help exchanges between parents and children. Early family life and the level of affective closeness were also found to be associated with the strength of adult obligation and the help exchanged between the generations. These later findings are congruent with attachment theory predictions. Interestingly, the obligation felt toward kin and non-kin alike was found to decrease with age, and likewise, there was a sharp decrease in the amount of help given by mothers and fathers over time.

Thompson and Walker (1984) utilized data collected from multiple generations to investigate aid patterns and attachment between mothers and their daughters. Their measure of attachment was composed of questions phrased in terms of "we" and "our" (for example, "we're emotionally dependent on each other"). Thus, it appears that one potential drawback to such a measure might be that it would not allow for any individual differences between the members of the pairs. The study by Thompson and Walker (1984) included three generations composed of 139 pairs in the younger group, and 110 pairs in the older group. The

authors categorized the pairs according to level of aid patterns (high, low, or mixed), and then conducted analyses of variance to determine any differences in attachment between groups. For the older intergenerational pairs, it was found that the older mothers reported greater attachment than their daughters. The older pairs also reported significantly greater attachment in the relationships of high-aid reciprocity. In the younger intergenerational pairs, the dependent woman reported less attachment than her female partner when the relationships involved nonreciprocal aid patterns. Thompson and Walker (1984) suggested that future research should focus on the history of the bond in addition to current aid patterns between mothers and daughters. Other studies using the same (or similar) measurement of attachment were conducted by Walker, Pratt, Shin, and Jones (1989, 1990) and Pohl, Boyd, Liang, and Given (1995). The former investigated obligatory and discretionary motives of caregiving and subsequent relationship quality, while the later study focused on mother-daughter relationships and the commitment to provide care during the first three months of caregiving.

Victor Cicirelli (1983, 1989, 1991, 1993, 1995) has written extensively about the subject of attachment and caregiving as it relates to adult children and their older parents. His 1983 study examined adult children's

attachment and helping behaviors towards their elderly parents. A path analysis was performed on 148 adult children with living elderly mothers. Cicirelli measured attachment feelings and behaviors, interpersonal conflict, filial obligation, negative feelings, present helping behaviors and commitment to provide future helping behaviors. At that time he defined attachment behaviors as proximity to parent, frequency of visiting, and frequency of telephoning. The adult child's attachment behaviors were found to be a function of feelings of attachment, dependency of the mother, and filial obligation. Present helping behavior was a function of attachment behaviors and dependency (increased attachment behaviors and greater dependency resulted in greater helping as hypothesized). Interpersonal conflict with the mother had no effect on helping behaviors, and obligation had only an indirect effect (through attachment behaviors).

Cicirelli's 1993 study followed up on the early one by looking at the combined effects of attachment and obligation as motives for adult children's caregiving behavior, and subsequent feelings of burden. A path analysis was conducted on data from 78 daughters who provided at least 10 hours of care weekly to their elderly mothers. This study found that the amount of help provided was strongly influenced by the mother's dependency (more help was

provided with greater dependency). Greater help was also seen when the daughter's attachment and sense of obligation were stronger. Although expected, Cicirelli did not find an interaction between attachment and obligation, which indicates that their effects are additive. Greater subjective burden was experienced when the amount of help was greater, when the sense of obligation was higher, and when attachment was weaker. Cicirelli noted this last finding as the most interesting; obligation and attachment had opposite effects on subjective burden. Attachment was associated with reduced burden and obligation was associated with enhanced burden. The author speculated that the processes involved for attachment and obligation may be different; attachment may lead directly to caregiving while obligation may involve adherence to internalized standards of proper filial behavior (e.g. to avoid feeling guilty).

While Cicirelli (1983, 1989, 1991, 1993) has explored ways in which adult children's attachment to their parents influence their caregiving behavior, Colin (1996) has suggested that older adults' attachment style may influence the ways in which the older individuals elicit and accept care from others. This appears to be an important issue to address. In some cases help may not be forthcoming because others are not aware of the need, and the older individual has not asked for help.



Colin (1996) has presented specific hypotheses concerning this issue which correspond to the three attachment styles. First, she has suggested that the secure older adult may have greater health, happiness, self-confidence, and social competence. In turn, these individuals may need less care, elicit care more easily, and even accept death more gracefully. Colin then surmised that individuals with anxious attachment may either be "angry" or "passive". The former may be the "fighters" who tend to be dependent, manipulative, and coercive in their attempts to gain assistance, while the latter may be more inclined to give up and go to nursing homes. Finally, those older adults with avoidant attachment styles may be inclined to compulsive self-reliance thereby denying themselves access to services and support.

### **Purpose of the Study**

This study aimed to examine the attachment bond from the perspective of older adult women. Because this is a relatively new area of research, one of the fundamental concerns of this study was a focus on the measurement of attachment in this population. Three separate measures (the Relationship Questionnaire, the Attachment Inventory, and the Adult Attachment Scale) were utilized to permit a comparison of different assessment techniques. Moreover, while the first measure was used to assess a global

"attachment style", the other two measures attempted to assess the women's specific attachment to their adult children. The Adult Attachment Scale (Cicirelli, 1995) was used on an exploratory basis, to investigate the feasibility of using this measure to assess the older parent's attachment to their adult child (instead of vice-versa).

In addition to the general issues related to measurement, several specific hypotheses were presented in this study. First, this study assessed the relationship between the older women's attachment and their well-being in terms of physical, emotional, and social functioning. While this topic has been previously addressed by Andersson and Stevens (1993), and Barnas, et al. (1991), the findings thus far have been mixed and warrant further exploration. It was hypothesized that those women who reported secure attachment would also exhibit a greater sense of well-being on the various measures utilized.

Second, Colin's (1996) premise was investigated to determine if older adults' willingness to ask for help differs according to their attachment styles in ways that are predictable from attachment theory. In brief, Colin suggested that secure individuals would elicit care more easily, while older adults with anxious and avoidant attachment styles may be manipulative, passive, or compulsively self-reliant.

A concept closely related to the notion of requesting assistance from others is that of coping styles. Therefore, a third goal of this study was to further investigate the work initiated by Barnas, et al. (1991) in which coping styles were examined in the context of the older mothers' attachment to their adult children.

Figure 1. The model of the attachment transfer process, in which attachment is hypothesized to gradually transfer from parent to peers.

#### ATTACHMENT AND CLOSE RELATIONSHIPS

DEVELOPMENTAL PHASE	TARGET OF ATTACHMENT BEHAVIORS	
	Parents	Peers
Infancy	proximity maintenance safe haven secure base	
Early Childhood	safe haven secure base	proximity maintenance
Late Childhood/ Early Adolescence	secure base	proximity maintenance safe haven
Adulthood		proximity maintenance safe haven secure base

Note. From "Attachment as an Organizational Framework for Research on Close Relationships," by C. Hazan and P.R. Shaver, 1994, Psychological Inquiry, 5(1), p. 9. Copyright 1994 by Lawrence Erlbaum Associates, Inc. Reprinted with permission.

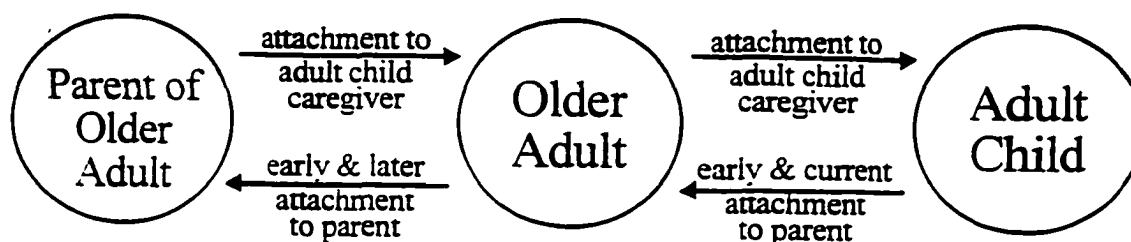
Figure 2. Modification of Hazan and Shaver's model of the attachment transfer process depicting extension of the model to include a life-span perspective; adult children may serve as attachment figures to their older parents.

### ATTACHMENT AND CLOSE RELATIONSHIPS

DEVELOPMENTAL PHASE	TARGET OF ATTACHMENT BEHAVIORS		
	Parents	Peers	Adult Children
Infancy	proximity maintenance safe haven secure base		
Early Childhood	safe haven secure base	proximity maintenance	
Late Childhood/ Early Adolescence	secure base	proximity maintenance safe haven	
Adulthood		proximity maintenance safe haven secure base	
Later Life			proximity maintenance safe haven secure base

Figure 3. Hypothesized intergenerational attachment relationships in later-life.

## Life-span Attachment



## CHAPTER TWO

### Method

#### Subjects

Subjects were 87 community dwelling single females, 65 years of age or older, who had living children. Single was defined as either widowed or divorced. Participants were recruited from a variety of sources including the senior citizen centers, women's church groups, retirement complexes, assisted living centers, the regional agencies on aging, and newspaper advertisements (Kalish, Kogan, & Drozdick, 1996).

General demographic data including the subjects' age, living arrangements, number of children, proximity to children, socioeconomic status, and ethnicity were collected. In addition, subjects were asked to identify (by first name and relationship) the person or persons whom they "feel closest to and depend on for security and comfort in times of distress". This was further described as the person(s) "to whom you turn when you are having a hard time, or when things are going wrong". This item contained space to list up to three individuals. The participants were then asked to identify the one child to whom they would be most likely to turn for comfort and support in a time of need. These questions appear in Appendix A.

## Measurements

### **Attachment**

Subjects' general attachment style was measured using the Relationship Questionnaire (RQ). This instrument consists of four short paragraphs describing the attachment prototypes of Secure, Preoccupied, Dismissing, and Fearful (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994). In this measure, Bartholomew has attempted to systematize Bowlby's conception of internal working models by defining individual differences in adult attachment in terms of two intersecting dimensions: model of self, and model of other. These dimensions are then dichotomized as positive or negative, resulting in the four prototypical attachment patterns of secure, preoccupied, dismissing, and fearful (see Table 1).

In the RQ, subjects were asked to rate (on a scale of 1-7) how well they correspond to each prototype. The highest of the four attachment ratings was then selected to classify subjects into an attachment category (or "best fitting" attachment pattern). The RQ appears in Appendix B.

Subjects' specific attachment to their adult children was assessed using two additional instruments. The first was a modification of the Attachment Interview developed by M. Barnas (personal communication, 1996). Her instrument



consists of nine questions which comprise the three domains of security, avoidance/resistance, and reciprocity. In the Attachment Interview, each response was scored on a four point security continuum (multiple choice format). Scores from the first two domains were averaged to obtain the overall security rating, while the reciprocity domain was considered separately. For the present study, the Attachment Interview was modified from an interview to a questionnaire format. Items containing more than one question were also simplified and/or separated. The revised version contained a total of ten items, and was referred to as the "Attachment Inventory" (AI). This measure appears in Appendix C.

The second measure of attachment to adult children utilized in the current study was the Adult Attachment Scale (AAS) developed by Cicirelli (1995). Items in this measure represent four basic aspects of secure attachment 1) seeking of security and comfort, 2) distress upon separation, 3) joy upon reunion, and 4) feelings of love and closeness. While Cicirelli has used this measure to assess adult children's attachment to their older mothers, the present study attempted to use the scale to measure attachment in the reverse direction, e.g. the mothers' attachment to their adult children. It should be noted that when Cicirelli previously used this measure to assess mothers' attachment

to children (in a sample of mothers receiving care from their adult daughters) he obtained a ceiling effect (personal communication, 1996). Because subjects in the current study were not recruited from a care-receiving population, it was anticipated that their scores might be more normally distributed than those obtained by Cicirelli. However, it should be noted that the use of this measure with the population under study was exploratory. The AAS appears in Appendix D.

### **Well-being**

In their previous study with older women, Barnas, et al. (1991) used the Self-Evaluation of Life Function (SELF) Scale (Linn & Linn, 1984) to assess participants' physical, psychological, and social well-being. The SELF Scale is a 54 item measure which contains six factors including physical disability, symptoms of aging, self-esteem, social satisfaction, depression, and personal control. Due to concerns about the length of the questionnaires in the present study, alternative measurements of health and well-being were investigated. Three shorter instruments were selected to assess physical health, depression, and social participation. These measures are described below:

The SELF-EVALUATION OF HEALTH is a single item indicator to assess health. Subjects are asked: "For someone your age, do you consider you health to be:

excellent, good, fair, or poor?". This assessment is described in Research Instruments in Social Gerontology, Volume 3 by Mangen and Peterson (1984) as "probably among the best single-item indicators available for measuring the health of the elderly". Maddox and Douglass (1973) found that both a physician's rating and a self-assessment of health had stability over a 15-year period, with the self-assessment indicator showing more stability. In addition, the self-rating was found to be a better predictor of future physician's ratings than the reverse. In a more recent study, Ross and Mirowsky (1995) reported that such global judgment of personal health provided valid and reliable measures of general physical well-being. The authors also noted that perceived health correlates with more objective measure such as physicians' assessments and with measures of morbidity and mortality.

Some researchers have combined the single item self-assessment of health with additional questions assessing physical functional ability. Such items may include questions regarding the individual's difficulty getting around, level of pain, and/or dependence on others for activities of daily living (Weinberger, Hiner, and Tierney, 1987; Murphy-Southwick 1993; and Ross and Mirowsky (1995). The present study employed the single item self-assessment of health in combination with four questions which assess

physical functional ability as used by Weinberger, et al. (1987) and Murphy-Southwick (1993). This measure appears in Appendix E.

The SOCIAL PARTICIPATION INDEX (SPI) by D. L. Phillips (1967) was used to assess subjects' level of social participation. This instrument is also described by Mangen and Peterson (1984) in Research Instruments in Social Gerontology, Volume 3. It consists of three items which assess the frequency of interaction with friends, neighbors, and organizations. Social participation has long been considered important as an index of social integration. Other measures, such as the Social Integration and Independence Questionnaire (SIIQ) (Kowal & Guelfi, 1992) were considered, but thought to be too lengthy for the purposes of this study. Although the SIIQ contains four factors, two of these are similar in content to that of the shorter SPI. Furthermore, the additional items in the SIIQ involve physical and depressive measures, which would have been redundant in the present study. The SPI appears in Appendix F.

The 15-item version of the GERIATRIC DEPRESSION SCALE (Sheikh and Yesavage (1986) was selected to measure the subjects' level of depression. This instrument is a shortened version of the original 30-item scale which was developed specifically for rating depression in the elderly

(Brink, et al., 1982, & Yesavage, et al., 1983). The 15 item GDS appears in Appendix G.

### **Asking for Help**

A measure of subjects' willingness to elicit assistance was developed by the author. Referred to as the Asking for Help (AFH) measure, this consists of nine vignettes, each of which describes a situation in which an older adult might typically need assistance from another person. Participants respond to each scenario by choosing from a 7-point Likert scale ranging from "yes, I would ask for help" to "no, I would not ask for help". Scores from the nine vignettes were then averaged to obtain one score representing the subject's willingness to elicit assistance from other individuals. This measure appears in Appendix H.

### **Coping Strategies**

A modification of the Coping Response Inventory (CRI) was used to assess the subjects' coping strategies (R.H. Moos, 1993). The original instrument includes eight scales including four approach and four avoidant coping strategies. In its original format, the answer sheet is separate from the item booklet. Moreover, items on the answer sheet are arranged in rows (across) rather than columns (down). Because it was determined that many older individuals found it difficult to continually alternate between item booklet and answer sheet, the CRI was adapted into a more "user

friendly" format in which the multiple choice answers appeared on the same page directly adjacent to each item. Permission was obtained from the publisher (Psychological Assessment Resources, Inc.) to modify the format accordingly. The adapted format appears in Appendix I.

Socioeconomic status was assessed with the Hollingshead Two-Factor Index of Social Position (Hollingshead and Redlich, 1958). This instrument combines weighted measures of education and occupation to arrive at the Social Position Index. Subjects in this study were asked to provide information regarding both their own occupation and education, as well as that of their former spouses. The two individual scores were then averaged to arrive at a measure of the family's Social Position Index.

Because the questionnaires utilized in this study were identified by number only (making the subjects' identity anonymous), no informed consent was required. Administration of instruments was also counter-balanced to allow for analysis of potential order effects.

Table 1

Bartholomew's Four-Group Model of Attachment

Model of other (avoidance)	<u>Model of self (dependence)</u>	
	Positive (low)	Negative (high)
Positive (low)	<b>Secure</b>	<b>Preoccupied</b>
Negative (high)	<b>Dismissing</b>	<b>Fearful</b>

## CHAPTER THREE

### RESULTS

From 95 distributed questionnaires, a total of 90 were returned. Three of these cases were omitted because they had mistakenly been completed by women who were currently married. This left a total of 87 valid respondents. Most questionnaires contained at least some missing data, and the amount of missing data varied considerably from measure to measure.

#### **Problems with Measures**

As discussed previously, problems were encountered with the original format of the Coping Responses Inventory (CRI). Therefore, permission from the publisher was obtained to revise the format specifically for this study in an attempt to make it somewhat easier for participants to record their responses. The new format maintained the integrity and content of the original measure, but allowed participants to record their responses more easily, without having to alternate between item booklet and answer sheet. Additional problems were also encountered with the CRI in terms of missing data. Many of the participants could not think of a serious problem which they had experienced during the last year, and thus declined to answer the entire instrument. Alternatively, many subjects left several individual items unanswered as "not applicable". Scoring instructions for



the CRI allow for a correction factor to be applied when at least four of the six items from each subscale have been completed. Although the original format made it relatively easy to determine which subscales should be corrected, the new format did not group items by subscale, thus making the correction process extremely tedious and time-consuming. However, after all necessary correction factors had been applied, the number of valid cases ranged from 59-68 for the eight CRI subscales (this was an increase of 14-23 cases, depending on the subscale). The four approach and four avoidance subscales were then averaged to yield single measures of Approach and Avoidance strategies.

Because only 65 subjects completed all items on the Geriatric Depression Scale, missing data were also a concern with this instrument. To increase the number of valid cases, the method of mean replacement was used to correct for missing data on the GDS. This resulted in an increase of 65 to 84 valid cases.

### **Participant Characteristics**

The mean age of subjects in this sample was 78.6 years, with a range of 65-98. All subjects were Caucasian. Table 2 illustrates participant characteristics in terms of living arrangement, type of residence, and place of recruitment. Most notable is the fact that 87% of the women in this

sample live alone, and 84% live in their own homes or apartments.

In terms of the participants' educational level, it was found that the women in this study typically had a higher level of education than did their former husbands. 51% of the women had either partial college training or completed college degrees, while only 39% of their husbands had post-high school education.

The occupations of the subjects and their former spouses were categorized according to the Hollingshead Two-Factor Index of Social Position (Hollingshead, et al. 1958). The majority of subjects reported occupations which fell into the categories of "managers and medium-sized business owners" (20%), "clerical or technical workers" (28%), or "unemployed" e.g. homemakers (16%). The occupations of the subjects' former husbands were more evenly distributed across categories, with the largest percentage (25%) found in the "skilled manual employee" category. Based on a weighted formula which combines rankings of education and occupation, Hollingshead Two-Factor Social Class Index Scores were computed for each subject and her former husband. These two scores were then averaged to obtain a final index score for the family unit. The mean family unit Social Class Index Score for this sample (n=69) was 3.3 on a

scale of 1-5 (with 1 indicating highest social class, and 5 indicating lowest social class).

The mean number of children for this sample of women was 2.9, with a range of 1-8. The median distance from the child they felt closest to (i.e. the child whom they would be "most likely to turn to for comfort and support in a time of need") was 21 miles, with a range of zero to 3000 miles. When considering all children (listed as child 1 through child 6), the median distance ranged from 75 to 350 miles, with an average median of 185 miles.

Eighty-six participants responded to the question asking them to identify the person (or persons) that they felt "closest to and depend on for security and comfort in times of distress". Although space was available to list three individuals, not all women provided three names. Responses to this question yielded a total of 192 individuals who were listed as "closest to". Of these, 34% were daughters, 30% were sons, 17% were friends, 15% were other relatives, and 4% were in the "other" category. Although no specific instructions were given to rank-order the responses, differences were noted in the percentage of sons and daughters who were listed either first or second. Daughters were listed first in 49% of the cases, while sons were listed first in only 27% of the cases. A reverse

pattern was seen with the numbers of closest individuals listed second; sons were listed second in 40% of the cases, while daughters were listed second in 19% of the cases. Data yielded from this item suggest that although the women considered both sons and daughters as comprising a major part of their primary support network, the women may have a tendency to rely more heavily on daughters.

More specific information was obtained regarding this issue by asking the women to identify the one child to whom they would be most likely to turn for comfort and support in a time of need. For the purposes of this discussion, this will be referred to as the "closest child". Forty eight of the women (55%) selected a daughter as the closest child, while twenty five (29%) selected a son. Fourteen of the women (16%) could not choose a single child as the closest, and therefore listed more than one child in this category. Because physical proximity to children was thought to be an important factor, the closest children's gender and their physical proximity to the subjects were also examined. This applied only to those cases (n=59) in which the subject had more than one child, and when she was able to identify one child as the closest. As illustrated in Table 3, the percentage of women living nearest (most proximate to) the closest child was approximately the same for daughters and

sons. That is, for approximately 74% of the women (n=59), the closest child was also the most proximate, regardless of the child's gender.

In terms of their overall health and well-being, this sample of older women appeared to be quite hearty. The subjects generally reported good physical health, low levels of depression, and high levels of social activity. These women were also generally inclined to ask for help when needed, and they obtained approach/avoidance coping strategies in the moderate range. A summary of participant characteristics for these variables appears in Table 4.

Mean CRI subscale scores for the current sample of older women were also compared to subscale scores from the CRI normative sample whose mean age was 61 years. As summarized in Table 5, these findings revealed significant differences between groups on three subscales. More specifically, the older women from the current sample obtained significantly higher scores on Positive Reappraisal and Seeking Alternative Rewards subscales, and lower scores on the Logical Analysis subscale when compared to females from the normative sample (n=722).

### **Measures of Attachment**

Subjects were classified into attachment categories using the Relationship Questionnaire (RQ). In the current

study, this can be thought of as their "general attachment pattern" because the measure was not directed specifically towards relationships with adult children. According to RQ directions, participants were asked to rate four paragraphs which described each of the four attachment styles. The highest rating was then selected as their "best fitting" attachment pattern. Unfortunately, many women ranked more than one category as "highest", thus making it impossible to determine a specific classification for these individuals. As a result, only 60 cases (from a total of 87) could be classified by RQ attachment category. As seen in Figure 4, the majority of these women were classified as either secure (n=24) or dismissing (n=25), while relatively few individuals were found in the Fearful (n=3) and Preoccupied (n=8) categories.

The Attachment Inventory (AI) was one of two measures used to assess attachment to adult children. As described earlier, this instrument yields separate scores for Security and Reciprocity. In the current sample, the Security scores had a relatively normal distribution, with a range of 6-19, a mean of 11.1, and standard deviation of 2.88. The Reciprocity scores were also normally distributed with a range of 4-14, a mean of 7.8, and standard deviation of 2.13. Alpha coefficients for Security and Reciprocity were

0.63 and 0.62, respectively. An exploratory factor analysis (principal components method with varimax rotation) resulted in four factors; however, the factor content was not clearly interpretable. Table 6 contains factor loadings for the Attachment Inventory.

The second measurement used to assess attachment to adult children was the Adult Attachment Scale (AAS). The frequency distribution for this instrument was heavily skewed towards higher attachment. For this sample of women, the AAS had a range of 39-112, a mean of 95.8, and standard deviation of 16.23. The reliability coefficient was alpha 0.94. A principal components factor analysis with varimax rotation revealed three factors with no clearly interpretable factor content. Factor loadings for the Adult Attachment Scale appear in Table 7.

Correlations were performed to evaluate the relationships among the three measures of attachment. It should be kept in mind that for the measures of Security and Reciprocity (revised from the AI by Barnas, et al. 1991), smaller values indicate greater security and reciprocity. In the other measures of attachment (the AAS and the RQ), higher values indicate greater attachment. This means that a negative correlation among Security and/or Reciprocity and the other attachment measures actually indicates a positive

relationship among instruments. The correlation matrix for attachment measures appears in Table 8.

Correlations were also performed among the three measures of attachment and the dependent variables of physical health, social participation, depression, asking for help, and the approach/avoidance subscales from the Coping Responses Inventory. This correlation matrix appears in Table 9. Finally, Table 10 depicts additional correlations which were performed among all dependent variables.

#### **Differences between attachment groups**

Although it had originally been anticipated that analyses of variance would be performed using the four categories of attachment from the RQ, very few subjects were found in the Fearful and Preoccupied groups ( $n=3$  and  $n=8$ , respectively). These two groups were therefore combined, and analyses of variance were performed using the resulting three groups of attachment categories (Secure, Dismissing, and combined Fearful and Preoccupied). No significant differences between groups were found on measures of depression,  $F(2,54) = 1.62$ ,  $p > .05$ , social participation  $F(2,56) = 0.18$ ,  $p > .05$ , physical health,  $F(2,54) = 2.45$ ,  $p > .05$ , tendency to ask for help,  $F(2,54) = 1.45$ ,  $p > .05$ ,



approach coping,  $F(2,38) = .50$ ,  $p > .05$ , or avoidance coping,  $F(2,38) = .129$ ,  $p > .05$ .

It was then determined that the Fearful and Preoccupied categories would be excluded from the analysis, and t-tests were utilized to examine potential differences between the Secure and Dismissing groups from the RQ. No significant differences were found when comparing mean values from the measures of social participation, asking for help, or approach/avoidance. Differences between means for the measures of physical health and depression neared significance,  $t(44) = 1.77$ ,  $p = 0.08$ , and  $t(45) = -1.77$ ,  $p = 0.08$ , respectively. Due to large differences in variance on the depression measure (GDS), a log transformation was performed on depression scores. A subsequent t-test using transformed depression scores did reach significance,  $t(45) = -2.21$ ,  $p < .05$ . This indicates that individuals in the Secure category had a mean depression score which was significantly lower than that of individuals in the Dismissing category. A summary of t-test findings for Secure and Dismissing categories appears in Table 11.

T-tests were also performed using the Security domain from the AI as the independent variable. Security scores were divided into high and low groups using a median split method. No significant differences between groups were

found for any of the dependent measures including those of physical health, social participation, depression, asking for help, approach, or avoidance. A summary of dependent variable means for the two levels of Security (high and low) appears in Table 12.

A median split method was also used to divide the AAS into high and low levels of attachment. T-tests revealed no significant differences between the high and low attachment on measures of physical health, social participation, depression, or approach. However, significant differences were found with the Asking for Help measure,  $t(68) = 2.81$   $p < .05$ , indicating that individuals in the low attachment group had a mean Asking for Help score which was significantly lower than that found in the high attachment group. Significant differences between high and low attachment were also found when comparing the mean avoidance scores,  $t(48) = 2.03$ ,  $p < .05$ . In this case, individuals in the high attachment group also had higher levels of avoidance coping strategies. A summary of dependent variable means for high and low attachment as measured by the AAS appears in Table 13.

### **Counterbalance Groups**

To verify that order of administration had not significantly influenced the participants' responses,

analyses of variance were performed using the counterbalance group as the independent variable. No significant differences were found between groups for measures of physical health,  $F(5,77) = .54$ ,  $p > .05$ , social participation,  $F(5,78) = 1.3$ ,  $p > .05$ , depression,  $F(5,77) = .93$ ,  $p > .05$ , asking for help,  $F(5,73) = 1.3$ ,  $p > .05$ , approach coping,  $F(5,52) = .85$ ,  $p > .05$ , or avoidance coping,  $F(5,52) = .59$ ,  $p > .05$ . In addition, no significant differences were found between counterbalance groups when comparing means for each of the attachment measures including the Relationship Questionnaire,  $F(5,53) = .45$ ,  $p > .05$ , the Attachment Inventory,  $F(5,71) = 1.56$ ,  $p > .05$ , and the Adult Attachment Scale,  $F(5,69) = .56$ ,  $p > .05$ .

Table 2

Demographic Data - Living Arrangements and RecruitmentLocation

Demographic Variable	N	Percent of Sample
Living With		
Self	75	87
Adult Child	7	8
Relative	3	4
Friend	1	1
Type of Residence		
Own Home	39	45
Apartment	34	39
Retirement Home	12	14
Other	2	2
Recruitment Location		
Senior Centers	33	38
Church Groups	22	26
Apartment Complexes	18	21
Other	13	15

Table 3

Proximity to Closest Child

	Closest Child		
	Son	Daughter	Total
	N (%)	N (%)	N (%)
<u>Proximity to Child</u>			
NOT Most proximate	5 (28)	10 (24)	15 (25)
IS most proximate	13 (72)	31 (76)	44 (75)
Total	18 (100)	41 (100)	59 (100)

Note. Closest Child = adult child to whom the subject feels closest and would turn to for comfort and support.  
 Proximity to Child = closest child is or is not the most proximate child.

Table 4

Participant Characteristics: Dependent Variable Means for Entire Sample

Variable	N	Mean	SD
Physical Health	84	13.51	1.87
Social participation	85	7.00	1.14
Depression	84	1.92	2.53
Asking for Help	80	5.26	0.99
CRI-Approach	58	10.96	3.31
CRI-Avoidance	58	6.85	2.88

Table 5

CRI Subscale Means for Current Sample and CRI Normative Sample

CRI Subscale	Current Sample n=59-68 Mean (SD)	Normative Female Sample n=722 Mean (SD)
LA	9.70 (4.53)	11.48 (3.87) *
PR	11.88 (3.59)	10.67 (4.40) *
SG	10.53 (4.25)	10.15 (3.94)
PS	11.64 (4.34)	11.19 (4.14)
CA	6.40 (4.79)	6.80 (4.18)
AR	8.38 (4.44)	7.56 (4.18)
SR	8.82 (4.55)	6.57 (4.51) *
ED	3.70 (3.02)	4.08 (3.24)

Note: LA = Logical Analysis, PR = Positive Reappraisal, SG = Seeking Guidance & Support, PS = Problem Solving, CA = Cognitive Avoidance, AR = Acceptance or Resignation, SR = Seeking Alternative Rewards, ED = Emotional Discharge.  
 \* Significant difference between current and normative sample as tested by a one-sample  $t$ -test,  $p < .05$ .

Table 6

Factor Loading of Attachment Inventory Items (n=76)

Item	Factor 1	Factor 2	Factor 3	Factor 4
1			.87	
2	.58		.52	
3		.64	.60	
4		.84		
5	.54	.53		
6				.78
7	.79			
8	.65			
9				.69
10	.46			.55

Table 7

Factor Loading for Adult Attachment Scale Items (n=75)

Item	Factor 1	Factor 2	Factor 3
1			.84
2		.69	.61
3		.73	
4			.83
5		.79	
6	.51		.64
7	.60		.60
8		.75	
9	.70		.49
10		.65	
11	.83		
12	.76	.43	
13	.48	.65	
14	.62		.51
15	.83		
16		.63	

Table 8

Correlation Matrix for Attachment Measures

	SEC	RCP	AAS	RQS	RQF	RQP	RQD
SEC	--						
RCP	.60**	--					
AAS	-.56**	-.29*	--				
RQS	-.22	-.21	.13	--			
RQF	-.06	.04	.04	-.22*	--		
RQP	.03	-.05	-.10	.06	.39**	--	
RQD	.04	.23*	-.04	-.20	.21	-.09	--

Note. SEC = AI-Security; RCP = AI-Reciprocity; AAS = Adult Attachment Scale; RQS = RQ-Security; RQF = RQ-Fearful; RQP = RQ-Preoccupied; RQD = RQ-Dismissing. N's vary due to missing data; range = 69-83.

\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).



Table 9

Correlation Matrix for Attachment Measures and Dependent Variables.

Scale	PHH	SPI	DSN	AFH	APP	AVD
SEC	-.09	0.03	.15	-.25*	-.21	-.13
RCP	-.03	-.05	.36**	-.03	-.18	-.01
AAI	-.05	.11	.10	.31**	.06	.21
RQS	.01	.05	-.21	.23*	.28*	.04
RQF	-.18	-.13	.18	-.16	-.02	.19
RQP	-.21	-.20	.10	-.04	.17	.23
RQD	-.01	.02	.06	-.13	-.08	-.10

Note. SEC = AI-Security; RCP = AI-Reciprocity; AAI = Adult Attachment Inventory; RQS = RQ-Security; RQF = RQ-Fearful; RQP = RQ-Preoccupied; RQD = RQ-Dismissing; PHH = Physical Health; SPI = Social Participation Index; DSN = Depression; AFH = Asking for Help; APP = CRI-Approach; AVD = CRI-Avoidance. N's vary due to missing data; range = 69-85.

\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).

Table 10

Correlation Matrix for Dependent Variables						
Scale	PHH	SPI	DSN	AFH	APP	AVD
PPH	--					
SPI	.17	--				
DSN	-.38**	-.32**	--			
AFH	.10	.26*	-.10	--		
APP	.04	.11	-.21	.03	--	
AVD	-.18	.15	.14	.29*	.41**	--

Note. PHH = Physical Health; SPI = Social Participation Index; DSN = Depression; AFH = Asking for Help; APP = CRI-Approach; AVD = CRI-Avoidance. N's vary due to missing data; range = 53-82.

\*  $p < .05$  (2-tailed).

\*\*  $p < .01$  (2-tailed).

Table 11

Means and Standard Deviations for RQ-Secure and RQ-Dismissing Attachment Categories.

Variable	Mean (SD) n		t	p
	Secure	Dismissing		
PHH	14.30 (1.79) n=23	13.43 (1.53) n=23	1.76	.08
SPI	7.17 (1.01) n=24	7.08 (1.21) n=24	.26	.80
DSN	1.10 (1.92) n=24	2.32 (2.77) n=23	-1.77	.08
logDSN	.23 (0.27) n=24	.41 (0.31) n=23	-2.21	.03 *
AFH	5.55 (1.02) n=23	5.13 (1.04) n=24	1.39	.17
APP	11.68 (3.10) n=16	10.57 (2.92) n=17	1.06	.30
AVD	6.90 (2.19) n=17	6.55 (3.35) n=16	.35	.73

Note. PHH = Physical Health; SPI = Social Participation Index; DSN = Depression; logDSN = log of Depression; AFH = Asking for Help; APP = CRI-Approach; AVD = CRI-Avoidance.

\*  $p < .05$ .

Table 12

Means and Standard Deviations for High and Low AI-Security.

Variable	Mean (SD) n		<u>t</u>	<u>p</u>
	Security			
	Low	High		
PHH	13.32 (1.76) n=38	13.67 (1.82) n=36	-0.84	.40
SPI	6.97 (1.24) n=38	6.97 (1.13) n=38	0.0	1.00
DSN	2.08 (3.08) n=38	1.78 (2.01) n=36	0.51	.62
AFH	5.10 (1.06) n=36	5.42 (0.91) n=36	-1.37	.18
APP	10.77 (3.36) n=29	11.42 (3.12) n=26	-0.73	.47
AVD	6.76 (2.98) n=29	7.33 (2.60) n=26	-0.75	.45

Note. PHH = Physical Health; SPI = Social Participation Index; DSN = Depression; AFH = Asking for Help; APP = CRI-Approach; AVD = CRI-Avoidance.

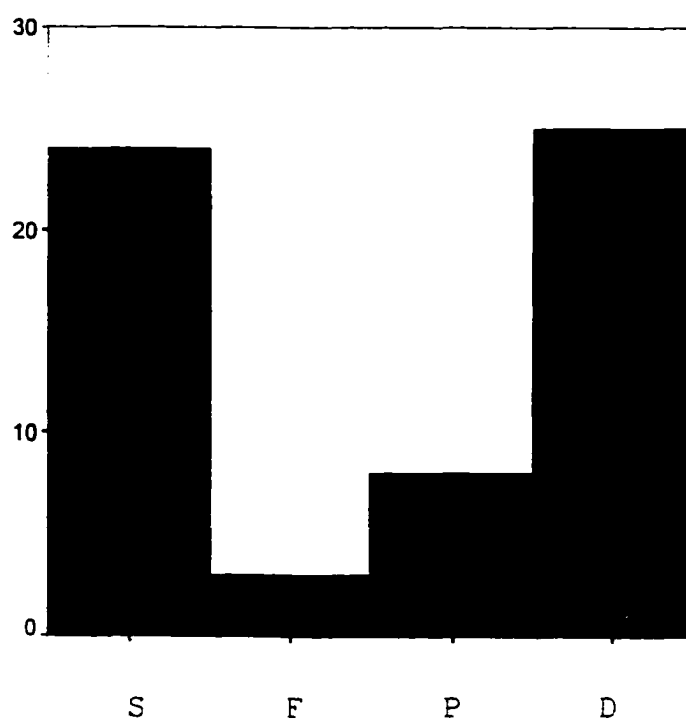
Table 13

Means and Standard Deviations for Low and High AAS-Attachment.

Variable	Mean (SD) n		<u>t</u>	<u>p</u>
	Attachment			
	Low	High		
PHH	13.69 (1.76) n=35	13.51 (1.82) n=37	-0.41	.69
SPI	6.80 (1.23) n=35	7.26 (1.02) n=39	1.72	.09
DSN	1.66 (2.14) n=35	1.75 (2.14) n=37	0.18	.86
AFH	5.03 (1.04) n=33	5.65 (0.79) n=37	2.81	.006
APP	11.22 (3.17) n=27	10.67 (3.71) n=23	-0.57	.57
AVD	6.24 (2.81) n=27	7.88 (2.85) n=23	2.03	.048

Note. PHH = Physical Health; SPI = Social Participation Index; DSN = Depression; AFH = Asking for Help; APP = CRI-Approach; AVD = CRI-Avoidance.

Figure 4. Distribution of subjects across RQ attachment categories.



Note. S = Secure, F = Fearful, P = Preoccupied, D = Dismissing

## CHAPTER FOUR

### Discussion

Before discussing the specific findings of this study, it should be noted that the population under investigation was not a random sample. Women were recruited from senior centers, women's church groups, and apartment complexes for older adults. The women who volunteered to participate in this study tended to be very socially active, reporting several social contacts per week. In addition, their self-reports indicate that the subjects were generally in good physical health and were not depressed. As such, care must be taken to avoid generalizing the findings of this study to "all women over the age of 64". It is quite possible that different results would be obtained from women who were socially isolated, in poor health, and/or depressed. Nonetheless, this study does provide useful information about the sub-population of women in this age group who could be collectively referred to as the "healthy and active group".

### Measurement

Measurement issues pertaining to each of the three attachment measures will be addressed before discussing the specific hypotheses of this study. When analyzing the findings from the Relationship Questionnaire (RQ) it was found that from a total of 60 cases classified by "best

fitting" attachment category in the current study, 40% (n=24) were classified as Secure, 13% (n=13) were Preoccupied, 5% (n=3) were Fearful, and 42% (N=25) were Dismissing (see Figure 4). This distribution of subjects across attachment categories differs markedly from that found with younger samples. For example, compared to the present study, Bartholomew and Horowitz (1991) found considerably fewer subjects in the Dismissing category and more subjects in the Fearful and Secure categories when using a sample of college students (mean age 19.6 years). Table 14 compares the distribution of subjects across attachment categories from the studies by Bartholomew and Horowitz (1991) and the current study. A chi-square test revealed significant differences in the category frequencies when comparing the college students to subjects in the current study,  $\chi^2(3) = 25.36, p < .05$ .

There are a number of possible explanations for the differing distributions found in the current study. One possibility is that measurement error could have been introduced via the concept of individual independence and the importance that such independence holds for many older adults. More specifically, paragraph four in the Relationship Questionnaire (the Dismissing prototype) contains the following sentence: "It is very important to me



to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me." In contrast, the Secure prototype states the following: "I am comfortable depending on them (others) and having them depend on me". Indeed, it should be recalled that Bartholomew's four category model of "self and other" (Table 1) can be conceptualized in terms of dependency (on the horizontal axis) and avoidance of intimacy (on the vertical axis). Furthermore, it was noted that when returning questionnaires, a number of the participants specifically stated to the author that they were very "independent". Because issues related to maintaining independence and autonomy (and the possible fear of "becoming a burden") are especially salient for this population, it is possible that the subjects' desire to maintain independence may have confounded their responses in the RQ, thereby resulting in an increase in the number of women who endorsed the Dismissing prototype.

A second possible explanation for these findings is that rather than being a function of measurement error, the results represent an accurate reflection of the subjects' distribution across attachment categories. Recall that according to the four category model, both the Secure and Dismissing groups are considered to be low in dependency

(positive models of self). In the current study, these two groups combined accounted for 82% of the cases. Assuming this distribution is accurate, these findings then suggest that a majority of individuals from this sample of active, healthy widows experience a positive model of self with a corresponding low level of dependence on others. One could speculate that these women have had to "fend for themselves" after losing their spouses, thereby developing a certain degree of independence. It would be interesting to test this hypothesis by comparing the attachment styles and dependency levels of widows and married women in this age group. Once again, it should be pointed out that results much different from those found in the current study might occur in a randomly selected sample of widows. Women experiencing compromised physical and psychological health would be expected to have higher dependency needs, and this in turn might influence their responses to measures of attachment.

The issue of subjects' self-selection may also account for the small number ( $n=3$ ) of Fearful subjects who volunteered to participate in this study. According to the four category model, the Fearful group is comprised of individuals who have negative models of both self and others. As such, they are thought to be high in dependency

and high in avoidance of intimacy. The Fearful prototype is characterized by a sense of personal insecurity, a distrust of others, and an avoidance of close relationships because of a fear of rejection. In an assessment of interpersonal problems associated with the different attachment groups, Bartholomew and Horowitz (1991) found that the Fearful group reported relatively more problems with introversion and a lack of assertiveness. Considering this prototypic description, it is quite conceivable that insecure, distrusting, and introverted women would be much less likely to volunteer to participate in a research project. Certainly, individuals matching the Fearful prototype do not fit the general description of "healthy and active" which defined the overall functioning of participants in this study.

Another explanation may also be offered to account for relatively small percentage (5%) of Fearful subjects in the current study. Recall that Bartholomew and Horowitz (1991) reported that 15-21% of their college-aged subjects were classified as Fearful. Considering this, one explanation to account for this difference is that women who would have previously been categorized as Fearful during their younger years may tend to develop a more positive model of self, and thereby move from the Fearful into the Dismissing category

with advancing age. Because no other studies to date have utilized the RQ with this age group, additional comparisons regarding attachment category classification are not available at this time. Longitudinal studies will be necessary to determine whether or not such a shift in attachment style occurs in later life.

To summarize the methodological issues related to the RQ, it should be kept in mind that measurement error, self-selection, and developmental stage are some of the issues which may have contributed to the distribution of attachment categories found in the current study. A great deal of additional research will be needed before investigators are confidently able to offer accurate and meaningful information regarding the distribution of attachment categories for women in this age group.

Next, measure issues related to the Attachment Inventory (AI) will be considered. This instrument, which is a modification of Barnas' Attachment Interview (1996, personal communication), was one of two measures used to assess women's attachment to their "closest" adult child. In the original Attachment Interview, Barnas designated three "domains" (security, avoidance, and reciprocity) which were apparently based on face validity. However, in the current study, a principal components factor analysis of the

Attachment Inventory resulted in four factors, with many items loading on more than one factor (see Table 6).

Furthermore, the factor content had no clear interpretation, and did not appear to correspond to the domains designated by Barnas. A larger sample would be needed before drawing conclusions about the factor structure of this instrument, but in the meantime, interpretations regarding specific "domains" of the AI should be made cautiously.

In the study by Barnas, et al. (1991), 83% of the subjects obtained security scores of 2.0 or below indicating higher levels of attachment to the "most secure" child relationship. When scores from the current study were converted to a similar four-point scale, 69% of the subjects obtained a score of 2.0 or below in reference to their "closest child". Although lower than those found by Barnas, these values do indicate that the majority of women from the current study experience a close attachment with at least one adult child.

The second instrument used to assess attachment to the "closest child" was the Adult Attachment Scale (AAS). This instrument is comprised of items representing four basic aspects of secure attachment: 1) seeking security or comfort, 2) distress upon separation, 3) joy upon reunion, and 4) feelings of love or closeness. In the current study

a principal components factor analysis yielded three factors with no clear interpretation, although Cicirelli (1995) has previously regarded the measure as ("tentatively") unidimensional (see Table 7). It should be noted that Cicirelli developed this instrument as a means of assessing adult children's attachment to their older mothers, and when he attempted to measure attachment in the reverse direction (e.g. mother's attachment to adult children) he found a ceiling effect with a sample of women who were receiving care from their daughters (personal communication, August 1996). Because the sample of women in the current study was not specifically receiving care from their daughters, it was thought that attachment scores might be more normally distributed; however, results showed that AAS scores were once again heavily skewed towards higher attachment to adult child. It can be concluded then, that for both women receiving care from their daughters as well as those who are more "independent", most subjects reported high levels of attachment towards children on the AAS. Furthermore, this suggests that the instrument may not be sensitive enough to detect subtle differences in the strength of attachment to adult children, especially at higher levels of attachment.

Correlational data were used to examine the relationships between attachment measures. In the

Attachment Inventory, Security and Reciprocity were positively correlated ( $r = .60$ ), suggesting that women who reported higher levels of security to their closest child also experienced a greater sense of "give and take" in the relationship. Attachment to closest child was assessed with both the AI and the AAS, and a positive correlation was therefore expected between these two scales. It must be kept in mind that since the two measures are scaled in opposite directions, negative correlations actually indicate positive relationships. Table 8 reveals that significant negative correlations (implying positive relationships) were found between AAS-Attachment and AI-Security, and for AAS-Attachment and AI-Reciprocity.

As also seen in Table 8, the four attachment categories from the RQ did not correlate significantly with scores from the AI and the AAS with the exception of the Dismissing group, which was negatively correlated with AI-Reciprocity (again, the RQ and AI are scaled in opposite directions, and positive values therefore indicate negative relationships). Because individuals classified as Dismissing are prototypically very independent, with a positive model of self and a negative model of others, it follows logically that they would be less likely to reciprocate with others.

At first glance, it may be surprising that the Secure category from the RQ did not correlate significantly with the other measures of security; however, it is important to keep in mind that the AI and AAS were assessing attachment to the closest child, while the RQ was assessing a global attachment style (not specific to adult children). Similar measures are expected to correlate more highly, and this was the case with the AI and AAS.

### **Differences Between Groups - Hypothesis Testing**

The first main hypothesis of this study was that women with higher (or more secure) attachment would report a greater sense of well-being. More specifically, this would include better physical health, less depression, and greater social participation. It had been originally anticipated that analyses of variance would be performed using the four categories from the RQ as independent variables. However, due to the small number of subjects in the Fearful and Preoccupied categories, these groups were omitted from the analysis. T-tests were then performed on the remaining Secure and Dismissing categories (these two groups comprised 82% of the sample). As seen in Table 11, no significant difference was found between groups with respect to social participation. Although mean differences did not reach



significance on measures on physical health and depression, trends were suggested for both. Furthermore, due to the large difference in variance between groups on the measure of depression, a log transformation was performed on GDS scores, and a t-test using the transformed scores did reveal significant differences between the Secure and Dismissing categories. Depression scores from the Dismissing category were found to be significantly higher (more depressed) than those individuals in the Secure category.

T-test were also performed with the AI-Security scores and the AAS Attachment scores by dividing the measures into high and low groups using a median split method. With these two measures, no significant differences were found between groups on measures of physical health, social participation, or depression. Therefore, it can be concluded that using a measure of global attachment style but not with the measures of attachment to child, significant differences were found with respect to depression. Specifically, women classified with the RQ as having Secure attachment were found to have lower depression scores than those women who were classified as Dismissing.

The second major hypothesis of this study involved Colin's (1996) premise that older adults with different attachment styles may differ in their tendency to ask other

individuals for help. T-tests using the Secure and Dismissing categories from the RQ, and the Security scale from the AI did not reveal significant differences between groups on the Asking for Help Measure. However, using the high and low categories from the AAS, significant differences were found between groups. That is, women in the high AAS-attachment group had significantly higher Asking for Help scores than did those women in the low attachment group. This finding indicates that women reporting higher levels of attachment to children on the AAS are more willing to ask others for assistance when needed.

The final hypothesis of this study involved potential differences between attachment groups with respect to the women's coping strategies. Subscales from the Coping Responses Inventory (CRI) were combined to arrive at Approach and Avoidance coping strategies. T-tests were then performed using each of the attachment measures as independent variables. For the RQ categories (Secure and Dismissing) and the AI-Security scores (high and low), no differences between groups were found with respect to coping strategies. However, using the AAS, significant mean differences for Avoidance scores were found between the high and low attachment groups. In this case, women in the high AAS-attachment group also had significantly higher Avoidance

coping strategy scores. No differences were found between high and low AAS groups with respect to Approach coping strategies. In a further analysis, correlations were performed between AAS-attachment scores and each of the four avoidance subscales from the CRI. The only significant correlation occurred with the Cognitive Avoidance subscale,  $r(55) = .275$ ,  $p < .05$ . In addition, t-tests performed using the four avoidance subscales also revealed that Cognitive Avoidance was the only subscale to show a significant difference between high and low AAS attachment groups,  $t(55) = 2.69$ ,  $p = .01$ . These unexpected results suggest that women who reported higher attachment to adult children on AAS also tend to utilize more cognitive avoidance coping. This coping strategy is defined as "cognitive attempts to avoid thinking realistically about a problem". Greater reliance on avoidance coping in general has also been associated with more physical symptoms, depression, and anxiety (Moos, 1993). However, in the current study, the high and low AAS-attachment groups did not differ significantly on measures of physical health and depression. One possible explanation is that these women may avoid dealing with stressful situations in their attempt to maintain harmony in their relationships. It was also noted earlier that this group obtained higher scores on the

measure of Asking For Help. Therefore, another explanation might be that these women tend to avoid more active cognitive coping strategies by seeking assistance from others.

To conclude this discussion, it is noted that partial support was obtained for each of the main hypotheses in this study. However, the results varied considerably depending on the attachment measure used, reflecting a lack of consistency between measures. Additional research would be required to compare and contrast these attachment measures; however, a few preliminary considerations are offered at this time. It is suggested that the variation in results between attachment measures may be at least partially accounted for by the degree to which the instruments were associated with issues of personal independence. The issue of independence appears to have been a salient (if not confounding) factor in the assessment of Secure and Dismissing attachment with the RQ. Colin (1996) suggested that overly independent ("compulsively self-reliant") older individuals may deny themselves services and support. Such behavior would be expected to contribute to higher levels of depression, and this finding was observed in the subjects classified as Dismissing. In contrast, items in the AI and ASS are less focused on personal independence, and these

instruments revealed no significant differences between groups on measures of well-being.

Divergent findings between attachment measures were also obtained when considering the subjects' tendency to ask for help and their coping strategies. For these variables, only the AAS (but not the RQ or the AI) yielded significant differences between high and low attachment. Because both the AI and the AAS were directed at adult children, more similar results were expected between these measures. A close examination of the two instruments reveals that items from the AAS correspond to the four domains of 1) joy upon reunion, 2) distress upon separation, 3) feelings of love and closeness, and 4) seeking of security and comfort. The AI does not include items related to feelings of love and closeness or joy upon reunion. Instead, the AI focuses primarily on seeking and resisting help (security and comfort) from adult children. Therefore, it may be that high scores on AAS were at least partially associated with women who felt a deep emotional closeness, if not dependency, towards their children. This dependence might then be related to the women's increased tendency to ask for help and to avoid cognitive coping strategies.

When considering the attachment measures used in the current study it is clear that none of them was ideal. In

fact, perhaps the most important finding offered from this study is that the attachment measurements must be further developed and refined before specific conclusions can be drawn regarding adult attachment and its correlates.

In addition to the problems with measurement noted above, other limitations of this study include the small sample size and the self-selection of subjects. Although 87 women participated in the study, missing data resulted in reduced numbers for some measures. As discussed earlier, the self-selection of participants in this study resulted in a sample of primarily "healthy and active" older women, and the results therefore have limited generalizability.

### **Summary and Recommendations for Future Research**

In summarizing the findings of this study, it can first be concluded that considerable differences were discovered in the distribution of subjects across RQ attachment categories relative to previous studies which have been performed with college students. Compared to college students, the current study found a higher percentage of older women classified as Dismissing, while smaller percentages were found in the Fearful and Secure groups. Additional research will be required to determine whether or not this distribution is an accurate one for older women, or

if the issue of personal independence has served to confound the measure. The current study also provided partial support for the hypotheses that women with higher (or more secure) attachment would report a greater sense of well-being (as measured by depression scores), and that they would be more likely to ask for help when needed.

Unexpected findings were obtained with a measure of coping strategies, which indicated that women with stronger attachment to children also utilized more avoidance coping. Finally, it is important to note that findings were not consistent across attachment measures, and this likely reflects the lack of well-developed instruments currently available in this relatively unexplored area of adult attachment.

Future research will certainly be required to clarify many of the issues raised in the current study. The development of valid, reliable measures should be a priority, and will need to occur before conclusions regarding correlates of attachment styles can be drawn with any degree of confidence. When developing measures of attachment in older adults, special attention should be given to issues salient in later life, such as personal independence and autonomy, which may influence and possibly confound the assessment instruments. The current study did

not specifically measure levels of dependency, and it is suggested that future studies include this as an important variable and/or covariate. Reciprocity is another important variable to be considered in future research, as older adults are likely to provide as well as receive security and comfort from their adult children (or other attachment figures).

Future studies should also consider methods of broadening the subject pool to achieve a more diverse sample. Although volunteers are more easily recruited from the "active and healthy group", important information could be obtained using a more representative sample. A more diverse sample pool, including individuals who are more isolated and/or less functional, might be recruited through health care facilities and aging services.

After first developing more refined attachment measures, researchers will be able to explore the functional correlates associated with various attachment patterns of later life. Psychologists and other health care professionals will then be better equipped to provide more effective services for older individuals. As an area of research which remains in its infancy, the topic of older adult attachment has just begun to receive attention. The current study, which has explored attachment theory as it



relates to older adults and their adult children, has no doubt raised far more questions than it has answered. It is hoped, however, that this study will contribute to the field by inspiring others to investigate this important area of relationships in later life.

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## APPENDIX A

Subject # \_\_\_\_\_

1. What is your age? \_\_\_\_\_
2. Where do you live?
  1. own home
  2. apartment
  3. assisted living center
  4. nursing home
  5. other (specify) \_\_\_\_\_
3. Do you live alone?
  1. Yes
  2. No
4. If you answered "no" to question # 3 above, with whom do you live?
  1. one of your children
  2. your sister or brother
  3. other relative (specify) \_\_\_\_\_
  4. friend \_\_\_\_\_
  5. other (specify) \_\_\_\_\_
5. Who is the person (or persons) that you feel closest to and depend on for security and comfort in times of distress? In other words, to whom do you turn when you are having a hard time, or when things are going wrong? List their first name and their relationship to you (e.g. child, friend, etc.) below:
 

1.		
	Name	Relationship
2.		
	Name	Relationship
3.		
	Name	Relationship
6. How many children do you have?
7. If you have more than one child, which child would you be most likely to turn to for comfort and support in a time of need?
 

Name

8. Where do each of your children live, and about how far (in miles) do they live from you?

First Name	Place	# miles away
First Name	Place	# miles away
First Name	Place	# miles away
First Name	Place	# miles away
First Name	Place	# miles away
First Name	Place	# miles away

9. What is (or was) your occupation? \_\_\_\_\_

10. How many years of formal education do you have?

1. 0 - 8 years
2. 9- 12 years
3. 13 - 16 years
4. 16 + years

11. What was the occupation of your spouse? \_\_\_\_\_

12. How many years of formal education did your spouse have?

1. 0 - 8 years
2. 9- 12 years
3. 13 - 16 years
4. 16 + years

13. What is your ethnic background?

1. White (Caucasian)
2. Hispanic
3. African-American
4. Native-American
5. Asian-American

14. Where did you learn about this study?

- |                    |                       |
|--------------------|-----------------------|
| 1. Senior Center   | 4. Radio or TV        |
| 2. Church          | 5. Apartment building |
| 3. Doctor's office | 6. Other _____        |

APPENDIX B  
Relationship Questionnaire (RQ)

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

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not at all	Very much
like me	like me

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

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not at all	Very much
like me	like me

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

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not at all	Very much
like me	like me

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

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not at all like me	Very much like me
-----------------------	----------------------

## APPENDIX C

Attachment Inventory (AI)

**Directions:** Refer to the person identified in Question #7 of Part A (e.g. the child you would turn to for comfort and support in a time of need), and write their first name on this line \_\_\_\_\_. Please answer the following items AS THEY APPLY TO THAT PERSON, by circling the appropriate number for each question.

1. Do you look to \_\_\_\_\_, for security and comfort in times of stress:
  1. Yes, always
  2. Usually
  3. Sometimes
  4. No, never
  
2. In general, would you say that when you turn to \_\_\_\_\_ they are there for you and able to comfort/help you?
  1. Yes, always
  2. Usually, most of the time
  3. Sometimes, but only for certain things.
  4. No, never
  
3. Does \_\_\_\_\_ look to you for comfort and security?
  1. Yes, always
  2. Usually
  3. Sometimes
  4. No, never
  
4. In general, when \_\_\_\_\_ comes to you in need of help, are you able to assist them?
  1. Yes, always
  2. Usually
  3. Sometimes
  4. No, never

5. Are there often or ever times when you feel you cannot go to \_\_\_\_\_ for help or security? If so, why?
1. No, never
  2. Usually not
  3. Sometimes
  4. Yes, usually
6. Are there ever times when you resist \_\_\_\_\_ attempts to provide comfort or assistance to you?
1. No, never
  2. Usually not
  3. Sometimes
  4. Yes, usually
7. Are there ever periods when you are not in contact with \_\_\_\_\_ for extended periods of time? If so, why?
1. No, never
  2. Usually not
  3. Sometimes
  4. Yes, usually
8. Do you and \_\_\_\_\_ give each other advice and/or offer opinions about problems or decisions?
1. Yes
  2. Usually
  3. Sometimes, but not often
  4. No, never

9. If you were ever separated from \_\_\_\_\_ due to death or other circumstances, what kind of issues, feelings, or voids would this present in your life?
1. I would feel deep distress, loneliness, and/or depression.
  2. I would miss them, but I would have to deal with it.
  3. I'm not sure how I would feel; I might miss them in some ways.
  4. It wouldn't affect my life that much, or it might be a relief in many ways.
10. Do you see your relationship with \_\_\_\_\_ as reciprocal? In other words, do you give and take equally in terms of protection, caring, and providing for one another?
1. Yes, it is even in the long run.
  2. Usually
  3. Sometimes
  4. No, it is not reciprocal.

#### **Direction for scoring the Attachment Inventory**

Security domain = items 1,2,9

Avoidance domain = items 5,6,7

Reciprocity domain = items 3,4,8,10

Score in each domain are added. The security and avoidance domains are combined to provide an overall security rating.

Score from the reciprocity domain are considered separately.

## APPENDIX D

Adult Attachment Scale

Directions: Refer to the person identified in Question #7 of Part A (e.g. the child you would turn to for comfort and support in a time of need), and write their first name on this line \_\_\_\_\_. Please answer the following items AS THEY APPLY TO THAT PERSON, by circling the appropriate number for each question.

1. Being with my daughter/son makes me feel very happy.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

2. At times when I have some trouble or difficulty, my daughter/son's image seems to come to my mind.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

3. If I am unable to see my daughter/son for a long time, it bothers me a lot.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

4. When I have not seen my daughter/son for a while, I feel happy when I see her/him again.

1	2	3	4	5	6	7
No, not at all					Yes, very much	



5. When I feel alone and feel anxious, my daughter/son is the first person I think of.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

6. When I am with my daughter/son I feel very close to her/him.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

7. I feel a sense of joy to be with my daughter/son again when we have been separated for a while.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

8. I feel lonely when I don't see my daughter/son often.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

9. When I am with my daughter/son, I feel that I am with someone I can depend on.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

10. If I am in trouble, the first person I want to talk to is my daughter/son.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

11. The thought of losing my daughter/son is deeply disturbing to me.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

12. When I have been away from my daughter/son for a long time, I feel a sense of security to be with her/him again.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

13. If I feel depressed, my daughter/son is always a source of strength for me.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

14. When I am with my daughter/son I feel that I am with someone I can trust completely.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

15. After we have been apart for a time, I feel a sense of relief when I see my daughter/son again.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

16. It would be very difficult for me to move far away from my daughter/son.

1	2	3	4	5	6	7
No, not at all					Yes, very much	

## APPENDIX E

SELF-EVALUATION OF HEALTH

1. For someone your age, do you consider your health to be:

1. poor
2. fair
3. good
4. excellent

2. Are you limited on activities because of your health?

1. severely limited
2. somewhat limited
3. not limited

3. Do you depend on others for performing activities of daily living such as eating, bathing, dressing, grooming, and walking across the room?

1. totally dependent on others
2. need some help
3. need no help

4. Do you have difficulty moving around?

1. a great deal
2. some
3. none

5. So you suffer from pain?

1. a lot
2. some
3. none

## APPENDIX F

SOCIAL PARTICIPATION INDEX

1. During the past few weeks how many times did you get together with friends - things like going out together or visiting in each other's homes?

1. no contact during the past few weeks
2. 1 to 2 times during the past few weeks
3. 3 or more times during the past few weeks

2. About how many neighbors around here do you know well enough to visit with?

1. none
2. 1 to 3 neighbors
3. 4 or more neighbors

3. How many organization such as church and school groups, labor unions, or social, civic and fraternal clubs do you take an active part in?

1. none
2. one or more

## APPENDIX G

GERIATRIC DEPRESSION SCALE

- |   |        |
|---|--------|
| 1. Are you basically satisfied with your life?                                | yes/no |
| 2. Have you dropped many of your activities and interests?                    | yes/no |
| 3. Do you feel that your life is empty?                                       | yes/no |
| 4. Do you often get bored?  | yes/no |
| 5. Are you in good spirits most of the time?                                  | yes/no |
| 6. Are you afraid that something bad is going to happen to you?               | yes/no |
| 7. Do you feel happy most of the time?  | yes/no |
| 8. Do you often feel helpless?  | yes/no |
| 9. Do you prefer to stay at home, rather than going out and doing new things? | yes/no |
| 10. Do you feel you have more problems with memory than most?                 | yes/no |
| 11. Do you think it is wonderful to be alive?                                 | yes/no |
| 12. Do you feel pretty worthless the way you are now?                         | yes/no |
| 13. Do you feel full of energy?   | yes/no |
| 14. Do you feel that your situation is hopeless?                              | yes/no |
| 15. Do you think that most people are better off than you are?                | yes/no |

## APPENDIX H

ASKING FOR HELP QUESTIONNAIRE

Directions: For each of the following situations, circle the number which best indicates how likely you would be to ask someone for help.

1. Imagine that you had suddenly become ill with flu-like symptoms. You are feeling poorly enough that it is hard to care for yourself. Would you ask someone to check in on you and/or stay with you for a while?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

2. Imagine that you had an important doctor's appointment, and you suddenly found yourself in need of transportation. Would you ask someone you know well to take you to the doctor?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

3. Imagine that while you are out shopping you accidentally lock your keys in the car. You remember that there is a spare set of keys in your house. Would you call someone to help you get the keys?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

4. Imagine that you wake up at 3:00 a.m. to find that your hot water heater is leaking all over the floor. Would you call someone you know well to help you deal with the situation?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

5. Imagine that you have just had minor surgery and are not feeling well. Although you are used to cooking and shopping for yourself, you do not feel up to it right now. Would you ask someone to help out?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

6. Imagine that you are struggling to make a financial decision. Would you talk with someone you know well and ask them for advice?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help



7. Imagine that you have been feeling discouraged about numerous recent losses in your life. Would you call someone you know and talk with them about it?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

8. Imagine that you are trying to make a major decision about moving into a new living arrangement. Would you call someone you know to talk about your decision?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

9. Imagine that you need to take a trip to another city about 250 miles away, but you don't want to travel that far by yourself. Would you ask someone you know to make the trip with you?

1	2	3	4	5	6	7
No, I would not ask for help		probably no		probably yes		Yes, I would ask for help

# APPENDIX I

## Coping Responses Inventory

### Part 1

This questionnaire contains questions about how you manage important problems that come up in your life. Please think about the most important problem or stressful situation you have experienced in the last 12 months (for example, troubles with a relative or friend, the illness or death of a relative or friend, an accident, or illness, financial or work problems.) Briefly describe the problem in the space provided below. If you have not experienced a major problem, list a minor problem that you have had to deal with.

Describe the problem or situation:

---



---



---

Now answer each of the following 10 questions about the problem by checking the appropriate box below:

		Definitely No	Mainly No	Mainly Yes	Definitely Yes
1.	Have you ever faced a problem like this before?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Did you know this problem was going to occur?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Did you have enough time to get ready to handle this problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	When this problem occurred did you think of it as a threat?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	When this problem occurred, did you think of it as a challenge?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Was this problem caused by something you did?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Was this problem caused by something someone else did?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Did anything good come out of dealing with this problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Has this problem or situation been resolved?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	If the problem has been worked out, did it turn out all right for you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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CRI - continued:

**Part 2**

Read each item below and check the appropriate box to the right of each question to indicate how often you engaged in that behavior in connection with the problem you described in Part 1. Please answer each item as accurately as you can, and try to answer every question. If an item does not apply to you, please write NA (Not Applicable ) next to that item. All your answers are strictly confidential.

		Not at all	Once or twice	Some- times	Fairly often
1.	Did you think of different ways to deal with the problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Did you tell yourself things to make yourself feel better?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Did you talk with your spouse or other relative about the problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Did you make a plan of action and follow it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Did you try to forget the whole thing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Did you feel that time would make a difference - that the only thing to do was wait?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Did you try to help others deal with a similar problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8.	Did you take it out on other people when you felt angry or depressed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9.	Did you try to step back from the situation and be more objective?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10.	Did you remind yourself how much worse things could be?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11.	Did you talk with a friend about the problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12.	Did you know what had to be done and try hard to make things work?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13.	Did you try not to think about the problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14.	Did you realize that you had no control over the problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15.	Did you get involved in new activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16.	Did you take a chance and do something risky?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17.	Did you go over in your mind what you would say or do?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18.	Did you try to see the good side of the situation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19.	Did you talk with a professional person (e.g., doctor, lawyer, clergy)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20.	Did you decide what you wanted and try hard to get it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21.	Did you daydream or imagine a better time or place than the one you were in?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22.	Did you think that the outcome would be decided by fate?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

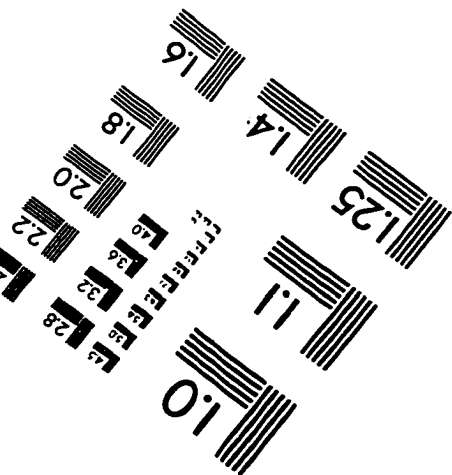
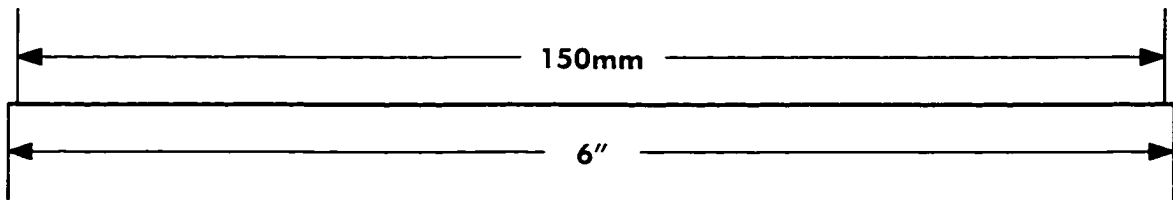
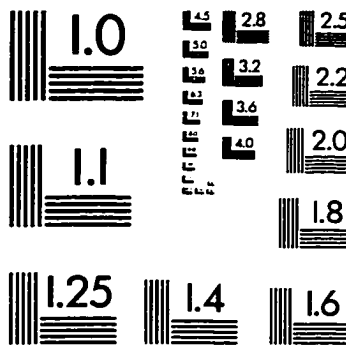
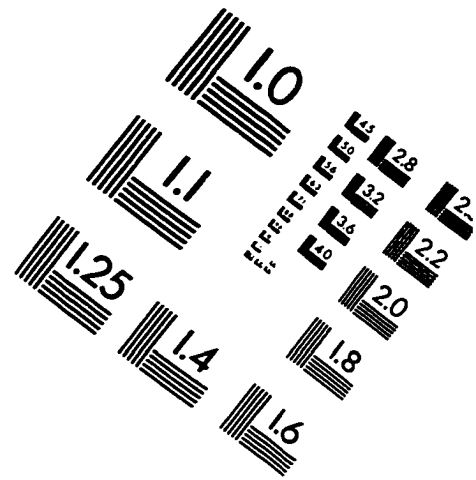
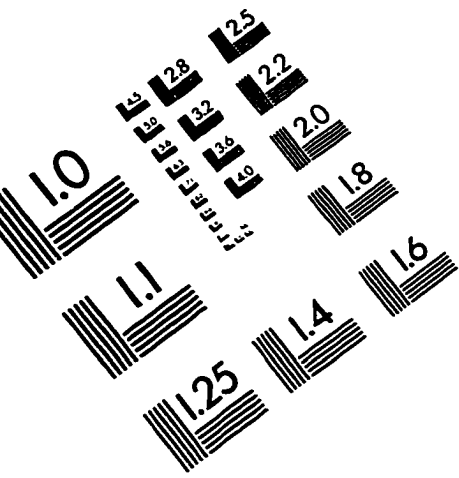
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## CRI Part 2 - continued:

	... continue answering these questions in connection with the problem you described in Part 1 ...	Not at all	Once or twice	Sometimes	Fairly often
23.	Did you try to make new friends?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24.	Did you keep away from people in general?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25.	Did you try to anticipate how things would turn out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26.	Did you think about how you were much better off than other people with similar problems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27.	Did you seek help from persons or groups with the same type of problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28.	Did you try at least two different ways to solve the problem?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29.	Did you try to put off thinking about the situation, even though you knew you would have to at some point?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30.	Did you accept it: nothing could be done?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31.	Did you read more often as a source of enjoyment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32.	Did you yell or shout to let off steam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33.	Did you try to find some personal meaning in the situation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34.	Did you try to tell yourself that things would get better?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35.	Did you try to find out more about the situation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36.	Did you try to learn to do more things on you own?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
37.	Did you wish the problem would go away or somehow be over with?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38.	Did you expect the worst possible outcome?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39.	Did you spend more time in recreational activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40.	Did you cry to let your feelings out?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41.	Did you try to anticipate the new demands that would be placed on you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42.	Did you think about how this event could change your life in a positive way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43.	Did you pray for guidance and/or strength?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44.	Did you take things a day at a time, one step at a time?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45.	Did you try to deny how serious the problem really was?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46.	Did you lose hope that things would ever be the same?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
47.	Did you turn to work or other activities to help you manage things?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48.	Did you do something that you didn't think would work, but at least you were doing something?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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# IMAGE EVALUATION TEST TARGET (QA-3)



APPLIED IMAGE, Inc.  
1653 East Main Street  
Rochester, NY 14609 USA  
Phone: 716/482-0300  
Fax: 716/288-5989

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