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EXPLORING ADULT ATTACHMENT IN NON-CLINICAL AND CLINICAL
SAMPLES: VALIDATING A FOUR-CATEGORY MODEL

By

Lynn Marshall Darling

A DISSERTATION

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ABSTRACT

EXPLORING ADULT ATTACHMENT IN NON-CLINICAL AND CLINICAL SAMPLES: VALIDATING A FOUR-CATEGORY MODEL

By

Lynn Marshall Darling

Bartholomew's (1990) four-category model of adult attachment was investigated in non-clinical and clinical samples of adults 21 years and older. A total of 91 respondents (54 non-clinical and 37 clinical) completed self-report instruments. The non-clinical set of questionnaires assessed attachment style and three variables: self-esteem, intimacy, and interpersonal dependency. The clinical set of questionnaires assessed attachment style and five variables: self-esteem, intimacy, interpersonal dependency, interpersonal problems, and perceived parental acceptance/rejection in the family of origin.

Two research questions and 20 hypotheses were investigated using Pearson Product-Moment correlation coefficients, chi-square analysis, and Student's *t*-tests.

The four-category model of adult attachment was largely supported. Four distinct categories were identified in each of the samples, with more females than males reporting a secure attachment style, and more males than females reporting a dismissing style.

In both samples, measures of self-esteem, intimacy, and interpersonal dependency were found to vary depending upon attachment style. In the clinical sample, the number and type of reported interpersonal problems were found to be related to attachment style. Furthermore, clinical subjects' recollections of maternal warmth and acceptance varied, depending upon attachment style.

The two samples were also compared, with the results indicating they were more alike than different. The samples differed significantly only on mean intimacy scores, with the clinical sample scoring lower. A *post hoc* analysis was performed, combining the samples. These results were consistent with those of the non-clinical sample.

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1993

To Gary and Erin, with my love and gratitude

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CHAPTER I

INTRODUCTION

BACKGROUND OF THE PROBLEM

Experts agree that being involved in close interpersonal relationships is important to human beings' physical and emotional well-being, and to their satisfaction with their lives (Berkman & Syme, 1979; Bloom, White, & Asher, 1979; Bowlby, 1988; Cassel, 1974; Cobb, 1976; Fehr & Perlman, 1985; Freedman, 1978; Gotlib & McCabe, 1990; Jemmott, 1987; Lynch, 1977; Peplau & Perlman, 1982; Verbrugge, 1979). Further, the nature and quality of close adult relationships are strongly influenced by social experiences in childhood (Kotler & Omodei, 1988). Of particular importance are those experiences occurring within early parent-child relationships, as these tend to shape a child's fundamental beliefs about self and the social world. These beliefs then guide subsequent social behavior and interpersonal relationships throughout life. An understanding of this process can assist in comprehending differences in the manner in which adults engage in close relationships. Attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1973, 1980, 1982b) offers a framework for conceptualizing this process.

Attachment theory posits an innate human tendency to form close relationships with particular persons. It is concerned with the strong affectional bonds which develop

between parent and child and the consequences of these bonds for the child's developing sense of self and others (Bowlby, 1973, 1980, 1982b). A fundamental principle of this theory is that attachment bonds continue to be significant throughout the lifespan. Indeed, Bowlby asserted childhood attachment is the foundation for future relationships as "there is a strong causal relationship between an individual's experiences with his parents and his later capacity to make affectional bonds. . . ." (1977, p. 206).

During the course of a child's first year, a relatively enduring pattern of attachment to parents or primary caregivers develops. During this early social development, persistent, internal cognitive/affective models of self and other are constructed based on patterns of interactions with significant others. These models are thought to organize personality and to shape relationship expectations, both in the present and the future (Ainsworth et al., 1978; Main, Kaplan, & Cassidy, 1985; Bowlby, 1988). Therefore, limitations in the ability to establish and maintain close, satisfying interpersonal relationships throughout the lifespan may be understood to originate in unfavorable experiences within these early family interactions.

Until recently, the majority of attachment research has utilized a three-category classification model of attachment developed by Ainsworth et al. (1978). Ainsworth and her colleagues hypothesized three distinct patterns, or categories, of attachment: secure, anxious-ambivalent, and

anxious-avoidant. These categories reflect the quality of the attachment relationship between parent and child. This model has been used extensively in research focusing on infancy and childhood (Belsky & Isabella, 1988; Cassidy, 1988; Egeland & Farber, 1984; Grossmann, Grossmann, Huber, & Wartner, 1981; Main, 1983; Main & Weston, 1981; Matas, Arend, & Sroufe, 1978; Waters, 1978; Waters, Vaughn, & Egeland, 1980). More recently, Ainsworth's patterns of infant attachment have been translated into adult styles of interpersonal relating (Collins & Read, 1990; Feeney & Noller, 1990; Hazan & Shaver, 1987; Shaver & Hazan, 1988; Shaver, Hazan, & Bradshaw, 1988). Other researchers have used this model to investigate attachment with respect to family interaction (Belsky, Rovine, & Fish, in press; Byng-Hall, 1985, 1991; Howes & Markman, 1989). Ainsworth's framework has also been used to examine certain emotional and behavioral dysfunctions, including depression (Radke-Yarrow, 1991; Radke-Yarrow, Cummings, Kuczinsky, & Chapman, 1985); agoraphobia and panic attacks in adulthood (Routh & Bernholtz, 1991), loneliness (Shaver & Rubenstein, 1980), and abuse of women and children (Crittenden, 1983; Lesser, 1990; Mayseless, 1991; Mitchell, 1990; Schneider-Rosen, Braunwald, Carlson, & Cicchetti, 1985).

More recently, Bartholomew (1990) hypothesized a four-category model of adult attachment which expanded Ainsworth's single anxious-avoidant pattern to two conceptually distinct categories: dismissing and fearful. These categories

differentiate between persons who dismiss close relationships as being unimportant to them and those who desire close relationships but avoid them because they fear rejection. This model has been used to investigate the relationship between attachment style and individuals' self-concept and interpersonal functioning (Bartholomew, 1991), interpersonal dependency (Bartholomew & Larsen, 1992), and the relationship between parental problem drinking and adult children's attachment styles (Brennan, Shaver, & Tobey, 1991).

PURPOSE OF THE STUDY

Research utilizing Bartholomew's four-category framework is in its infancy; additional research is needed to explore the validity of this new model. A limitation of the studies investigating Bartholomew's four categories of attachment is that convenience samples of university students were used. The mean ages of students in the these studies were respectively, 19.5 years, 19.6 years, and 19 years. Additional research utilizing more varied, older adult samples is necessary to generalize findings to a mature adult population. Furthermore, research investigating attachment patterns in persons who may experience chronic relationship difficulties has been lacking. The purposes of this study were to investigate Bartholomew's four distinct patterns of adult attachment in a non-clinical sample of mature adults, and to extend this framework into a clinical adult sample. Extending this model to clinical populations may be

beneficial in understanding and effectively intervening with adults who experience chronic difficulties in forming or maintaining close relationships.

THEORETICAL FRAMEWORK

Bowlby's Theory of Attachment

Attachment theory is concerned with the bond that develops between a child and his primary caregiver(s) and the consequences of this bond for the child's developing self-concept and view of social relationships. John Bowlby developed this theory as a way of conceptualizing

. . . the propensity of human beings to make strong affectional bonds to particular others and of explaining the many forms of emotional distress and personality disturbance, including anxiety, anger, depression and emotional detachment, to which unwilling separation and loss give rise. (1977, p. 201)

This theory is derived from object relations theory, but also incorporates evolution theory, control theory, cognitive psychology, and ethology.

Bowlby (1982a, 1982b, 1988) defined attachment as a goal-corrected behavioral system that is an integral part of human nature. This system has the goal of regulating infant behaviors which promote or maintain proximity to the primary caregiver (attachment figure), and serves the biological function of protection of the helpless infant. Bowlby defined attachment behaviors as those infant behaviors which reliably bring the infant into closer proximity or maintain proximity with the attachment figure (usually the biological

mother or primary caregiver). They consist of signaling behaviors, such as crying, smiling, and calling, and of more active behaviors, such as following and clinging. Once an infant has become attached to a specific person, certain environmental conditions may activate attachment behavior in varying degrees of intensity. Attachment behavior is readily apparent when the baby is separated or at a distance from the attachment figure; when the attachment figure is leaving or returning; when the infant is rejected or inappropriately responded to by the attachment figure; or when the infant is in an strange environment and/or with unfamiliar people. Internal infant conditions such as fear, hunger, illness, or fatigue may also activate attachment behavior. Whatever the precipitating condition, close, physical contact with the attachment figure allows the baby to reestablish a sense of security and attachment behaviors diminish. At times the mere knowledge that the attachment figure is near, available, and responsive is sufficient to allow the infant to feel this sense of security, lessening attachment behavior. Thus, from a psychological perspective, a goal of attachment is felt security.

As the infant matures, the attachment figure serves as a secure base from which the child is able to explore the world and other relationships (Ainsworth et al., 1978; Bowlby, 1988). At this time, the goal of the attachment system is not simply proximity to the attachment figure, but rather is the availability of the attachment figure when needed.

Attachment behaviors correspondingly become more diverse, and include walking, holding and talking.

Bowlby (1988) stated that implicit in his approach is the assumption that both infant behavior and parenting behavior have strong biological roots. Thus, just as an infant is predisposed to behave in ways which function to elicit protection, parents are predisposed to behave in complementary ways which function to provide protection to the infant. Parental behaviors include cradling, soothing, feeding, providing warmth, and protecting the infant from danger. Bowlby posits these reciprocal behaviors of parent and child are adapted to each other in an evolutionary sense and serve the biological function of survival of the species.

Attachment develops gradually over the course of an infant's first year through continued interactions with the attachment figure. These interactions lead to an intense relationship, or bond, between the infant and attachment figure. This bond tends to be enduring, unaffected by particular situations, and accompanied by intense emotion. Bowlby (1988) stated the intense emotions aroused are dependent on

. . . how the relationship between the individual attached and the attachment figure is faring. If it goes well, there is joy and a sense of security. If it is threatened, there is jealousy, anxiety, and anger. If broken, there is grief and depression. (p. 4)

Bowlby postulated the infant will form this enduring bond with no more than a few people; even so, the infant will show a clear preference for one specific person, the primary

caregiver, over the others, particularly in stressful situations. He further believed that "should a child fail to show such clear discrimination, it is likely he is severely disturbed" (Bowlby, 1988, p. 28).

Bowlby (1973, 1982a, 1982b) also hypothesized that as parent and child interact through infancy, childhood and adolescence, the child gradually constructs increasingly complex internal representations of the relationship, the parent, and self which tend to persist relatively unchanged throughout the remainder of life. The child builds a mental representation of the parent (other) based upon the parent being, or not being, the kind of person who in general responds to calls for support and protection. The infant's mental representation of self is based upon whether or not the self is judged to be the kind of person towards whom others, particularly the attachment figure, are inclined to respond in beneficial ways. These representations of self and other are likely to develop so as to be complementary and mutually confirming. These internal representations become established as significant cognitive structures, which Bowlby labeled working models. These models guide the child's social behavior, at first only within that primary attachment relationship, but later in other social relationships, as well. Thus, relationships are not only internalized by the child, but are also carried forward into later close relationships. It is theorized that a self-perpetuating cycle of relationships is maintained, because once formed, these

models are likely to operate outside conscious awareness. Internal working models serve to organize experiences, thus new experiences tend to be assimilated into existing models, making the models relatively stable and resistant to major changes (Bowlby, 1988; Sroufe, 1983, 1988; Sroufe & Fleeson, 1986).

While these working models are resistant to dramatic alterations, Main et al. (1985) maintain they are not impervious to later change. Once the stage of formal operations is entered, restructuring of working models may come about through an individual's conscious efforts to think about and understand early childhood attachment experiences and the effect these experiences have had throughout his life. When early rejection can be understood and integrated as an attribute of the attachment figure rather than as a reflection of the self, internal working models can be restructured. Working models may also be reorganized through involvement in significant relationships in which protection, security, emotional support, and encouragement for examination of previous attachment patterns are present (Pottharst, 1990). Others have also documented the value of supportive spousal or therapist relationships in diminishing the effects of early insecure attachment relationships (Brown & Harris, 1978; Epstein, 1980; Quinton, Rutter, & Liddle, 1984). Furthermore, major life transitions, which involve assuming new roles, such as marriage or having children, can

be important periods for evaluating and reorganizing working models (Ricks, 1985).

The quality of attachment that develops between infant and parent is the foundation of working models and is influenced by several factors. Maternal, infant, and social-contextual factors are hypothesized to be important in determining security of attachment. Ainsworth et al. (1978) reported the key factor in determining quality of attachment is the mother's ability to sensitively respond to the infant's cues. Sensitive responsiveness involves reading the signals and cues of the infant correctly and then responding promptly and appropriately to the infant. This ensures a smooth, consistent interaction between mother and baby, and allows the baby to form the expectation that the mother is generally accessible and responsive.

Once a pattern of attachment has been established between parent and child, it is likely to remain stable (Bowlby, 1982a, 1982b). The quality of attachment between child and parent has been shown to be highly stable from ages twelve months to six years (Main et al., 1985; Waters, 1978). Matas, Arend, and Sroufe (1978) explained this continuity by stressing the importance of stability in maternal behavior. They contended a mother who is sensitively responsive, or conversely, nonresponsive to her infant, would be likely to continue to be so as the child developed, ensuring the quality of attachment would remain the same. Nevertheless, changes in life situations can lead to changes in the quality

of interactions between mother and child, resulting in changes in quality of attachment (Egeland & Farber, 1984; Vaughn, Egeland, Sroufe, & Waters 1979).

With its ethological approach, attachment theory expands understanding of infants' separation anxiety (Bowlby, 1988). As do other animals, humans respond with fear to situations in which there is an increase in risk of pain or danger, not merely to situations in which there is a high risk. Separation from the caregiving figure or threats of abandonment constitute such an increase in risk for an infant. Both lead to intense separation anxiety, accompanied by intensified attachment behavior. In addition to anxiety, threats of abandonment also provoke intense anger in the child. The function of this anger, according to Bowlby, is to dissuade the attachment figure from carrying out the threat. Bowlby warned this anger can easily become dysfunctional for the child, and for the adult the child becomes.

Bowlby was particularly interested in a child's response to separation from the attachment figure. Through observations of babies separated from their mothers, he identified the sequence of infant responses as being protest, despair, and detachment, with detachment describing the condition of attachment behavior disappearing, only to reappear after a period of time. Upon reunion with the attachment figure, it was common for infants to behave toward their mothers as if they were strangers. After a period of time, however, they exhibited intense attachment behaviors, becoming clingy,

anxious, and angry about the possibility of their mothers' leaving again. Bowlby hypothesized detachment was the result of a defensive process operating within the child and, that under pathological conditions, the signals (internal and external) which would ordinarily activate attachment behavior, and would also allow the child to love and experience being loved, are defensively excluded from unconscious mental processes. Under these circumstances the attachment system is "rendered either temporarily or permanently incapable of being activated, and with it the whole range of feeling and desire that normally accompanies it is rendered incapable of being aroused" (Bowlby, 1988, p. 34). He further theorized that prolonged and repeated frustration of attachment behaviors will likewise defensively deactivate the attachment system, temporarily or permanently, as the information which would lead to activation is selectively excluded from processing.

Although Bowlby did not specifically address the role of infant temperament in attachment, infant temperament has been the focus of research on infant determinants of attachment security. There are currently two schools of thought as to the role infant temperament plays in the development and assessment of security of attachment (Belsky & Isabella, 1988). It is argued by one school that temperament does not exert a main effect in determining attachment quality, as even a temperamentally difficult baby may develop a secure attachment to a caregiver who is sensitively responsive.

This position is supported by Crockenberg (1981), who found an infant's irritability led to insecure attachment only when mothers did not receive adequate social support. Low levels of social support appeared to negatively influence the mother's ability to respond sensitively to her infant, thus leading to insecure attachment. Belsky and Rovine (1987) reported temperament did not determine whether an infant developed a secure or insecure attachment relationship, but did appear to affect the manner in which security or insecurity is expressed in the experimental Strange Situation. Mangelsdorf, Gunnar, Kestenbaum, Lang, and Andreas (1990) reported no main-effect relations between infant proneness-to-distress temperament and infant attachment classification. They reported, however, that infant proneness-to-distress was associated with maternal behavior and personality, and that security of attachment could be predicted by the interaction between maternal personality and infant proneness-to-distress, with goodness of fit being an important consideration. Other studies have found no relationship between infant temperament and the quality of attachment (Bates, Maslin, & Frankel, 1985; Belsky & Isabella, 1988; Belsky, Rovine, & Taylor, 1984; Egeland & Farber, 1984; Vaughn, Lefever, Seifer, & Barglow, 1989). Thus, from this point of view, the mother holds the balance of influential power in the infant-mother attachment relationship, with the infant's temperament influencing how

the mother interacts with the infant to provide sensitively responsive care.

The second school of thought holds that infant temperament not only directly influences quality of attachment through its impact on mother-child interactions, but further, that it directly influences attachment classification because the behaviors that determine classification are those behaviors that define temperament. Susceptibility to distress, vulnerability to anxiety, and irritability are identified as particularly important in this context (Chess & Thomas, 1982; Kagan, 1982, 1984). This position maintains temperament seriously confounds attachment assessments and classifications. Empirical evidence in support of this view is limited at this time (Frodi, 1983; Goldsmith & Alansky, 1987; Izard, Haynes, Chisholm, & Baak, 1991). Thus, there is not yet a definitive explanation of the role of temperament in determining attachment security.

Other researchers have added to Bowlby's attachment theory. Belsky (1984) identified two characteristics of mothers that may be related to the quality of relationships formed with their infants. These are the mothers' own developmental histories, particularly how they themselves were parented, and their own psychological resources. Researchers have found support for the relationship between a mother's own quality of attachment in childhood and the quality of her infant's attachment (Main & Goldwyn, 1984; Ricks, 1985). Evidence linking mothers' personalities to quality of

attachment is inconsistent. Maslin and Bates (1983) reported mothers who were more nurturant, more understanding, more autonomous, less aggressive, more inquisitive, were responsive to stimuli, and enjoyed physical sensation were more likely to have infants who were judged to be securely attached. Ricks found mothers of securely attached babies had higher levels of self-esteem than did mothers of insecurely attached babies. Benn (1985) found psychological integration to be strongly related to sensitivity, which in turn is highly related to security of attachment. Belsky and Isabella (1988) also found the maternal personality characteristics of affection and ego strength to be related to quality of infant-mother attachment. More recently, mothers' experiences of emotion, expressive behaviors, and personality traits were found to be predictive of security of infant-mother attachment (Izard et al., 1991). On the other hand, Egeland and Farber (1984) found that measures of maternal aggression, suspiciousness, impulsiveness, succor, and social desirability did not differentiate infant attachment patterns.

Ainsworth's Contribution to Attachment Theory

Building upon Bowlby's work, Ainsworth et al. (1978) conceptualized the attachment system as additionally functioning to provide the infant with a secure base for exploring the world. She considered exploratory behavior to be significant from an evolutionary point of view, as human

beings must be able to adapt to a wide range of environmental variations. They must, therefore, be predisposed to explore and learn about their world. According to Ainsworth and Bell (1970), the implication is that provisions in the genetic code

. . . provide for a balance in infant behaviors (and in reciprocal maternal behaviors) between those which lead the infant away from the mother and promote exploration and acquisition of knowledge of the properties of the physical and social environment, and those which draw mother and infant together and promote the protection and nurturance that the mother can provide. (p. 51)

When the baby is frightened or distressed, attachment behavior is activated and she seeks proximity with the mother rather than engaging in exploratory behavior. On the other hand, when the baby feels secure in the availability and responsiveness of the mother, attachment behaviors are not activated and she is free to enter into the exploration of the unknown features of her environment. This sense of felt security thus supports the infant's necessary exploration of the world.

To assess individual differences in security of attachment, Ainsworth and her colleagues developed a laboratory method called the Strange Situation. Twelve-month-old infants were exposed to a series of increasingly stressful episodes involving an unfamiliar setting, a stranger, and separation from, and reunion with their mothers. Infants' behavioral responses to separations and reunions were observed along with the infants' use of their mothers as secure bases for exploration. Of particular interest was an infant's capacity to be comforted through close bodily

contact with the mother upon reunion. From these observations, three distinct patterns of attachment were identified, one secure pattern and two insecure patterns.

The largest group of infants, 66%, was classified as secure. These infants used their mothers as bases for exploration, actively exploring the new environment when in their mothers' presence. Their interactions with their mothers were more positive and harmonious than those of the other two groups of infants. When distressed, they actively sought close bodily contact with their mothers and were readily comforted by them. Upon reunion, they welcomed their mothers' return, again seeking body contact.

A second group, 22% of the sample, was classified as anxious-avoidant. The significant characteristic of these infants was they conspicuously avoided interaction or bodily contact with their mothers upon reunion. Further, they showed little or no separation distress. They actively explored the environment, but did not use the mother as a secure base.

The third group of infants was the smallest, 12%, and was designated anxious-resistant, or anxious-ambivalent, as they showed ambivalent behavior towards their mothers. These infants were intensely distressed upon separation from their mothers, but were not easily comforted by them upon reunion. They both sought, yet angrily resisted, contact with their mothers. Anxious-resistant babies were least likely of the

three groups to engage in exploration of the environment or interaction with the stranger.

Ainsworth et al. (1978) hypothesized different attachment styles were the consequences of the infants' ongoing experiences with mothers who varied in their degree of responding sensitively to the signals and communications of their babies. They further suggested another key factor was the reciprocity of interaction between mother and child. Through a number of positive experiences in a variety of contexts, a secure infant is believed to have formed the expectation that her mother is accessible and responsive to her signals and communications. Therefore, when attachment behavior is activated, she readily seeks close bodily contact with her mother and is quickly soothed by this contact.

An anxious-avoidant infant is thought to have formed the expectation that her mother is not accessible to her, nor is she responsive to her cues. Therefore, when attachment is activated, she does not seek body contact with her mother; rather, she avoids it. Ainsworth et al. hypothesized the infant's avoidance of her mother was a defensive reaction to protect against rejection by her. In fact, mothers of anxious-avoidant infants were found to be rejecting of their babies, particularly through rebuffing their infants' desire for close bodily contact. These mothers demonstrated an aversion to close physical contact with their babies, and were more often irritated by and angry with their babies than

were other mothers. Furthermore, they were characteristically rigid and compulsive, and lacked emotional expression. Anxious-avoidant infants tended over time, then, to have had unpleasant, frustrating interactions with their mothers. They therefore had no basis for believing the mother to be accessible or responsive, and the babies consequently became anxious. These infants tended to show more separation distress in everyday separation situations and cried more frequently in general than did other infants. They were also judged to be angrier babies than those in the other two groups. Further, these infants were found to be easily frustrated and over-reliant on their mothers.

Ainsworth explained anxious-avoidant infants' tendency to maintain high levels of exploration during the separation and reunion episodes of the Strange Situation as displacement behavior. Avoidance through a focus on exploration inhibits the direct expression of anger to the mother, which may be dangerous to the infant. It also protects the baby from experiencing the rejection she has learned to expect when she seeks contact and comfort from her mother. Additionally, it allows a lowering of her anxiety level through engagement with the neutral world of objects. This exploratory behavior, however, is not of the same quality as non-anxious exploration, as it is not motivated by true interest in the environment.

Babies who were classified as anxious-resistant also tended to be anxious because their mothers did not respond

sensitively to their signals and communications. Their mothers, however, were not rejecting, did not have an aversion to close, physical contact with their babies, nor were they as rigid or compulsive or as lacking in emotional expression as were mothers of anxious-avoidant babies. Thus, these infants had not developed the defense of avoidance.

Mothers of anxious-resistant babies were most likely to misread their infants' cues and to respond inappropriately, such as playing with an infant when the infant wanted to be fed. Because they were generally uncertain about their mothers' accessibility and responses to them, these babies tended to be unable to use their mothers as secure bases to engage in exploration; instead, these infants stayed very close to their mothers. Anxious-resistant babies responded the most intensely of the three groups to separations from their mothers and also were the most wary of the stranger. Ainsworth suggested these infants' experiences with close bodily contact have not been as consistently positive as those of secure babies, leading to some ambivalence about physical contact. Ainsworth hypothesized this ambivalence, coupled with frustration from their mothers' inappropriate responses may lead these infants to exhibit angry resistance to their mothers, mingled with clinging and other forms of contact-maintaining behavior.

In summary, Ainsworth and her colleagues concluded the three styles of attachment are largely determined by mothers' ongoing responses to their infants' signals and communication

and by the infants' internal expectations of their mothers' accessibility and responsiveness.

Bartholomew's Four-Categories of Adult Attachment

Bartholomew (1990, 1991) suggested the classifications used by Ainsworth and her colleagues to describe attachment in children may not be adequate for explaining the variations in adult attachment relations. She felt this to be primarily true for the avoidant category, as the different patterns of avoidance in adulthood may be obscured by a three-category attachment model.

She proposed an expanded model of adult attachment which systematizes Bowlby's conception of internal working models in terms of the intersection of the self and other. Models of self can be dichotomized as positive, with a positive self-concept in which the self is evaluated as worthy of love and attention, or negative, with a negative self-concept in which the self is evaluated as unworthy of love and attention. Models of other can also be perceived as positive, with other seen as trustworthy, available and caring, or negative, with other viewed as rejecting, distant and uncaring. Thus, four categories are possible: positive self/positive other; negative self/positive other; positive self/negative other; and negative self/negative other, as shown in Figure 1.

Bartholomew stated these four styles represent theoretical ideals or prototypes, because it is not likely an

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individual will uniformly match any one prototype, as adult models of self and other are constructed from a variety of experiences over time. Rather, assignment to one of the prototypes simply means that an individual's life experiences have generally led to outcomes that more closely match one prototype than the other three.

		MODEL OF SELF	
		Positive	Negative
MODEL OF OTHER	Positive	SECURE (Cell I)	PREOCCUPIED (Cell II)
	Negative	DISMISSING (Cell III)	FEARFUL (Cell IV)

Figure 1 Bartholomew's Model of Adult Attachment Styles

Cell I conceptually corresponds to a category previously identified by other researchers as securely attached (Main, Kaplan, & Cassidy, 1985; Hazan & Shaver, 1987). Bartholomew labeled this cell Secure. Individuals who have a secure pattern of attachment hold positive models of both self and other, resulting in secure and satisfying adult relationships. This style is related to warm and responsive relationships with attachment figures in childhood.

Cell II is a combination of a negative evaluation of self and a positive evaluation of other, and is labeled Pre-occupied. Preoccupied persons tend to have intense feelings of unworthiness, and strive for self-acceptance through the achieving of others' acceptance and approval; consequently, preoccupied individuals have a tendency to be overly-dependent. This attachment style is related to experiences of inconsistent and insensitive parenting, particularly when this parenting style was paired with conflicting messages of parental devotion to the child.

Cells III and IV represent two different forms of adult avoidance and it is here that Bartholomew diverges from other three-category adult attachment frameworks. Cell III represents the combination of a positive model of self and a negative model of other. Bartholomew labeled this combination Dismissing-avoidant. In this style, attachment needs are denied. To defend against rejecting childhood attachment figures, the attachment system was deactivated in childhood and emotional distance was used to develop and maintain a positive model of self. Dismissing persons view the self as fully adequate and thus are immune to any negative feelings which may reactivate the attachment system. These individuals have a negative perception of others and protect themselves from expected disappointment by passively avoiding intimate relationships. They declare close relationships unimportant, and instead place great value on independence and invulnerability. Dismissing persons tend to emphasize

impersonal aspects of their lives, such as career or hobbies, and to focus on achievement rather than relationships.

Cell IV combines a negative evaluation of self with a negative evaluation of other. This style is labeled Fearful-avoidant. Fearful-avoidant persons have a history of rejecting or psychologically unavailable parents; they therefore are likely to believe others are uncaring and unavailable and that they themselves are not worthy of being loved. While they long for contact and intimacy with significant others, their low self-esteem leads them to be distrustful and fearful of others' rejection. To reduce the possibility of painful rejection, they actively avoid any social situation or close relationship in which they feel they may be rejected. This lack of social intimacy and the awareness of their own vulnerability in relationships, however, causes them substantial pain and anxiety.

Bartholomew suggested differing child-rearing practices lead to these two different avoidant styles. Parents of dismissing adults are hypothesized to have discouraged the open expression of negative affect; in fact, their interactions in general were likely to have been cool and impersonal, reflecting deficits in emotional availability and sensitivity. This is likely to have created an environment in which the experiencing and expression of negative affect was unacceptable. Such an environment could contribute to a defensive negation of feelings that might have otherwise undermined self-esteem. Further, these families may have placed greater

value on non-social arenas (academic or athletic achievement) than on involvement in intimate relationships. With this lack of emphasis on relationships, individuals are not likely to evaluate themselves negatively if they lack close relationships. By adulthood, dismissing individuals seem to have been able to exclude their affective experiences from their cognitive representations, allowing them to be invulnerable to future rejection.

On the other hand, Bartholomew hypothesized parents of fearful adults openly and frequently expressed negative affect, both toward others in front of their children, and toward the children themselves. This behavior may cause the children to become fearful of rejection by others and fearful of expressing their own negative affect, resulting in avoidance of interpersonal conflict.

Through their influence on the formation of a positive or negative self-image, Bartholomew believes non-familial factors may also be important in the development of a fearful or dismissing attachment style. A number of experiences of active rejection by peers would tend to promote the development of a fearful style. Temperament is also likely to play a role, as a temperamentally inhibited child would be more likely to be affected by peer rejection than a temperamentally less reactive child who may be better able to tolerate rejection through the cutting off of negative affect. Further, a child may in general be less reliant on peers, maintaining more superficial relationships. Thus, the image

of self could be protected, facilitating the formation of a detached interpersonal style which eventually culminates in a dismissing style of attachment.

According to Bartholomew, the two dimensions in Figure 1 can also be conceptualized in terms of social response styles, with dependence on the horizontal axis and avoidance of intimacy with others on the vertical axis, as illustrated in Figure 2.

		MODEL OF SELF Dependence	
		Positive Low	Negative High
MODEL OF OTHER Avoidance	Positive Low	SECURE (Cell I)	PREOCCUPIED (Cell II)
	Negative High	DISMISSING (Cell III)	FEARFUL (Cell IV)

Figure 2 Bartholomew's Attachment/Social Response Styles

The dependent response style can vary from low, where self-esteem is primarily internalized and external validation is not required, to high, where self-esteem is not internalized and requires ongoing external validation. The vertical axis also varies from low to high, reflecting the degree of avoidance of intimate contact with others. Dependency and

avoidance, then, vary independently. Thus, both fearful-avoidant and dismissing-avoidant persons demonstrate high avoidance of intimate relationships, but differ in the degree to which they are dependent upon others' acceptance. By virtue of the importance they place upon others' approval and acceptance, fearful individuals are susceptible to greater interpersonal distress stemming from loneliness and depression than are dismissing individuals.

Correspondingly, both preoccupied and fearful persons exhibit strong dependency needs, but differ in their approaches to relationships. Preoccupied persons seek relationships with others, sometimes desperately, in an attempt to fulfill their intense dependency needs, while fearful persons defensively evade relationships to lessen the possible pain of rejection. They share a susceptibility, however, to interpersonal distress, fear of rejection and low self-confidence.

In summary, Bartholomew contends this is a more adequate model of adult attachment than has previously been used. Bartholomew contends the strengths of this model are (a) it more adequately addresses attachment styles in adulthood than do Ainsworth's childhood model and Hazan and Shaver's adulthood model because it identifies two distinct patterns of avoidant attachment, (b) it identifies gender differences in styles of attachment, (c) and it more accurately represents the working models of self and other that Bowlby initially described.

DEFINITIONS

The following terms and their definitions were used in this study:

Attachment Style: Social behavior which reflects positive or negative internal models of self and other.

Self-Esteem: The evaluation of the self by the self.

Intimacy: Relationship state which has the features of openness, honesty, mutual self-disclosure, care, warmth, mutual attentiveness, mutual commitment, and emotional attachment.

Interpersonal Dependency: A system of thoughts, beliefs, feelings, and behaviors which center around the need to associate closely with, and rely upon valued others (Hirschfeld et al., 1977).

Interpersonal Problem: An area of interpersonal interaction (including beliefs, attitudes, feelings, and behaviors) which leads to feelings of discomfort or distress.

Parental Warmth: A bi-polar dimension in which rejection, or the absence of warmth and affection, is at one pole in opposition to acceptance and affection at the other pole.

Parental Acceptance: Behaviors which demonstrate love or affection to a child, verbally and/or physically, and are likely to result in a child feeling loved or accepted.

ASSUMPTIONS

The assumptions underlying this study are:

1. Close interpersonal relationships are essential to human beings' physical and emotional well-being and to their life satisfaction.
2. Early childhood relationship experiences influence the nature and quality of adult relationships, including relationship expectations and behaviors.
3. Individuals' development is influenced by interaction with their immediate environments, as well as environments in which they are not present.
4. The influence of one environment operates in conjunction with the influence of other environments.
5. Individuals who are in psychotherapy are qualitatively different from those who are not in psychotherapy.

HYPOTHESES AND RESEARCH QUESTIONS

The following hypotheses were tested in non-clinical and clinical samples:

H_{O1} = There is no relation between a secure pattern of attachment and self esteem.

H_{a1} = There is a positive relation between a secure pattern of attachment and self-esteem.

H_{O2} = There is no relation between a fearful pattern of attachment and self-esteem.

H_{a2} = There is a negative relation between a fearful pattern of attachment and self-esteem.

H_{O3} = There is no relation between a preoccupied pattern of attachment and self-esteem.

H_{a3} = There is a negative relation between a preoccupied pattern of attachment and self-esteem.

H₀₄ = There is no relation between a dismissing pattern of attachment and self-esteem.

H_{a4} = There is a positive relation between a dismissing pattern of attachment and self-esteem.

H₀₅ = There is no relation between a secure pattern of attachment and intimacy.

H_{a5} = There is a positive relation between a secure pattern of attachment and intimacy.

H₀₆ = There is no relation between a fearful pattern of attachment and intimacy.

H_{a6} = There is a negative relation between a fearful pattern of attachment and intimacy.

H₀₇ = There is no relation between a preoccupied pattern of attachment and intimacy.

H_{a7} = There is a negative relation between a preoccupied pattern of attachment and intimacy.

H₀₈ = There is no relation between a dismissing pattern of attachment and intimacy.

H_{a8} = There is a negative relation between a dismissing pattern of attachment and intimacy.

H₀₉ = There is no relation between a secure pattern of attachment and interpersonal dependency.

H_{a9} = There is a negative relation between a secure pattern of attachment and interpersonal dependency.

H₀₁₀ = There is no relation between a fearful pattern of attachment and lack of social self-confidence.

H_{a10} = There is a positive relation between a fearful pattern of attachment and lack of social self-confidence.

H_{O11}= There is no relation between a preoccupied pattern of attachment and emotional reliance on another.

H_{a11}= There is a positive relation between a preoccupied pattern of attachment and emotional reliance on another.

H_{O12}= There is no relation between a dismissing pattern of attachment and autonomy.

H_{a12}= There is a positive relation between a dismissing pattern of attachment and autonomy.

The following hypotheses were tested in a clinical sample:

H_{O13}= There is no relation between a secure pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{a13}= There is a positive relation between a secure pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{O14}= There is no relation between a fearful pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{a14}= There is a negative relation between a fearful pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{O15}= There is no relation between a preoccupied pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{a15}= There is a negative relation between a preoccupied pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{O16}= There is no relation between a dismissing pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{a16}= There is a negative relation between a dismissing pattern of attachment and recollections of perceived parental warmth and acceptance.

The following hypotheses were tested regarding differences between clinical and non-clinical samples:

H_{O17}= There is no difference in the percentage of insecure subjects in the clinical sample and the non-clinical sample.

H_{A17}= There is a greater percentage of insecure subjects in the clinical sample than in the non-clinical sample.

H_{O18}= There is no difference in the mean self-esteem scores of clinical and non-clinical subjects.

H_{A18}= Clinical subjects have lower mean self-esteem scores than do non-clinical subjects.

H_{O19}= There is no difference in the mean intimacy scores of clinical and non-clinical subjects.

H_{A19}= Clinical subjects have lower mean intimacy scores than do non-clinical subjects.

H_{O20}= There is no difference in the mean dependence scores of clinical and non-clinical subjects.

H_{A20}= Clinical subjects have higher mean dependence scores than do non-clinical subjects.

In addition, the following research questions were posed:

1. Are Bartholomew's four attachment patterns found in clinical and non-clinical samples?
2. In a clinical sample, are the four patterns of attachment related to particular subscales of interpersonal problems?

OVERVIEW

The value of using attachment theory to understand adult relationships was discussed in Chapter I. In addition,

Bowlby's attachment theory was presented, as well as the contributions of Ainsworth and Bartholomew. Bartholomew's four patterns of attachment were discussed as being particularly useful for understanding relationships in adulthood. In Chapter II, the adult attachment literature is reviewed. In Chapter III, the methodology chapter, the samples are described along with a description of the operational measures used to examine the characteristics of interest. The research design and the analysis of data are also described. The findings are presented in Chapter IV. Chapter V includes (a) a summary of the study; (b) a discussion of the findings; (c) limitations of the study; (d) a discussion of attachment from an ecological perspective; (e) implications for clinical practice; and (f) directions for future research in the area of adult attachment.

CHAPTER II

REVIEW OF LITERATURE

This chapter presents a review of studies which examined attachment in adulthood. Included in this discussion are studies which examined adult attachment using the traditional three styles of attachment, and those using the more recent four categories of attachment developed by Bartholomew.

Until very recently, research has focused almost entirely on attachment in infancy and early childhood, using the three categories of attachment described by Ainsworth et al. (1978). While this has provided an extensive body of valuable information, it has neglected Bowlby's (1977, 1980, 1982a) emphasis on the importance of attachment throughout the lifespan. The majority of adult attachment research has used Ainsworth's three-category framework; therefore, this body of literature will be reviewed first, followed by the literature on Bartholomew's expanded four-category model.

Early adult attachment literature suggests that not only parents, but peers, siblings, and sexual partners may serve as attachment figures into adulthood (Ainsworth, 1982, 1989; Weiss, 1975, 1982). More recently, romantic love has been conceptualized as an attachment process (Hazan & Shaver, 1987; Shaver & Hazan, 1988; Shaver et al., 1988). These authors contend that all important love relationships are attachments as defined by Bowlby, because for every documented feature of attachment there is a parallel feature

of love, and vice versa. They also argued the dynamics of each type of relationship are similar:

When the attachment figure (or attachment object, AO) is available and responsive, the infant (or adult lover) feels secure enough to wander off and explore the environment and to interact with others, occasionally checking back with AO. If AO suddenly becomes unavailable, attachment behaviors such as signaling or moving closer are initiated and maintained, until feelings of security are restored. (Shaver et al., 1988, p. 77)

The most important characteristics of infant-mother attachment, then, also characterize romantic relationships. These characteristics are the use of the attachment figure as a secure base for exploration; a desire to be close to the attachment figure, especially under stress; the experiencing of security when in contact with the attachment figure; and distress and/or protest when threatened with the loss of, or separation from, the attachment figure.

Hazan and Shaver (1987) developed a self-report procedure which differentiated in adults the three attachment styles identified by Ainsworth et al. (1978): secure, avoidant, and anxious-ambivalent. Their measure consisted of three brief paragraphs, each describing an adult representation of an infant attachment style. The secure description was characterized by ease of, and comfort with, trusting and becoming close to another person. The avoidant description addressed discomfort with trusting and becoming close with another. The anxious-ambivalent description pertained to the desire to become merged with another person, along with the

fear of not being loved sufficiently and/or of being abandoned. Adults were asked to choose the paragraph that best described themselves. They were found to differ predictably in their experiences of romantic love, based upon their attachment style. Secure individuals reported their romantic relationships were happy, friendly and trusting. They also had histories of longer relationships than did individuals who were insecurely attached. The avoidant individuals reported fear of intimacy, emotional highs and lows, and jealousy. Anxious-ambivalent persons reported experiences of love as involving obsessive preoccupation with the love object, desire for union, emotional extremes, and intense sexual attraction and jealousy. Further, differences in attachment styles predicted subjects' perceptions about the nature and course of love. Secure persons reported romantic feelings wax and wane, but that in some relationships romantic feelings never diminish. Avoidant persons maintained that intense romantic feelings do not exist in real life, romantic love rarely lasts, and it is rare to find a person with whom it is possible to truly fall in love. Anxious-ambivalent individuals said it was easy to fall in love, although true love is seldom found. As did secure individuals, they believed romantic feelings tend to wax and wane over time. Attachment styles were also found to be related to mental models of self and other. Secure persons felt well-liked and believed others were reliable and had good intentions, whereas anxious-ambivalent individuals experienced self-doubt

and believed they were misunderstood by others. Avoidant persons tended to fall between the extremes reported by the secure and anxious-ambivalent group, although they tended to be closer to the anxious-ambivalent than to the secure. They also tended to believe they could get along very well by themselves. Finally, adult attachment was found to be related to reports of early parent-child relationships, with secure adults reporting warmer relationships with parents than did the insecure adults. Avoidant adults, in comparison with the anxious-ambivalent group, reported mothers who were cold and rejecting, whereas the ambivalent group reported fathers who were unfair. The authors further reported there were no gender differences in the frequencies of attachment styles.

Using a sample of Australian college undergraduates, Feeney and Noller (1990) reported findings similar to Hazan and Shaver's (1987). They found secure individuals were likely to report positive early family relationships and to believe people were essentially trustworthy. They had high levels of self-esteem and were generally positive and self-assured in their interactions with others. Anxious-ambivalent persons perceived a lack of parental support in childhood and expressed a desire for commitment in adult relationships. They also exhibited dependence, idealization of partners, and obsessive preoccupation in romantic relationships. Avoidant individuals were most likely to report early separation from mother and mistrust of others in

adulthood. They were less likely than the anxious-ambivalent individuals to idealize their partners and were most likely to avoid intimacy in romantic relationships. Consistent with Hazan and Shaver (1987), Feeney and Noller reported no gender differences in frequencies of attachment styles.

In college undergraduate samples, relationship characteristics have been found to be associated with particular adult attachment styles. Levy and Davis (1988) and Simpson (1990) changed their measures of attachment from Hazan and Shaver's mutually exclusive three-category measure to one using Likert-type scales, which allowed individual differences within styles to be assessed. In both studies, a secure attachment style was found to be positively related to intimacy, passion, satisfaction, interdependence, trust, commitment and cohesion.

Security of attachment has also been found to be associated with positive conflict resolution styles (Pistole, 1989). Pistole found securely attached individuals tended to use a mutually focused, integrating conflict strategy. Both avoidant and anxious-ambivalent attachment styles were found to be negatively related to intimacy, care, trust, interdependence and satisfaction (Levy & Davis, 1988; Pistole, 1989), while the avoidant style was found to be negatively associated with commitment, and the anxious-ambivalent style negatively related to respect and tolerance (Levy & Davis, 1988). Both insecure styles were positively associated with conflict and ambivalence and with negative conflict

resolution styles (Levy & Davis, 1988). Anxious-ambivalent individuals tended to oblige their partners' wishes to resolve conflict more frequently than did the other two groups (Pistole, 1990). Pistole also reported that the use of compromising strategies was not significantly different for the secure and avoidant groups.

Simpson's (1990) study also reported findings at the dyad level. He found that men who scored higher on the secure index tended to be dating women who were less insecure. Men who had high scores on the anxious attachment index were involved with women who scored somewhat lower on the secure index. These women reported less interdependence and less commitment. Further, men who had high scores on the avoidant index were dating women who scored somewhat higher on the anxious index, and who reported less trust, greater insecurity, and less satisfaction. On the other hand, women who had higher scores on the secure index were involved with men who reported greater commitment to the relationship and less insecurity within the relationship. Women who scored higher on the anxious index were dating men who reported less commitment, interdependence, and satisfaction. Finally, women with higher scores on the avoidant index were involved with partners who reported less commitment and trust, and greater insecurity.

Simpson also examined the extent of emotional distress upon the dissolution of a relationship. The only significant finding was that highly avoidant men tended to experience

less prolonged and intense emotional distress following the ending of their relationships than did others.

In a study conducted in Israel, Mikulincer and Erev (1991) found attachment style was related to how individual college undergraduates think about three basic components of love: intimacy, commitment, and passion. Securely attached persons rated intimacy more central to love than did individuals who were avoidantly or ambivalently attached, and they also had relatively high ratings for passion and commitment. Their actual patterns of romantic love tended to reflect their thoughts about romantic love. Secure persons expected, achieved, and valued intimacy in their relationships. Further, their partners shared their perceptions of mutually satisfying relationships, reporting high levels of intimacy and commitment. Ambivalent individuals rated passion most central to love, but also desired intimacy and a relatively committed relationship. These individuals did not achieve their desired relationships, however, as they experienced the lowest levels of intimacy and commitment of the three groups in their relationships; additionally they experienced distress over the lack of a warm, secure love. Moreover, their partners did not love them as much as the partners of the other attachment types loved their partners. Avoidant individuals rated commitment as the most significant component of love. They desired low levels of intimacy and passion, and tended to bring low levels of these characteristics into their relationships. They also reported feeling satisfied

with the quality of their relationships. When avoidant individuals had maintained a relationship for at least the period of time necessary for participating in this study, their partners reported levels of love higher than the avoidant persons expected.

Cohn, Silver, Cowan, Cowan, and Pearson (1991), using an adult sample, addressed the question of whether there is a relationship between working models of childhood attachment relationships and the quality of marital relationships. Using Main's (Main & Goldwyn, 1988) Adult Attachment Interview to assess working models of childhood attachment relationships, they combined three insecure patterns of attachment (dismissing, preoccupied, and disorganized) into one group, insecure, and compared the secure and insecure groups. This was done because of their small sample size (27 couples). They found the working models of childhood attachment were not associated with self-reports of relationship satisfaction and couple communication for either wives or husbands. There were no significant differences in observed couple conflict or positive interaction for wives, although, for couples in which the husband was rated insecure, there was more conflict and less positive interaction than for couples in which the husband was rated secure. Further, couples in which both spouses were rated insecure demonstrated more conflict and less positive interaction than did couples in which the woman alone was insecure or in which both spouses were secure. The authors suggested the

connection between childhood attachment experiences and couple relationships may be more direct for men than for women. For women, it may be these connections are mediated by the husbands' working model of attachment relationships. They suggested that men who hold secure working models are supportive with their wives, perhaps making it easier for their wives to reciprocate in a positive manner.

Using an adult sample, Kobak and Hazan (1991) examined the role of working models of attachment in marital functioning. Attachment security was assessed with a self-description of one's reliance on partner and an assessment of one's partner's psychological availability. In general, husbands described themselves as relying less on their wives than wives described themselves as relying on their husbands. Secure spouses showed more constructive emotion modulation during the two types of interaction examined, problem solving and confiding, and reported better marital adjustment than did insecure partners. Spouses' agreement about their working models of attachment also tended to promote better marital adjustment and was associated with the quality of communication between the spouses. The authors suggested that spouses' working models are accommodated to the partners' behavior in marriage, and it may be that being in a long-term or committed relationship tends to move attachment styles toward security.

In a recent study of college undergraduates, Simpson, Rholes, and Nelligan (1992) examined how attachment styles

are related to support seeking and support giving within dating couples. Each woman was told she would participate in an activity that was known to provoke anxiety in most people, then she was shown a dark, windowless room which contained psychophysiological equipment and told the equipment was not fully set up. At this point she was taken to a waiting room where she rejoined her partner, who was not told of the anxiety-producing situation, and their interactions were unobtrusively videotaped for five minutes. Support seeking on her part and support giving on her partner's part were then evaluated. The authors found more secure women tended to seek more support from their partners as their anxiety increased, using their partners as sources of comfort and reassurance, while more avoidant women tended to seek less support as their anxiety increased. In fact, avoidant women were likely to withdraw from their partners both emotionally and physically as they became more anxious. Further, more secure men were inclined to offer more support through reassurance and supportive comments as their partners' level of anxiety increased, whereas more avoidant men tended to offer less support in the same circumstances. No significant effects were found for the anxious attachment style.

Collins and Read (1990) also expanded Hazan and Shaver's (1987) categorical attachment measure by developing a scale to measure adult attachment style dimensions. Three dimensions underlie this scale: the degree of closeness with which an individual feels comfortable; the extent to which an

individual believes another can be depended upon; and the degree to which an individual is anxious or fearful of being abandoned or unloved. These dimensions were labeled respectively, Close, Depend, and Anxious. In a sample of college undergraduates, secure persons were characterized as being comfortable with closeness, able to depend upon others, and unworried about being abandoned or unloved. Avoidant individuals, on the other hand, were uncomfortable with closeness, not confident in others being available if needed, and not worried about being unloved or abandoned. Anxious-ambivalent persons were found to be comfortable with closeness, moderately confident in others' availability, but very concerned about being abandoned or unloved. The authors believed their scale captured fundamental features of adult attachment that are conceptually tied to those of infant attachment, and thus they considered these features core structures which underlie differences in adult attachment.

Additionally, empirical evidence has been reported supporting the intergenerational transmission of attachment patterns, in which a parent's internal model of attachment tends to govern how the parent behaves as an attachment figure for his or her own child (Grossmann, Fremmer-Bombik, Rudolph, & Grossmann, 1988; Ricks, 1985). Thus, a securely attached parent is likely to have a securely attached child, and an insecurely attached parent is likely to have an insecurely attached child.

Bartholomew (1990) acknowledged the importance of the work based upon Hazan and Shaver's paradigm, but found the avoidant category to be too narrow. It focused on fear of intimacy and did not account for a detached position toward close relationships. The correlates of the avoidant pattern support the image of a person who distrusts others, but who also experiences strong emotions in attachment relations. This does not represent the defensive self-reliance of a person in whom attachment needs are permanently deactivated. To correct this omission, she developed an expanded attachment model utilizing four patterns, two of which describe avoidant styles. The four patterns of attachment are secure, fearful, preoccupied, and dismissing.

Using a sample of college undergraduates, Bartholomew (1991) tested her four-category model of attachment. The secure group obtained high ratings on warmth, balance of control in friendships, level of involvement in romantic relationships, self-confidence and the degree of intimacy in their friendships.

The dismissing group had high scores on self-confidence, but scored low on emotional expressiveness, warmth, caregiving, self-disclosure, intimacy, level of romantic involvements, use of others as a secure base when upset, and reliance on others. They also were rated as being more in control than their partners in both romantic relationships and friendships.

Both the secure and dismissing categories were positively correlated to measures of self-concept.

The preoccupied group obtained scores that were almost opposite to those of the dismissing group. They scored uniquely high on elaboration, self-disclosure (indicating a tendency towards inappropriate disclosure), emotional expressiveness, reliance on others, level of romantic involvement, use of others as a secure base, and caregiving. They had low scores on self-confidence, and tended to be less in control in friendships than their friend.

The fearful group obtained significantly lower scores than the secure and preoccupied groups on self-disclosure, intimacy, level of romantic involvement, reliance on others, and use of others as a secure base when upset. Further, they scored uniquely low in self-confidence and demonstrated a tendency to assume a subservient role in both friendships and romantic relationships.

Both the preoccupied and fearful categories were negatively correlated with measures of self-concept.

Bartholomew also reported female subjects received significantly higher ratings than male subjects on the preoccupied rating, whereas male subjects scored significantly higher than females on the dismissing rating.

In examining the types of interpersonal problems experienced by the subjects, Bartholomew found preoccupied and fearful individuals (those having negative self-images) reported more interpersonal problems than did the other two

groups. Further, their friends also judged them to experience many interpersonal problems.

Profiles of the types of interpersonal problems experienced by each group were developed. Self- and friend-reports of interpersonal problems tended to be consistent across the four attachment styles. The secure group did not exhibit any extreme scores according to self- and friend-reports. The dismissing subjects tended to experience interpersonal problems related to a coldness in social interaction. The findings for the preoccupied group indicated problems related to dominance and lack of warmth. The fearful group tended to have problems which reflected social inhibition and a lack of assertiveness. They also tended to have problems with introversion and tended to be easily exploited by others.

In a more recent study, again using a college sample, Bartholomew and Larsen (1992) examined the relationship between interpersonal dependency and adult attachment using three components of interpersonal dependency: emotional reliance on another; lack of social self-confidence; and assertion of autonomy. They found these subscales to be differentially associated with Bartholomew's three insecure adult attachment styles. Emotional reliance on another was associated with the preoccupied style. This was characterized by over-dependency on the presence and acceptance of the intimate other. This is consistent with Bartholomew's previous finding that preoccupied persons exhibit an expressive and controlling interpersonal style reflecting a desperate

search for reassurance and support. A lack of social self-confidence was associated with the fearful style, which confirms the previous finding of a passive, compliant interpersonal style which decreases the possibility of social rejection. The dismissing style was found to be associated with assertion of autonomy. This is related to Bartholomew's finding that a dismissing person sees himself as being exceptionally independent and self-reliant, therefore not dependent upon ongoing validation from others. Thus, the two attachment styles with negative self-models (fearful and preoccupied) were associated with higher levels of interpersonal dependency than was the style reflecting a positive self model (dismissing). Bartholomew and Larsen suggested these results indicate an attachment perspective may be helpful in clarifying the multidimensional nature of dependency.

Using Bartholomew's four-category model of attachment, Brennan, Shaver, and Tobey (1991) reported gender differences in a college undergraduate sample, with more males than females classified as dismissing, and more females than males classified as fearful. They also found students with an alcoholic parent were classified most often in the fearful category.

In summary, past empirical studies have demonstrated the utility of investigating adult relationships from an attachment perspective. Research has focused primarily on parent-child relationships and romantic relationships using a three-category model. The initial studies using Bartholomew's

four-category model of attachment are few in number and limited by the samples used. All samples consisted of college students with mean ages under 20 years. Further research utilizing Bartholomew's model with varied samples is needed.

CHAPTER III

METHODOLOGY

This exploratory, correlational study was undertaken to investigate Bartholomew's four patterns of adult attachment in mature adults. The unit of analysis was the individual. Self-report questionnaires were used to collect information from each individual. In the non-clinical sample, information on demographics, attachment style, and three variables (self-esteem, intimacy, and interpersonal dependency) was gathered. In the clinical sample, information was gathered on demographics, attachment style, and five variables: self-esteem; intimacy; interpersonal dependency; interpersonal problems; and perceived parental warmth and acceptance in the family of origin.

This chapter includes the following sections: (a) sampling procedures; (b) data collection, including descriptions of the measures used; and (c) procedures for data analysis.

SAMPLING PROCEDURES

The Non-Clinical Sample

The non-clinical sample consisted of individuals, and their spouses or partners, who belonged to the Clerical Technical Union of Michigan State University, or who were parents of children enrolled in Michigan State University's Child Development Laboratories. These two organizations were chosen because they have diverse memberships. The Clerical

Technical Union required its governing board's approval prior to beginning the study. The Child Development Laboratory required approval of the study by the Department of Family and Child Ecology before allowing their member-parents to be contacted. One hundred fifty names were randomly selected from the Clerical Technical Union membership list and one hundred names were randomly selected from the list of parents having children enrolled in the Child Development Laboratories. Letters of invitation were mailed to each person, along with a project information sheet and informed consent forms. Stamped, addressed envelopes were included for returning the consent forms. Those persons who chose to participate in the study returned their consent forms by mail. Upon receipt of the consent forms, the participants were mailed the questionnaires and letters thanking them for their participation. Stamped addressed envelopes were included for returning the questionnaires. Subjects' names did not appear on the questionnaires. The questionnaires were coded with identification numbers for mailing purposes. A second mailing was sent four weeks after the first invitation to a random sample of those persons who had not initially chosen to participate. A random sample was used because (1) the desired sample size of 30 was achieved from the first mailing, and (2) the resources of the researcher were limited. The second mailing again included invitations to participate in the study, project information sheets, and informed consent forms. Individuals choosing to participate

were mailed letters thanking them for participating, the questionnaires, and stamped return envelopes. Follow-up postcards were mailed to participants who had not returned their questionnaires after three weeks. Follow-up letters were mailed to participants who had not returned their questionnaires to the researcher within six to seven weeks of their receiving them. Questionnaires and stamped return envelopes were again included with these letters. The desired sample size of 30 was exceeded, as 62 individuals agreed to participate. Of those agreeing to participate, 8 did not return their questionnaires, or 12.9%. Further, 5 persons reported being currently in counseling and were eliminated from the study. The final non-clinical sample size was 54.

The Clinical Sample

The clinical sample of 37 subjects was drawn from all individuals and couples receiving counseling at the Family and Child Clinic at Michigan State University and from clients at a private mental health clinic in East Lansing. These clinics provide individual, couple, and family therapy and the majority of clients voluntarily enter therapy. The sites were chosen because (1) diverse populations are served at each clinic, and (2) the researcher is a therapist at the Family and Child Clinic. Ninety-six individuals received invitations. The initial invitation procedure at the Family and Child Clinic was identical to that of the non-clinical

sample. Three to four weeks after the first invitation a second mailing was sent to all Family and Child Clinic clients who had not responded to the first invitation. A decision was made to contact all clients who had not responded because of the small pool of potential subjects available at this clinic. Follow-up postcards were sent to those participants who had not returned their questionnaires within five to six weeks. Participants who had not returned their questionnaires after eight weeks were mailed follow-up letters, additional questionnaires, and stamped return envelopes. The desired sample size of 30 was exceeded. Of the 37 who agreed to participate, six did not return their questionnaires, or 16.2%.

To preserve client confidentiality, individuals at the private clinic were given all information by their therapist. Second invitations were not issued for this population, due to client confidentiality and the desire to avoid the appearance of therapist pressure on clients. Six clients agreed to participate and completed their questionnaires.

DATA COLLECTION

Data were collected through two sets of self-administered questionnaires: the non-clinical version, and the clinical version. The non-clinical set of questionnaires was composed of four measures: the Relationship Questionnaire (including the Demographics Questionnaire), the Rosenberg Self-Esteem Inventory, the Miller Social Intimacy Scale, and

the Interpersonal Dependency Inventory. This set of questionnaires required approximately 20 to 30 minutes to complete. The clinical set of questionnaires was composed of the same measures as the non-clinical version, plus the Inventory of Interpersonal Problems, and the Adult Parental Acceptance-Rejection Questionnaire. This set of questionnaires required approximately 45 minutes to 1 hour to complete.

All subjects completed the questionnaires in their homes and the questionnaires were returned either by mail or in person to the researcher.

Self-Report Measures

The measures used in the sets of questionnaires are described below:

1. The Relationship Questionnaire is an adaptation by Bartholomew (1991) of the questionnaire developed by Hazan and Shaver (1987) to measure attachment style/pattern. Attachment style is conceptualized as social behavior which reflects internal models of self and other. Descriptions representing the four attachment styles are separately presented. Subjects first indicate how much each style is like or not like them, rating each on a seven-point Likert scale. A high rating indicates a style is very much like the subject. Subjects then choose one style which they feel is the most like them. This measure has been found to correlate

with individuals' models of self and others and has demonstrated adequate reliability.

2. The Demographic Questionnaire is a brief questionnaire which includes requests for personal information (e.g., age, gender, race, education), relationship information (e.g., length of marriage, number of marriages), and family of origin information (e.g., marital status of parents, number of siblings). This information was requested as the first part of the Relationship Questionnaire.

3. The Rosenberg Self-Esteem Inventory (Rosenberg, 1965) is a 10-item scale which measures self-esteem. Self-esteem is conceptually defined as the evaluation of one's self by the self. It utilizes a four-point Likert scale (strongly disagree to strongly agree) and has demonstrated adequate reliability and validity. Sample items are "I feel I have a number of good qualities" and "I feel I do not have much to be proud of." The 10 items are summed to produce a total score, with a maximum score being 40. The minimum possible score is 10. High total scores indicate high levels of self-esteem.

4. The Miller Social Intimacy Scale (MSIS; Miller & Lefcourt, 1982) is a 17-item measure of the level of intimacy currently experienced by the individual. Conceptually, intimacy is defined as having features of openness, honesty, mutual self-disclosure, care, warmth, mutual attentiveness, mutual commitment, and emotional attachment (Rubenstein & Shaver, 1982). The MSIS utilizes a 10-point Likert scale and

has demonstrated adequate reliability and validity. A sample item is "How often do you confide very personal information to him/her?" Individual items are summed to produce a total score, with a minimum possible score being 17 and a maximum score being 170. High total scores indicate high levels of intimacy in a current relationship.

5. The Interpersonal Dependency Inventory (IDI; Hirschfeld et al., 1977) is a 46-item questionnaire that assesses three empirically derived components of interpersonal dependency using a four-point Likert scale. Interpersonal dependency is conceptualized as "a complex of thoughts, beliefs, feelings, and behaviors which revolve around the need to associate closely with, interact with, and rely upon valued other people" (Hirschfeld et al., 1977, p. 610). The three interpersonal dependency components are: (a) Emotional Reliance on Another Person; (b) Lack of Social Self-Confidence; and (c) Assertion of Autonomy. Emotional Reliance measures emotional reliance on others, especially the need for specific others to be accepting and approving. A sample item is "I do my best work when I know it will be appreciated." Lack of Social Self-Confidence measures the taking of a dependent role in social situations and being overly sensitive to others' judgments. It reflects the desire for help in decision-making, social situations, and in taking the initiative. A sample item is "When I have a decision to make, I always ask for advice." Assertion of Autonomy measures the tendency to emphasize an extreme level of independence, and includes

the conviction that self-esteem is not dependent on the approval of others. Items in this subscale tend to deny either attachment or dependency needs. Sample items are "I prefer to be by myself" and "I don't need anyone." By summing the three subscales a total dependency score can be computed, with a maximum total score of 184 possible. The minimum possible score is 46. A high score indicates the individual experiences a high degree of interpersonal dependence. The IDI has demonstrated adequate reliability and validity. Bartholomew and Larsen (1992) found the three subscales to be related to the three insecure attachment styles in predictable ways.

6. The Inventory of Interpersonal Problems (IIP; Horowitz, Rosenberg, Baer, Ureno, & Villasenor, 1988) is a 127-item self-report inventory designed to identify interpersonal sources of distress that are frequently the focus of psychotherapy. An interpersonal problem is defined as an area of interpersonal interaction (including beliefs, attitudes, feelings, and behaviors) which leads to feelings of discomfort or distress. Subjects are asked to rate how distressing each interpersonal problem has been for them, using a five-point scale which ranges from 0 (Not at all) to 4 (Extremely). Two categories of items are included: interpersonal behaviors which one finds hard to do, and interpersonal behaviors which one does too much. There are six subscales within the IIP: Assertive; Sociable; Submissive; Intimate; Responsible; and Controlling. The authors differentiate

between the hard-to-do (H) and the do-too-much (T) subscales. H subscales are Assertive, Sociable, Submissive, and Intimate. T subscales are Responsible and Controlling. Sample items are "It is hard for me to let other people know what I want" and "I am too sensitive to criticism." Items are summed, with a minimum possible total score of zero and a maximum total score of 508. A high score is indicative of a high number of interpersonal problems which cause distress to the individual. The IIP has demonstrated adequate reliability and validity. Bartholomew (1991) reported insecure attachment styles are related to distinctive profiles of interpersonal problems.

7. The Adult Parental Acceptance-Rejection Questionnaire (Adult PARQ; Rohner, 1990) is a 60-item self-report questionnaire in which an adult reflects back upon a period of childhood (7 through 12 years old) and responds to his/her perceptions about maternal treatment toward him/her in terms of acceptance and rejection. Conceptually, parental warmth is defined as a bi-polar dimension in which rejection, or the absence of warmth and affection, is at one pole in opposition to acceptance and affection at the other pole. Parental acceptance is defined as behaviors which demonstrate love or affection to a child and are likely to cause a child to feel loved or accepted. These behaviors include physical and verbal behaviors, such as hugging, kissing, praising and complimenting the child. Parental rejection is conceptualized as the negative pole of the warmth/acceptance-rejection

continuum, and is defined as behaviors which reflect hostility, aggression, indifference, or neglect and are likely to cause a child to feel unloved (Rohner, 1975, 1980, 1986). Included are behaviors such as hitting; kicking; pushing; choking; saying thoughtless, unkind, and cruel things; sarcasm; ignoring children's bids for attention; and being unresponsive to a child's physical or emotional needs. Four dimensions, warmth/affection, hostility/aggression, indifference/neglect, and undifferentiated rejection, are assessed in the Adult PARQ. The Parental Warmth/Affection scale refers to parent-child relationships in which parents are perceived as giving love/affection without qualification, although not necessarily with great demonstration. Such parents are viewed as liking the child, approving of her personality, and taking an interest in her activities and well-being. The Perceived Undifferentiated Rejection scale reflects the child's view of parents who do not demonstrate warmth to him. This perceived rejection, however, does not clearly reflect either aggression/hostility nor neglect/indifference *per se*. The Perceived Aggression/Hostility scale reflects conditions in which the child believes her parents are angry, bitter, or resentful of her, or conditions in which the child believes her parents intend to physically or verbally hurt her. The Perceived Neglect/Indifference scale assesses the child's belief that his parents are unconcerned or uninterested in him. These parents may not necessarily be viewed as hostile, but rather as cold, distant, or unconcerned about their child.

Items are summed by subscales, then these subscales are combined to yield a total perceived rejection score; thus, it is necessary to reverse the warmth/affection subscale to maintain consistency in scoring. The total score of the Adult PARQ reflects rejection; therefore, a low total score reflects a high level of perceived warmth/acceptance, while a high total score reflects a low level of perceived warmth/acceptance. The maximum rejection score is 240 and the minimum score is 60.

The Adult PARQ uses a four-point Likert scale ranging from 1 (Almost never true) to 4 (Almost always true). The internal reliabilities (coefficient alpha) of the scales on the Adult PARQ range from .86 to .95, with a median reliability of .91. It also has demonstrated adequate validity. Sample items are "My mother ignored me as long as I did not do anything to bother her" and "My mother tried to help me when I was scared or upset."

ANALYSIS OF DATA

This study was descriptive, comparative, and correlational in nature. All measures yielded interval data, with one question in the Relationship Questionnaire yielding nominal data (choice of one attachment style most like them).

Descriptive statistics were used to determine frequency distributions and to calculate mean scores on the measures of attachment style, self-esteem, intimacy, dependency, interpersonal problems, and parental warmth and acceptance.

Research Question 1 was examined using a frequency distribution. Four categories of attachment and the number of subjects in each category were determined separately for the clinical and non-clinical samples.

Research Question 2 was addressed using Pearson Product-Moment correlation coefficients. This was appropriate as measures of attachment pattern (Relationship Questionnaire) and interpersonal problems (Inventory of Interpersonal Problems) yielded interval data. The level of significance used was .05.

Hypotheses 1 through 16 were tested using Pearson Product-Moment correlation coefficients, using a level of significance of .05. This was appropriate because the measures of attachment styles, self-esteem, intimacy, dependence, and parental warmth and acceptance yielded data at the interval level. The measures used to yield these data are presented in Table 1.

Table 1
Measures of Independent and Dependent Variables

Variable	Measure
Attachment Style	Relationship Questionnaire
Self-esteem	Rosenberg Self-Esteem Inventory
Intimacy	Miller Social Intimacy Scale
Dependence	Interpersonal Dependency Inventory
Interpersonal Problems	Inventory of Interpersonal Problems
Parental Warmth and Acceptance	Adult Parental Acceptance-Rejection Questionnaire

Hypothesis 17 was analyzed using the chi-square test of association. This was suitable because the variable, sample, is nominal (non-clinical versus clinical), and for comparison purposes, attachment pattern was treated as two categories: secure; and the preoccupied, dismissing, and fearful patterns collapsed into one category, labeled insecure. This decision was made to accommodate the small numbers of subjects in each of the three insecure patterns. Thus, both variables are dichotomous, making chi-square analysis appropriate. The level of significance was .05.

Hypotheses 18 through 20 were analyzed using Student's t-tests. Data were measured at the interval level and

differences between the means of the two samples were being examined, making *t*-tests appropriate. The level of significance was .05.

Samples were also compared on demographic variables using chi-square analysis.

SUMMARY

Clinical and non-clinical samples were used in this study. Non-clinical subjects were members of the Michigan State University Clerical Technical Union or parents of children attending the Child Development Laboratories at Michigan State University. Subjects were asked to participate and all those agreeing to participate were included in the study. Clinical subjects were drawn from clients at the Michigan State University Family and Child Clinic and from a private clinic.

Data from self-report questionnaires were analyzed using Pearson Product-Moment correlation coefficients and Student's *t*-tests. Further analyses of categorical variables were also completed using the chi-square statistic.

CHAPTER IV

RESULTS OF DATA ANALYSIS

This research study was designed to investigate Bartholomew's four-category model of adult attachment in non-clinical and clinical samples of adults. Attachment style and three variables (self-esteem, intimacy, and interpersonal dependency) were investigated in the non-clinical sample. Attachment style and five variables (self-esteem, intimacy, interpersonal dependency, parental warmth and acceptance, and interpersonal problems) were examined within the clinical sample. Self-report questionnaires were used to gather data.

Data related to the description of the samples and the findings pertaining to the research questions and hypotheses are reported in this chapter. Results are reported by sample and by dependent variable.

DESCRIPTIONS OF THE SAMPLES

Non-Clinical Sample

Demographic information was collected from individuals, and their partners or spouses, who were members of the Clerical Technical Union of Michigan State University or who were parents of children attending the Michigan State University Child Development Laboratories. The non-clinical sample consisted of 54 individuals, 22 males (40.7%) and 32 females (59.3%). The subjects ranged in age from 25 to 68 (mean = 38.7 years). Fifty subjects were Caucasian, 3 were

Asian, and 1 was African-American. The number of years of education reported by non-clinical subjects ranged from 12 to 24 (mean = 16.4 years), and the average individual yearly income was \$30,000 to \$34,999. Forty-one subjects were currently married (75.9%); 4 (7.4%) were divorced; and 9 (16.7%) had never been married. Of those currently married, the number of years married ranged from 2 to 32 (mean = 11.7 years). Thirty-seven (68.5%) of the subjects reported one marriage and 8 (14.8%) reported two marriages.

Clinical Sample

Demographic information was collected from individuals who were clients at the Family and Child Clinic at Michigan State University or at a private East Lansing clinic. The clinical sample consisted of 37 individuals, 15 males (40.5%) and 22 females (59.5%). The subjects ranged in age from 21 to 51 (mean = 37.2 years). Thirty-six subjects were Caucasian and 1 was African-American. The number of years of education reported by clinical subjects ranged from 12 to 23 (mean = 15.6 years), and the average individual yearly income was \$25,000 to \$29,999. Twenty-one subjects were currently married (56.8%); 5 (13.5%) were separated; 8 (21.6%) were divorced; 2 (5.4%) had never been married; and 1 (2.7%) was widowed. Of those currently married (and not separated), the number of years married ranged from 2.5 to 27 (mean = 11.1 years). Twenty-seven (73%) of the subjects reported one marriage; 6 (16.2%) reported two marriages; and 2 (5.4%)

reported three marriages. The length of time in therapy ranged from 1 week to 180 months (mean = 18.5 months). Selected demographic information is provided in Table 2.

Table 2
Selected Demographic Information on Samples

Variable	Non-Clinical %	Mean (SD)	Clinical %	Mean (SD)
Gender				
Male	40.7%		40.5%	
Female	59.3%		59.5%	
Age		38.7 (1.3)		37.2 (1.3)
Marital Status				
Never Married	17%		5%	
First Marriage	63%		46%	
Remarried	13%		11%	
Separated	0%		13%	
Divorced	7%		22%	
Widowed	0%		3%	
No. of Marriages		1 (.1)		1.2 (.1)
No. of Divorces		.2 (.1)		.5 (.1)
Rel. Status				
None	13%		11%	
Dating one	11%		22%	
Married	76%		68% ^a	
Years Married		11.7 (1.2)		11.3 (1.7)
No. of Children		1.7 (.2)		2.0 (.3)
Race				
African-Amer.	2%		3%	
Asian	6%		0%	
Caucasian	92%		97%	
Education (yrs)		16.4 (.41)		15.6 (.44)
Income		\$30- 34,999 (2,500)		\$25- 29,999 (3,000)

^aIncludes persons who are separated but not divorced

Comparison of the Non-Clinical and Clinical Samples

The two groups were compared on demographic information. Comparison of the groups was performed using chi-square analysis. A significant difference was revealed between the two samples on current marital status ($\chi^2=14.98$, $p \leq .01$). More non-clinical subjects were never married or were in their first marriage than were clinical subjects. More clinical subjects, however, were currently separated than non-clinical subjects.

Controlling for Demographic Variables

Only one demographic variable was found to be related to the dependent variables of the study. Using Pearson Product-Moment, a correlation of $-.71$ ($p \leq .001$) was obtained between gender and self-esteem in the clinical sample only. Males' scores (mean = 35.9) were significantly higher than females' (mean = 29.5) scores ($t = 4.17$, $df = 35$, $p < .001$).

RESEARCH QUESTIONS

Question 1: Are Bartholomew's four attachment patterns found in clinical and non-clinical samples?

A frequency count of the attachment patterns/styles chosen by subjects was used to determine the presence of the four categories of attachment in each sample. As shown in Table 3, all four attachment styles are represented in each sample.

Table 3
Attachment Style Frequencies in Clinical and Non-Clinical
Samples

Count Col %	Clinical Sample	Non-Clinical Sample
Secure	19 51.4	29 53.7
Fearful	10 27.0	12 22.2
Preoccupied	3 8.1	2 3.7
Dismissing	5 13.5	11 20.4
Total	37 100	54 100

Chi-square analysis was also performed on each sample, comparing gender and attachment style. No significant relation between gender and attachment was found in the clinical sample ($\chi^2=3.93$, $p \leq .27$). A significant relation between gender and attachment style was revealed in the non-clinical sample, however ($\chi^2=16.37$, $p \leq .001$). More females than males rated themselves as having a secure pattern of attachment, whereas more males than females rated themselves as having a dismissing attachment style. These findings are presented in Table 4.

Table 4

Comparisons Between Attachment Style and Gender in the Non-Clinical Sample

Count Col %	Male	Female	Style Totals
Secure	6 27.3	23 71.9	29 53.7
Fearful	5 22.7	7 21.9	12 22.2
Preoccupied	1 4.6	1 3.1	2 3.7
Dismissing	10 45.4	1 3.1	11 20.4
Total	22	32	54

$\chi^2=16.37$ $p \leq .001$

Question 2: In a clinical sample, are the four patterns of attachment related to particular subscales of interpersonal problems?

Higher scores on the secure attachment scale were found to be negatively related to problems in being sociable (See Table 7). Problems with assertiveness, sociability, submissiveness, intimacy, and being too responsible were associated with higher scores on the fearful scale. Subjects with higher scores on the preoccupied scale tended to have problems being assertive, submissive, intimate, and too responsible and controlling. Problems with intimacy were also positively related to the dismissing style. Finally, both the

fearful and preoccupied patterns were associated with more interpersonal problems in general.

Table 5
Relations Between Attachment Styles and IIP Subscales

Subscale	Secure	Fearful	Preoccupied	Dismissing
Assertive	-.08	.50***	.35*	-.04
Sociable	-.46**	.60***	.25	.17
Submissive	-.28	.38*	.46**	.30
Intimate	-.31	.44**	.39*	.33*
Responsible	-.09	.32*	.33*	.04
Controlling	-.02	.13	.36*	-.14
IIP Total	-.22	.46**	.44**	.10
N = 37	* $p \leq .05$	** $p \leq .01$	*** $p \leq .001$	

HYPOTHESES

Non-Clinical Sample

Attachment Style and Self-Esteem

H_{a1} = There is a positive relation between a secure pattern of attachment and self-esteem.

H_{a2} = There is a negative relation between a fearful pattern of attachment and self-esteem.

H_{a3} = There is a negative relation between a preoccupied pattern of attachment and self-esteem.

H_{a4} = There is a positive relation between a dismissing pattern of attachment and self-esteem.

It was hypothesized that higher scores on the secure and dismissing attachment scales would be associated with higher scores on the Rosenberg Self-Esteem Inventory. In contrast, the fearful and preoccupied subjects were hypothesized to be low in self-esteem. A positive correlation was obtained between the secure rating and the self-esteem measure, as shown in Table 6. Furthermore, both fearful and preoccupied subjects tended to have lower self-esteem scores. The dismissing pattern, however, was not found to be significantly related to self-esteem.

Table 6

Relations Between Attachment Styles and Dependent Variables
in the Non-Clinical Sample

Variable	Secure	Fearful	Preoccupied	Dismissing
Self-Esteem	.33**	-.41**	-.47***	.05
Intimacy	.13	-.44***	-.39**	-.34**
Total Dependency	-.46***	.50***	.41**	.08
Reliance	-.26 [†]	.18	.31*	-.26
Lack of Confidence	-.42***	.39**	.34**	-.02
Autonomy	-.26 [†]	.48***	.18	.49***
<i>N</i> = 54	* <i>p</i> ≤ .05	** <i>p</i> ≤ .01	*** <i>p</i> ≤ .001	[†] <i>p</i> < .10

Attachment Style and Intimacy

H_{a5} = There is a positive relation between a secure pattern of attachment and intimacy.

H_{a6} = There is a negative relation between a fearful pattern of attachment and intimacy.

H_{a7} = There is a negative relation between a preoccupied pattern of attachment and intimacy.

H_{a8} = There is a negative relation between a dismissing pattern of attachment and intimacy.

It was hypothesized that a higher score on the secure attachment scale would be associated with a higher score on the Miller Social Intimacy Scale. Higher scores on the fearful, preoccupied, and dismissing scales were expected to be associated with lower intimacy levels. With the exception of the secure pattern, the data were consistent with the alternative hypotheses (See Table 6). Negative correlations were obtained between the fearful, preoccupied, and dismissing scales and the intimacy measure. Scores on the secure scale were unrelated to level of intimacy. Therefore, for hypothesis 5, the null hypothesis could not be rejected.

Attachment Style and Interpersonal Dependency

H_{a9} = There is a negative relation between a secure pattern of attachment and interpersonal dependency.

H_{a10} = There is a positive relation between a fearful pattern of attachment and lack of social self-confidence.

H_{a11} = There is a positive relation between a preoccupied pattern of attachment and emotional reliance on another.

H_{a12} = There is a positive relation between a dismissing pattern of attachment and autonomy.

Support was found for each of the alternative hypotheses (See Table 6). Higher scores on the secure scale were

related to lower total interpersonal dependency scores. Higher scores on the fearful scale were positively related to lack of social self-confidence. Higher scores on the preoccupied scale were positively related to emotional reliance on another, while higher scores on the dismissing scale were positively related to autonomy.

Further associations between attachment style and total interpersonal dependency scores were found. Results indicated subjects with higher scores on either the fearful or preoccupied scales tended to experience higher levels of interpersonal dependency (See Table 6).

The analysis also revealed significant correlations between the secure and preoccupied styles and the lack of social self-confidence subscale. A negative correlation was obtained between the secure scale and scores on this subscale. A positive correlation was obtained, however, between the preoccupied scale and scores on the lack of social self-confidence subscale. Thus, secure subjects tended to be confident in social interactions, while preoccupied subjects tended to report a lack of self-confidence.

Results also indicated a positive correlation between the fearful scale scores and autonomy scores.

Finally, there was a trend for higher scores on the secure scale to be associated with lower scores on emotional reliance and autonomy.

Clinical Sample

Attachment Style and Self-Esteem

H_{a1} = There is a positive relation between a secure pattern of attachment and self-esteem.

H_{a2} = There is a negative relation between a fearful pattern of attachment and self-esteem.

H_{a3} = There is a negative relation between a preoccupied pattern of attachment and self-esteem.

H_{a4} = There is a positive relation between a dismissing pattern of attachment and self-esteem.

Because gender had been found to be highly related to self-esteem, it was controlled for in this analysis. The results revealed the correlations between scores on attachment scales and self-esteem were unaffected when gender was controlled through multiple regression; the correlation for gender, however, was reduced to $-.58$ ($p \leq .001$).

It was hypothesized that higher scores on the secure and dismissing attachment scales would be associated with higher self-esteem. In contrast, the fearful and preoccupied subjects were expected to be low in self-esteem. The data only partially supported the alternative hypotheses (See Table 7). A positive correlation was obtained between the self-esteem measure and the secure scale, and a negative correlation was obtained between the measure and the fearful scale. Subjects with higher scores on the secure scale tended to be higher in self-esteem, while subjects rated higher on the fearful scale tended to be lower in self-esteem. Scores on the preoccupied and dismissing scales were unrelated to levels of self-

esteem. Thus, for hypotheses 3 and 4, the null hypotheses could not be rejected.

Table 7

Relations Between Attachment Styles and Dependent Variables
in the Clinical Sample

Variable	Secure	Fearful	Preoccupied	Dismissing
Self-Esteem	.36*	-.39*	-.25	.15
Intimacy	.28 [†]	-.16	-.36*	-.19
Total Dependency	-.12	.29 [†]	.35*	.08
Reliance	.07	.06	.33*	-.24
Lack of Confidence	-.12	.36*	.31 [†]	-.15
Autonomy	-.23	.24	.09	.55***
<hr/>				
N = 37	*p ≤ .05	**p ≤ .01	***p ≤ .001	[†] p < .10

Attachment Style and Intimacy

H_{a5} = There is a positive relation between a secure pattern of attachment and intimacy.

H_{a6} = There is a negative relation between a fearful pattern of attachment and intimacy.

H_{a7} = There is a negative relation between a preoccupied pattern of attachment and intimacy.

H_{a8} = There is a negative relation between a dismissing pattern of attachment and intimacy.

It was hypothesized that higher scores on the secure attachment scale would be associated with higher levels of intimacy. The fearful, preoccupied, and dismissing scales,

on the other hand, were expected to be associated with lower levels of intimacy. With the exception of the preoccupied pattern, the data did not support the alternative hypotheses (See Table 7). Subjects with higher scores on the preoccupied attachment scale tended to experience lower levels of intimacy in relationships. Scores on the secure, fearful, and dismissing scales were unrelated to level of intimacy, although there was a trend for secure subjects to have higher scores on the intimacy measure. Therefore, for hypotheses 5, 6, and 8, the null hypotheses could not be rejected.

Attachment Style and Interpersonal Dependency

H_{a9} = There is a negative relation between a secure pattern of attachment and interpersonal dependency.

H_{a10} = There is a positive relation between a fearful pattern of attachment and lack of social self-confidence.

H_{a11} = There is a positive relation between a preoccupied pattern of attachment and emotional reliance on another.

H_{a12} = There is a positive relation between a dismissing pattern of attachment and autonomy.

It was hypothesized that higher scores on the secure attachment scale would be associated with lower total scores on interpersonal dependency. Results indicated scores on the secure scale were unrelated to total dependency scores. Thus, for hypothesis 9, the null hypothesis could not be rejected.

The results indicated higher scores on the preoccupied scale were associated with higher total dependency scores

(See Table 7). A trend for subjects with higher scores on the fearful scale to have higher scores on total dependency was also noted.

Higher scores on the fearful scale were expected to be associated with higher scores on the lack of social self-confidence subscale. The data supported this alternative hypothesis. Subjects with higher scores on the fearful scale tended to report experiencing a lack of self-confidence in social interactions. There was also a trend for higher scores on the preoccupied scale to be associated with higher scores on the lack of self-confidence subscale.

It was further expected that preoccupied subjects would be emotionally reliant on others. The data were consistent with this alternative hypothesis. Higher scores on the preoccupied scale were positively related to higher scores on the emotional reliance on another subscale.

A higher rating on the dismissing scale was hypothesized to be associated with a higher rating on the assertion of autonomy subscale. The alternative hypothesis was supported. Subjects with higher scores on the dismissing scale tended to experience higher levels of defensive autonomy.

Attachment Style and Perceived Parental Warmth/Acceptance

H_{a13} = There is a positive relation between a secure pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{a14} = There is a negative relation between a fearful pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{a15} = There is a negative relation between a preoccupied pattern of attachment and recollections of perceived parental warmth and acceptance.

H_{a16} = There is a negative relation between a dismissing pattern of attachment and recollections of perceived parental warmth and acceptance.

It was hypothesized that higher scores on the secure attachment scale would be associated with perceptions of mothers as warm and accepting in childhood. In contrast, higher scores on the fearful, preoccupied, and dismissing scales were expected to be associated with perceptions of mothers as cool and rejecting. The Adult PARQ total score reflects maximum perceived parental rejection; therefore, a low total score reflects perceived parental warmth and acceptance.

As shown in Table 8, the data, with one exception, were consistent with the alternative hypotheses. Subjects with higher scores on the secure scale tended to perceive their mothers as being warm and accepting in childhood, whereas subjects with higher scores on the fearful and preoccupied scales tended to perceive their mothers as cool and rejecting. Scores on the preoccupied scale were unrelated to perceptions of mothers' warmth and acceptance. Thus, for hypothesis 15, the null could not be rejected.

Table 8

Relations Between Perceived Parental Rejection and Attachment
Styles in the Clinical Sample

	Secure	Fearful	Preoccupied	Dismissing
Parental Rejection	-.41**	.43**	.12	.43**
$N = 37$	$*p \leq .05$	$**p \leq .01$		

Comparisons Between Non-Clinical and Clinical Samples

Hypothesis Seventeen

H_{a17} = There is a greater percentage of insecure subjects in the clinical sample than in the non-clinical sample.

A chi-square analysis was performed comparing the two samples on rates of insecure attachments. The results are shown in Table 9. The fearful, preoccupied, and dismissing categories were combined into one category, insecure, due to the small numbers of subjects in these categories. No significant difference between the samples was found.

Table 9

Percentage of Secure/Insecure Subjects in Clinical and Non-Clinical Samples

Count Col %	Clinical	Non- Clinical	Row Total
Secure	19 51.4	29 53.7	48 52.7
Insecure	18 48.6	25 46.3	43 47.3
Column Total	37	54	91

$$\chi^2 = -0.04 \quad p > .05$$

Differences Between Samples' Mean Scores

H_{a18} = Clinical subjects have lower mean self-esteem scores than do non-clinical subjects.

H_{a19} = Clinical subjects have lower mean intimacy scores than do non-clinical subjects.

H_{a20} = Clinical subjects have higher mean dependence scores than do non-clinical subjects.

The clinical and non-clinical samples' mean scores on the Rosenberg Self-Esteem Inventory, the Miller Social Intimacy Scale, and the Interpersonal Dependency Inventory were compared using Student's *t*-tests. As shown in Table 10, the means were not found to differ significantly for self-esteem and interpersonal dependence. Therefore, the null hypotheses could not be rejected for hypotheses 18 and 20. Clinical subjects did, however, have significantly lower mean intimacy scores than non-clinical subjects. The data were consistent with the alternative hypothesis for hypothesis 19.

Table 10

T-tests for Differences Between Clinical and Non-Clinical
Samples in Self-Esteem, Intimacy, and Dependency

Variable	Mean (SD)		t-value	df	Prob.
	Clinical (N=37)	Non- Clinical (N=54)			
Esteem	32.1 (5.5)	33.9 (4.4)	1.80	89	.08
Intimacy	127.0 (20.8)	140.0 (20.5)	2.92	88	.004
Dependency	101.7 (14.8)	99.3 (14.6)	-0.75	88	.46

POST HOC ANALYSIS

Only one hypothesis regarding differences between the two samples was supported. In fact, the results of this study indicated the two groups were more alike than different. In response to these unexpected findings, a *post hoc* analysis seemed warranted. To this end, the two samples were combined; also included in this sample were the five non-clinical cases which initially had been eliminated from the study, due to the subjects' participation in psychotherapy. This produced a single sample of 96 subjects. Another analysis was performed testing research question one and the first 12 hypotheses. The results are presented in Tables 11 and 12.

Table 11
Frequencies of Attachment Styles in the Combined Sample

Count Col %	Male	Female	Style Totals
Secure	12 31.6	38 65.5	50 52.1
Fearful	10 26.3	14 24.1	24 25.0
Preoccupied	2 5.3	3 5.2	5 5.2
Dismissing	14 36.8	3 5.2	17 17.7
Total	38	58	96

$$\chi^2=18.12 \quad p \leq .001$$

Table 12
Post Hoc Analysis of the Combined Sample

Variable	Secure	Fearful	Preoccupied	Dismissing
Self-Esteem	.33***	-.42***	-.36***	.08
Intimacy	.17 [†]	-.35***	-.37***	-.26**
Total IDI	-.29**	.40***	.37***	.10
Reliance	-.12	.12	.30**	-.23*
Lack of Confidence	-.27**	.37***	.34***	-.06
Autonomy	-.23*	.36***	.12	.53***
N = 96	*p ≤ .05	**p ≤ .01	***p ≤ .001	[†] p < .10

Research Question 1 related to frequencies of the four attachment styles. All four categories of attachment were

represented in the *post hoc* analysis. In addition, a significant relationship was found between gender and attachment style (See Table 11). As in the non-clinical sample, more females classified themselves as secure, whereas more males identified themselves as dismissing.

Hypotheses

Attachment Styles and Self-Esteem

H_{a1}: There is a positive relation between a secure pattern of attachment and self-esteem.

H_{a2}: There is a negative relation between a fearful pattern of attachment and self-esteem.

H_{a3}: There is a negative relation between a preoccupied pattern of attachment and self-esteem.

H_{a4}: There is a positive relation between a dismissing pattern of attachment and self-esteem.

Hypotheses 1 through 4 related to attachment style and self-esteem. The data supported alternative hypotheses 1, 2 and 3 (See Table 12). A positive relation was found for the secure style and self-esteem. Negative correlations were obtained between scores on the fearful and preoccupied scales and levels of self-esteem. No significant relation was found between scores on the dismissing scale and level of self-esteem. Thus, for hypothesis 4, the null hypothesis could not be rejected. These findings are consistent with the findings for the non-clinical sample.

In addition, group differences were analyzed in a one-way analysis of variance followed by multiple comparisons of group means, using the Duncan procedure. As shown in Table

13, the self-esteem scores of the two groups with positive models of self, secure and dismissing, were found to be significantly higher than the scores of the two groups with negative models of self, fearful and preoccupied.

Attachment Style and Intimacy

H_{a5}: There is a positive relation between a secure pattern of attachment and intimacy.

H_{a6}: There is a negative relation between a fearful pattern of attachment and intimacy.

H_{a7}: There is a negative relation between a preoccupied pattern of attachment and intimacy.

H_{a8}: There is a negative relation between a dismissing pattern of attachment and intimacy.

It was hypothesized that higher scores on the secure scale would be associated with higher levels of intimacy. Conversely, higher scores on the fearful, preoccupied, and dismissing scales were expected to be associated with lower intimacy levels. The data were consistent with the alternative hypotheses, with one exception (See Table 12). Negative correlations were obtained between the fearful, preoccupied, and dismissing scales and intimacy. Scores on the secure scale were not related to levels of intimacy, although there was a positive trend. Again, these results were consistent with those from the non-clinical sample.

Table 13
Post Hoc Analysis of Variance: Attachment Styles and Dependent Variables

Style	Self-Esteem F(3,94)=7.56*** M = 34.5 ^{b,c}	Intimacy F(3,93)=6.91*** M = 142.88 ^{b,c,d}	Total Dependence F(3,93)=6.75*** M = 95.16 ^{b,c,d}	Self- Confidence F(3,94)=1.34 M = 29.00	Emotional Reliance F(3,94)=1.56 M = 41.40	Autonomy F(3,93)=8.32*** M = 26.76 ^{b,d}
Secure						
Fearful	M = 30.5 ^{a,d}	M = 129.04 ^a	M = 106.45 ^a	M = 44.65	M = 51.26	M = 31.86 ^a
Preoccupied	M = 27.4 ^{a,d}	M = 112.60 ^a	M = 116.00 ^a	M = 34.40	M = 47.20	M = 32.40
Dismissing	M = 34.2 ^{b,c}	M = 125.18 ^a	M = 102.59 ^a	M = 28.24	M = 38.82	M = 34.35 ^a

***p < .001 ^adiffers significantly from secure ^bdiffers significantly from fearful ^cdiffers significantly from preoccupied ^ddiffers significantly from dismissing

A one-way analysis of variance followed by multiple comparisons of group means using the Duncan procedure revealed the secure group had significantly higher levels of intimacy than the other three insecurely attached groups (See Table 13).

Attachment Style and Dependence

H_{a9}: There is a negative relation between a secure pattern of attachment and interpersonal dependency.

H_{a10}: There is a positive relation between a fearful pattern of attachment and lack of social self-confidence.

H_{a11}: There is a positive relation between a preoccupied pattern of attachment and emotional reliance on another.

H_{a12}: There is a positive relation between a dismissing pattern of attachment and autonomy.

It was hypothesized that higher ratings on the secure scale would be related to lower total scores on interpersonal dependence. Analysis revealed a correlation of $-.29$ ($p \leq .01$), supporting this alternative hypothesis. Furthermore, the analysis revealed positive correlations between both the fearful and the preoccupied scales and total interpersonal dependency scores (See Table 12). These results are consistent with those of the non-clinical sample.

A one-way analysis of variance was performed, showing significant differences between the four attachment styles on the measure of dependency. The Duncan comparison of group means indicated that the secure group had significantly lower

total dependency scores than the other three groups (See Table 13).

It was expected that higher scores on the fearful attachment scale would be related to lack of social self-confidence. The data supported this alternative hypothesis. Further associations were revealed, with preoccupied subjects tending to report a lack of social self-confidence. Subjects with higher scores on the secure scale tended not to report experiencing a lack of self-confidence in relationships, thus confirming a trend noted in the non-clinical sample. In sum, these results were consistent with those of the non-clinical sample.

A one-way analysis of variance indicated the groups did not differ significantly on lack of social self-confidence scores.

Alternative hypothesis 11, the relation between emotional reliance on another and scores on the preoccupied scale, is supported. Subjects with higher scores on this scale tended to experience higher levels of emotional reliance. These results are consistent with the results from the non-clinical sample. Analysis also revealed a correlation of $-.23$ ($p \leq .05$) between the dismissing style and emotional reliance on another.

A one-way analysis of variance revealed no significant differences between the four categories on scores of emotional reliance on others.

Higher scores on the dismissing scale were expected to be associated with higher scores on autonomy. The data were consistent with alternative hypothesis 12, as they were in the non-clinical sample. The analysis also yielded significant relations between the secure and fearful styles and autonomy. A negative correlation was obtained between the secure pattern and autonomy, supporting the trend found in the non-clinical sample, and a positive correlation was obtained between the fearful style and level of autonomy.

Following a one-way analysis of variance which indicated significant differences between groups, the Duncan procedure revealed the secure group had significantly lower scores on autonomy than the fearful and dismissing groups (See Table 13).

In summary, the results of the *post hoc* analysis tended to replicate the findings of the non-clinical sample and predominantly supported Bartholomew's model of adult attachment.

CHAPTER V

SUMMARY, DISCUSSION, AND IMPLICATIONS

This chapter presents (a) a summary of the study; (b) a discussion of the findings; (c) limitations of the study; (d) a discussion of attachment from an ecological perspective; (e) implications for clinical practice; (f) and directions for future research in the area of adult attachment.

SUMMARY OF THE STUDY

It is believed that the nature and quality of close adult relationships are influenced by childhood experiences, especially those occurring within early parent-child relationships. These experiences tend to shape a child's basic beliefs about self and others; these beliefs then guide subsequent interpersonal relationships throughout life. Attachment theory is a way to conceptualize this process. The purposes of this study were to investigate Bartholomew's four patterns of adult attachment in a non-clinical sample of adults, and to extend this framework into a clinical adult sample.

Bartholomew (1990) proposed a model of adult attachment which systematizes Bowlby's conception of internal working models in terms of the intersection of the self and other. Models of both self and other can be dichotomized as positive or negative. Thus, four categories are possible: positive

self/positive other; negative self/positive other; positive self/negative other; and negative self/negative other.

The attachment styles reflecting positive models of self are secure and dismissing. Individuals who hold positive models of both self and other are considered to have a secure attachment style, and they tend to have satisfying adult relationships. Furthermore, this style is associated with warm and responsive relationships with attachment figures in childhood. The combination of a positive model of self and a negative model of other is labeled dismissing-avoidant. In this style, to defend against rejecting attachment figures, the attachment system was deactivated in childhood and emotional distance was used to develop and maintain a positive model of self. To protect themselves from expected disappointment from others, they avoid intimacy in relationships. Value is instead placed on independence, and dismissing persons tend to focus on achievement rather than relationships. This style is associated with cool and unresponsive parenting in childhood.

The attachment styles reflecting negative models of self are preoccupied and fearful-avoidant. Preoccupied persons hold negative models of self and positive models of other. They strive for self-acceptance by gaining others' acceptance and approval, resulting in a tendency to be overly-dependent. This style is related to experiences of inconsistent and insensitive parenting.

Individuals who hold negative models of both self and other are considered to have a fearful-avoidant attachment style. While they long for contact and intimacy with significant others, their low self-esteem leads them to be distrustful and fearful of others' rejection. They are likely to hold the belief others are uncaring and unavailable and that they themselves are not worthy of being loved; these beliefs result from rejecting or psychologically unavailable parents. Fearful individuals actively avoid any social situation or close relationship in which they feel they may be rejected. Their lack of social intimacy and their awareness of their own vulnerability in relationships results in anxiety and distress.

In this study, 54 adults who were not currently in psychotherapy comprised the non-clinical sample. The clinical sample consisted of 37 adults who were clients at one of two mental health clinics in East Lansing, Michigan. Each individual completed a set of questionnaires. In the non-clinical sample, information on demographics, attachment style, and three variables (self-esteem, intimacy, and interpersonal dependency) was gathered. In the clinical sample, information was gathered on demographics, attachment style, and five variables: self-esteem; intimacy; interpersonal dependency; interpersonal problems; and perceived parental warmth and acceptance in the family of origin.

Two research questions and twenty hypotheses were tested using Pearson Product-Moment correlation coefficients, chi-square analysis, and Student's *t*-tests. Data related to the samples were also analyzed.

DISCUSSION OF THE FINDINGS

This discussion focuses on the theoretical impact of the findings.

Research Question One

All four categories of attachment were identified in the non-clinical and clinical samples. This supports Bartholomew's four-category model of adult attachment. In the non-clinical sample, gender differences were revealed, with more females than males reporting a secure attachment style, and more males than females reporting a dismissing style. Previous studies (Bartholomew, 1990; Brennan et al., 1991) have also found more males than females rated themselves as dismissing. In her study, Bartholomew found more females than males reported a preoccupied attachment style, while Brennan et al. found more females than males reported a fearful style. No definite conclusion can be drawn about females, but it appears males are more likely than females to classify themselves as dismissing. This may reflect society's expectation that males, in general, should be independent. Gender role differences are a product of both society and the social organization of the family

(Rubin, 1983). Thus, gender roles are social constructions, which create powerful expectations which delineate acceptable behavior for males and females. The masculine role emphasizes autonomy, invulnerability, competition, and power (Meth & Pasick, 1990), while the feminine role stresses affiliation and relatedness to others (Miller, 1986). Young males are encouraged to develop a sense of separateness, whereas young females are rewarded for being relationally-oriented. Within this context, this study's finding that males are more likely to develop defensive independence is easily understood.

Research Question Two

This question was investigated only with the clinical group. Consistent with Bartholomew's findings, the fearful and the preoccupied attachment styles were associated with reports of more interpersonal problems than the secure and dismissing styles. This reflects not only their low self-esteem, but also the extreme relationship expectations of preoccupied individuals and the negative models of other that fearful persons hold.

Also consistent with Bartholomew's model and research is the finding that the secure style was not significantly related to either the total number of interpersonal problems experienced or to the assertive, submissive, intimate, responsible, or controlling subscales. This study also produced a new finding: the secure style was negatively

related to problems in being sociable. This is consistent with the theoretical model and is reflective of the positive models secure individuals hold of themselves and others which predisposes them to enjoy satisfying interpersonal relationships.

This study also produced the expected association between the dismissing style and problems with intimacy. Avoidance of intimacy is a defining characteristic of this style, due to its defensive independent stance. While dismissing individuals would be expected to experience other interpersonal problems, according to Bartholomew (1989), they would "also be expected to defensively underreport their problems, potentially attenuating effects for this group" (p. 54). It is likely dismissing persons would tend to perceive others as having problems, rather than themselves. In addition, the measure used (Inventory of Interpersonal Problems) is likely to underreport egosyntonic problems, as it asks respondents to report how distressing an interpersonal problem is to them. Interpersonal problems are not likely to be consciously experienced as very distressing by dismissing types.

Consistent with being associated with more interpersonal problems in general, the fearful and preoccupied patterns had positive correlations with five of the six subscales. Both styles were associated with problems being assertive, submissive, intimate, and too responsible. The fearful style was also associated with difficulties in being sociable,

while the preoccupied style was related to problems in being too controlling. While Bartholomew did not initially conceptualize the preoccupied style as being controlling, her research also revealed this association. She suggested a controlling interpersonal style may be a preoccupied individual's attempt to achieve the goal of others' positive evaluations of them.

These results, with one exception, support Bartholomew's model and previous findings. According to her model, fearful individuals would be expected to report problems related to being too submissive, rather than problems in being submissive, as found in this study. Bartholomew reported fearful individuals tend to be passive, lacking assertiveness, and socially inhibited, which reflects their negative model of self, coupled with their negative model of others. Indeed, in this study, the strongest relations were found between this group and problems in being assertive and sociable. A possible explanation of this contradictory finding may lie in the small sample size and the wide range of reported submissive scores. When an outlier was eliminated in a secondary analysis, a nonsignificant correlation resulted ($r = .29$, $p > .05$). Additional research with larger samples may clarify this discrepancy.

Measure of Self-Esteem

Hypotheses 1 through 4 considered the association between attachment styles and self-esteem. In both samples,

a secure style was related to high levels of self-esteem, and a fearful style was associated with low levels of self-esteem. In the non-clinical sample, the preoccupied pattern was also related to low self-esteem. The *post hoc* analysis produced results consistent with those found in the non-clinical sample. These results support the theoretical model and previous findings (Bartholomew, 1991). An unexpected result was that no significant association was found between the dismissing style and evaluation of self in either of the samples. The *post hoc* analysis of variance and Duncan comparison of group means, however, revealed the self-esteem scores of the secure and dismissing groups were significantly higher than the other two groups' scores. Thus, when individuals categorize themselves as being dismissing, the expected high self-esteem scores are found. This seems to reflect a lack of sensitivity in the continuous scale measurement of attachment style, in which individuals rate the degree to which each style is like them. It is possible for individuals to rate themselves highly on two or more scales, or, conversely, low on all scales, obscuring the results. Perhaps the forced choice of one style more accurately reflects their attachment style. Further research is needed to clarify this possibility.

Measure of Intimacy

Hypotheses 5 through 8 investigated relations between attachment styles and intimacy. The results largely

supported Bartholomew's theory. As hypothesized, a negative relation was found between a preoccupied style and intimacy in both samples. In the non-clinical sample, as hypothesized, the fearful and dismissing styles were also associated with low levels of intimacy in relationships. Once again, the *post hoc* analysis confirmed the non-clinical results. An unexpected result was that no significant relation was found between the secure style and level of intimacy in either sample. When group differences were analyzed *post hoc*, however, the secure group had significantly higher intimacy scores than the did the other three groups. This result, once again, may be related to the possible lack of sensitivity of the continuous scale attachment style measure.

Measure of Interpersonal Dependency

Hypotheses 9 through 12 examined the associations between the four attachment patterns and interpersonal dependency. Bartholomew and Larsen (1992) found significant relations between attachment style and three components of interpersonal dependency. Emotional reliance on another was associated with the preoccupied style; lack of social self-confidence was associated with the fearful style; and the dismissing style was related to assertion of autonomy. These associations were found in both samples in this study. In addition, Bartholomew reported the groups with negative models of self (fearful and preoccupied) were associated with

high scores on total interpersonal dependency. In this study, the preoccupied style was found to be positively correlated to total interpersonal dependency in both groups, and in the non-clinical sample, a positive association was also revealed between a fearful style and total dependency.

The *post hoc* combined sample confirmed the non-clinical findings, and added two more significant findings which were consistent with the theoretical model. The dismissing style was found to be negatively related to emotional reliance on another. This reflects the defensive independence of this style. The secure style was found to be negatively related to autonomy. This finding is consistent with the model in that the autonomy scale represents a defensive extreme of independence which is not an aspect of the secure pattern of attachment.

Additional examination of the non-clinical group provided further support for the four-category model of attachment. Consistent with the theory were negative relations between the secure style and total dependency and lack of social self-confidence. The secure individual is not expected to experience high levels of dependency, nor to experience the lack of assertiveness, oversensitivity to the opinions of others, and generally passive interpersonal style subsumed under lack of social self-confidence.

In the *post hoc* analysis of variance and comparison of group means, the secure group was found to have significantly lower total dependency scores than the other three groups.

This is consistent with Bartholomew's model, as is the finding that the secure group had significantly lower scores on autonomy than the dismissing group. The groups did not differ significantly, however, on lack of social self-confidence or on emotional reliance on another. This is not consistent with the model.

Other findings from the non-clinical sample did not support the theory. A positive association was found between the preoccupied style and lack of social self-confidence. Bartholomew theorized only the fearful style would show this pattern, and expected there would be no overlap between the subscales of the interpersonal dependency measure.

Also contradictory was the finding of a positive relation between the fearful style and autonomy. The post hoc ANOVA and comparison of group means also found the fearful group scored significantly higher than the secure group on autonomy. These findings are in opposition to the fearful style's positive relations with total dependency scores and lack of social self-confidence. The fearful style is described by Bartholomew as one of dependence, and this description is not consistent with the finding of defensive independence. This result may reflect a measurement problem with the continuous ratings of attachment styles, or unique characteristics of this sample. More research using larger, more heterogeneous samples of adults is necessary to determine if this finding represents idiosyncrasies of this sample, measurement problems, or a challenge to theory.

Measure of Perceived Parental Warmth and Acceptance

This variable was investigated in the clinical sample only and the results largely supported Bartholomew's theory. Consistent with the expectation that secure individuals would have experienced warm and sensitive parenting, the secure attachment style was associated with recollections of parental warmth and acceptance. Both the fearful and dismissing styles were associated with recollections of parental rejection. This is consistent with the expectation that parents of fearful and dismissing individuals would have been rejecting and/or lacking in warmth. No significant correlation was found for the preoccupied style, however. This may reflect the small size of the clinical sample.

Comparison of Samples

It was expected the clinical sample would have a greater percentage of insecure subjects than the non-clinical sample. This was not supported. Indeed, the percentages were quite similar: 48.7% and 46.3%.

It was also hypothesized that there would be differences in the mean scores of the self-esteem, intimacy, and dependency measures of the two samples. A significant difference was found only for the intimacy measure, with the clinical sample having a lower mean score than the non-clinical group. In fact, the mean scores for self-esteem, 32.1 and 33.9, were very close, as were the dependency means,

101.7 and 99.3. It would appear the two samples were more alike than different. This may be partially explained by the composition of the clinical sample. The subjects in the clinical sample were people who voluntarily came to a family clinic and who also volunteered to participate in a study about relationships. Other than acknowledging marital or family problems, this particular group of "clinical" subjects may not be different from the non-clinical subjects, especially along the dimensions measured in this study. The results of these hypotheses led the researcher to combine the samples in a *post hoc* analysis, the results of which tended to confirm the results of the non-clinical sample.

In summary, much of Bartholomew's work is supported by this research. One unexpected exception to this is the dismissing attachment style. Several hypotheses pertaining to this group were not supported by the results of this study.

LIMITATIONS OF THE STUDY

This study was an analysis of data gathered in a medium sized city and the surrounding area. Furthermore, the majority of the subjects had some association with Michigan State University. The generalizability of the findings is thus limited by any biases or unusual characteristics of the sampled community.

Generalizability is also limited due to the imbalance of race, education, and income in the samples. The samples are

predominantly Caucasian, and overrepresent higher education and income levels.

Self-reports were used exclusively to collect data. The limitations of self-report methods are acknowledged by the researcher. Self-report measures can not directly observe behavior and they often rely upon recollections of behavior, which may or may not be accurate.

Potential non-clinical subjects were randomly invited to participate, whereas all clients at the clinics were invited; naturally, only those persons willing to participate in a relationship study responded. As the questionnaires dealt with relationship issues in the present and in the past, the samples may underrepresent people who are uncomfortable with relationship issues or consider relationships unimportant, and overrepresent persons for whom relationship issues were, for some reason, particularly salient at the time.

A further limitation of this study is the small clinical sample size.

Finally, although most respondents grew up living with both parents, only recollections of mother-child relationships were assessed. This overlooks the importance of the father-child relationship, which may be the more significant relationship for some individuals. The Adult PARQ is designed to assess the mother-child relationship, but the questions could readily be adapted for the father-child relationship. A decision was made to assess only the mother-child relationship in this study, however, due to the already

considerable length of the clinical version of the set of questionnaires.

AN ECOLOGICAL PERSPECTIVE ON ADULT ATTACHMENT

Although Bowlby did not specifically identify attachment theory as an ecological theory, it is most definitely so. Attachment theory reflects constructs from general systems, ecological systems, and family ecosystems theories (Bertalanffy, 1968; Bronfenbrenner, 1989; Bubolz & Sontag, 1993). These theories hold that the interaction and interdependence of the elements of a system create a unique, functioning whole, and only by considering all the parts and their interactions can this whole be understood (Buckley, 1967; Kantor & Lehr, 1975).

At the child-as-system level, attachment is conceptualized as a goal-corrected behavioral system which utilizes feedback to achieve desired outcomes which ensure survival. Consistent with the premise that no system can be fully understood in isolation from its environment (Bertalanffy, 1968), infant attachment cannot be fully understood without considering the parent-as-system level, the parent-child system level, and the additional systems which influence those systems. Further, the notion of circular causation is incorporated, with both the child and parent influencing each other, as well as influencing and being influenced by systems external to them. Therefore, the attachment relationship system must be viewed as existing

within a network of relationships; it cannot be understood except within that context.

With its focus on human development and human behavior, Bronfenbrenner's ecological systems theory provides a useful framework for understanding attachment. Bronfenbrenner (1989) defined the ecology of human development as:

the scientific study of the progressive, mutual accommodation, *throughout the life course*, between an active, growing human being, and the changing properties of the immediate settings in which the developing person lives, as this process is affected by the relations between these settings, and by the larger contexts in which the settings are embedded. (p. 188)

Thus, the ultimate objective is the systematic understanding of the processes and outcomes of human development as a joint function of the person and the environment over time. Furthermore, the developmental outcomes at one point in time shape developmental outcomes in the future.

Bronfenbrenner contributed significantly to ecological theory with the introduction of this chronosystem model. The model considers not only constancy and change in the person, but also in the environment. Of particular importance are those life events or experiences which alter the existing relations between the person and environment, thus creating a dynamic for potential developmental change. This perspective is incorporated in attachment theory, as changes in environments impact upon the quality of a developing attachment relationship and also upon the stability of quality over time (Belsky and Isabella, 1988; Egeland & Farber, 1984; Erickson, Egeland, & Sroufe, 1985; Izard et

al., 1991; Vaughn et al., 1979). Thus, within this framework, adult attachment is a developmental outcome that has been, and continues to be, shaped by the individual and the individual's environments over time, and it can be best understood as such.

Bronfenbrenner conceptualized the ecological environment as a set of nested environments, consisting of a hierarchy of systems at four levels moving from the most proximal to the most distal. Of the four (microsystem, mesosystem, exosystem, and macrosystem), the most salient for adult attachment is the microsystem. The environments in which face-to-face interactions occur comprise the microsystem. This environment is the closest to the individual and includes patterns of activities, roles, and interpersonal relationships. This level also includes other persons with their own distinctive characteristics of temperament, personality, and systems of belief.

Family is generally the first and most important microsystem in which an individual functions. Qualities of the mother and of the parental relationship have significant effects upon quality of attachment (Belsky & Isabella, 1988; Durrett, Otaki, & Richards, 1984; Goldberg & Easterbrooks, 1984; Maslin & Bates, 1983). This study, in part, examined the associations between the degree of parental acceptance and rejection perceived by the individual over time and the resulting adult attachment style.

As the individual matures, siblings, friends, and romantic partners become important relationship partners. These relationships become significant microsystems which are highly influential in the development and maintenance of secure or insecure attachment styles. It is also within microsystems that alterations of internal working models of self and other occur over time. Thus, an ecological perspective fosters a more complete understanding of attachment throughout the life cycle.

IMPLICATIONS FOR CLINICAL PRACTICE

Bowlby (1988) maintained an attachment framework was beneficial in guiding clinical therapy with individuals, families, and groups, as the therapeutic relationship can be one in which resistant internal working models yield and become transformed. Within the security of this relationship, a secure attachment style may be nurtured.

The role of the therapist is to provide an environment in which a client is free to explore working models of self and attachment figures with the goal of "reappraising and restructuring them in the light of the new understanding he acquires and the new experiences he has in the therapeutic relationship" (Bowlby, 1988, p. 138). To this end, the therapist must provide the client with a secure base from which to explore the unpleasant and painful aspects of life, both past and present. The therapist is perceived as a trusted companion who provides encouragement, support, sympathy,

caring, and guidance. She encourages exploration of the client's family of origin; the expectations he holds about relationships; and the manner in which he currently engages in relationships which repeat relationship patterns from childhood, thus reinforcing existing models of self and other. As the client becomes aware of his working models and the experiences which led to their creation, he can be guided in understanding these experiences did not occur because of his own attributes, but primarily because of the attributes and behavior of the attachment figure. From this understanding, and from the therapist's respectful and responsive behavior toward him, he may be able to restructure his model of self from unworthy and unlovable to one in which self is worthy and deserving of love. Also by experiencing the therapist's responsiveness and support, the client may gain the ability and confidence to modify his model of other from rejecting, distant, and uncaring to trustworthy, available, and caring.

As the client develops a secure attachment style, benefits may accrue to others around him. Parenting can become more sensitive and responsive, thus encouraging security of attachment in his children (Main et al., 1985). Marital relationships can benefit as reenactment of old relationship patterns diminishes, freeing partners to focus on current relationship difficulties and strengths.

Byng-Hall (1991) stated an attachment framework provides goals for family therapy, primarily "to help the family to

establish their own sufficiently secure attachment pattern so that they can resolve problems for themselves when they arise" (p. 204). He also recommended an attachment perspective in understanding and altering distance regulation among family members.

Marvin and Stewart (1990) also recommended an attachment framework for understanding family interactions and patterns. In particular, they noted the commonalities between Ainsworth's attachment styles and Minuchin's (1974) classification of family organizations. The attachment categories of secure, anxious-avoidant, and anxious-ambivalent correspond quite closely with his family classifications of "'adaptive' (mutually sensitive, openly communicative, and supportive while respectful of developmentally and situationally appropriate autonomy), 'disengaged' (avoidant or underinvolved, angry and insensitive), or 'enmeshed' (overinvolved, intrusive, ambivalent, and disrespectful of appropriate autonomy and boundaries)" (p. 77). They maintained an attachment framework facilitates greater understanding of family subsystems, boundaries, and family dysfunctions such as triangles and parentification, enabling the therapist to intervene more effectively.

In summary, attachment theory has much to offer clinicians in their work with individuals, couples, and families.

DIRECTIONS FOR FUTURE RESEARCH

Research utilizing Bartholomew's attachment model is still in the early stages. Further research is needed to confirm the findings of existing studies.

More research is required with a greater diversity of populations. The homogeneity of this study's samples (race, education, and income) limits generalizability of findings. Future investigations would also benefit from larger samples.

Future research should utilize a variety of measures. In her initial research, Bartholomew (1991) used self-reports, peer-reports, and interviews. This approach should be continued. This is especially important in assessing the dismissing attachment style, as self-report measures alone are likely to be less reliable with this group.

Another area to be investigated is the influence of other attachment figures on the resulting attachment style. Fathers, grandparents, or other significant relationship partners would be expected to influence the developing person in important ways.

Other areas for research include investigating how attachment patterns influence the selection of marital or relationship partners. It would be expected partners would be selected which would confirm internal working models. If so, how is relationship quality and satisfaction influenced?

In conclusion, this exploratory study represents a preliminary step in research utilizing Bartholomew's four-category model of adult attachment. It utilized older adult

samples than did previous studies and extended the model into a clinical population. Although some contradictions were found, the results of this investigation were largely supportive of Bartholomew's model. It appears this model has much to offer in understanding adult attachment.

APPENDICES

APPENDIX A
UNIVERSITY COMMITTEE ON RESEARCH INVOLVING HUMAN SUBJECTS '
APPROVAL OF STUDY

UCRIHS Approval

MICHIGAN STATE UNIVERSITY

OFFICE OF VICE PRESIDENT FOR RESEARCH
AND DEAN OF THE GRADUATE SCHOOL

EAST LANSING • MICHIGAN • 48824-1046

November 4, 1992

TO: Lynn M. Darling
985 Ives Road
Mason, MI 48854

RE: IRB #: 92-514
TITLE: ADULT ATTACHMENT IN CLINICAL AND NON-CLINICAL
SAMPLES: VALIDATING A FOUR-CATEGORY MODEL OF
ATTACHMENT
CATEGORY: 1-C
REVISION REQUESTED: N/A
APPROVAL DATE: 11/03/1992

The University Committee on Research Involving Human Subjects' (UCRIHS) review of this project is complete. I am pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and methods to obtain informed consent are appropriate. Therefore, the UCRIHS approved this project with any revision listed above.

UCRIHS approval is valid for one calendar year, beginning with the approval date shown above. Investigators planning to continue a project beyond one year must seek updated certification. Request for renewed approval must be accompanied by all four of the following mandatory assurances.

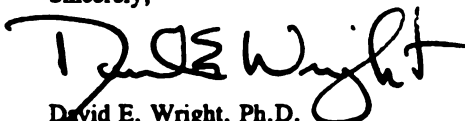
1. The human subjects protocol is the same as in previous studies.
2. There have been no ill effects suffered by the subjects due to their participation in the study.
3. There have been no complaints by the subjects or their representatives related to their participation in the study.
4. There has not been a change in the research environment nor new information which would indicate greater risk to human subjects than that assumed when the protocol was initially reviewed and approved.

There is a maximum of four such expedited renewals possible. Investigators wishing to continue a project beyond that time need to submit it again for complete review.

UCRIHS must review any changes in procedures involving human subjects, prior to initiation of the change. Investigators must notify UCRIHS promptly of any problems (unexpected side effects, complaints, etc.) involving human subjects during the course of the work.

If we can be of any future help, please do not hesitate to contact us at (517) 355-2180 or FAX (517) 336-1171.

Sincerely,


David E. Wright, Ph.D.
UCRIHS Chair

DEW:pjm

cc: Dr. Thomas Luster

APPENDIX B
COMMUNICATION WITH SUBJECTS

MICHIGAN STATE
UNIVERSITY

CDL Parent Recruitment Letter

Dear Child Development Laboratories Parents,

My name is Lynn Darling and I am a doctoral student at Michigan State University in the Department of Family and Child Ecology. I am writing to invite you to participate in a study I am conducting about close relationships in adulthood. Professor Thomas Luster is assisting me in this research. I am especially interested in relationship styles and how these styles are related to the importance people place on relationships and how people feel about themselves in relationships.

You are very important to this research. I would sincerely appreciate your cooperation and assistance with this project. If you each choose to participate in this study, I will mail you two questionnaire booklets, one for each of you. If only one of you decides to participate, I will send you one questionnaire booklet. The questionnaire booklet will take between twenty and thirty minutes to complete. Please be assured that the information gathered in this study will be strictly confidential. There will be an identification number on your booklet that is for mailing purposes only. Your name will not appear on these booklets at any time, nor will anyone other than the researchers read your responses. Reports of the research will consist of summarized results with no information regarding specific individuals.

I have enclosed a project information sheet with further details about this project. Your willingness to volunteer your time will assist me in better understanding the nature of close relationships in adulthood. If you would like to participate in this study, please sign the enclosed informed consent forms and mail them to me in the enclosed stamped envelope. (If you both choose to participate, you must each sign a consent form.) I will then send you the questionnaire booklets and a stamped, addressed return envelope.

If you have any questions about this project, I'll be happy to answer them. Please call me at 676-1197. If you wish to have a copy of the study's findings, please check the box at the bottom of the consent form and I will mail you the results when the study has been completed. Thank you for your time and consideration of this project. I hope you

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48824-1030

517/355-7680
FAX 517/336-2953

will decide to become a part of this research, and I am looking forward to hearing from you in the very near future.

Sincerely,

Lynn Darling

CTU Recruitment Letter

Dear Clerical Technical Union Member,

My name is Lynn Darling and I am a doctoral student at Michigan State University in the Department of Family and Child Ecology. I am writing to invite you and your spouse or partner to participate in a study I am conducting about close relationships in adulthood. Professor Thomas Luster is assisting me in this research. I am especially interested in relationship styles and how these styles are related to the importance people place on relationships and how people feel in relationships. Your name was selected for this research through a random search of the Clerical Technical membership list after approval of the CTU Board of Directors. I have enclosed a project information sheet with further details about this project.

You are very important to this research. I would sincerely appreciate your cooperation and assistance with this project. If you each choose to participate in this study, I will mail you each a set of questionnaires. If only one of you decides to participate, I will send you one set of questionnaires. The questionnaires will take between twenty and thirty minutes to complete. Please be assured that the information gathered in this study will be strictly confidential. Your name will not appear on these questionnaires at any time, nor will anyone other than the researchers read your questionnaires. Reports of the research will consist of summarized results with no information regarding specific individuals. There will be an identification number on your questionnaires for mailing purposes only.

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FAX 517/336-2953

If you would like to participate in this study, please sign the enclosed informed consent forms and mail them to me in the enclosed stamped envelope. (If you both choose to participate, you must each sign a consent form.) I will then send you the questionnaire sets and a stamped, addressed return envelope.

If you have any questions about this project, I will be happy to answer them. Please feel free to call me at 676-1197. If you wish to have a copy of the study's findings, please check the box at the bottom of the consent form and I will mail you the results when the study has been completed. Thank you for your time and consideration of this

(over)

project. I hope you will decide to become a part of this research, and I am looking forward to hearing from you in the near future.

Sincerely,

Lynn Darling

MICHIGAN STATE UNIVERSITY

Clinical Recruitment Letter

Dear Family and Child Clinic Client,

My name is Lynn Darling and I am a doctoral student at Michigan State University in the Department of Family and Child Ecology. I am writing to invite you to participate in a study I am conducting about close relationships in adulthood. Professor Thomas Luster is assisting me in this research. I am especially interested in relationship styles and how these styles are related to the importance people place on relationships and how people feel about themselves in relationships.

You are very important to this research. I would sincerely appreciate your cooperation and assistance with this project. If you choose to participate in this study, I will mail you a set of questionnaires. The questionnaires will take between forty-five minutes to an hour to complete. Please be assured that the information gathered in this study will be strictly confidential. There will be an identification number on your questionnaires that is for mailing purposes only. Your name will not appear on these questionnaires at any time, nor will anyone other than the researchers read your questionnaires. Reports of the research will consist of summarized results with no information regarding specific individuals.

Your participation or non-participation will in no way affect the therapy you receive at the Family and Child Clinic. None of the staff, including your therapist, will know of your participation. Further, no one at the clinic will have access to any of the information you provide in this study. You may, however, wish to discuss your participation and your responses with your therapist. This is entirely up to you.

I have enclosed a project information sheet with further details about this project. Your willingness to volunteer your time will assist me in better understanding the nature of close relationships in adulthood. If you would like to participate in this study, please sign the enclosed informed consent form and mail it to me in the enclosed stamped envelope. I will then send you the questionnaire set and a stamped, addressed return envelope.

If you have any questions about this project, I will be happy to answer them. Please call me at 676-1197. If you wish to have a copy of the study's findings, please check

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the box on the bottom of the consent form and I will mail you the results when the study has been completed. Thank you for your time and consideration of this project. I hope you will decide to become a part of this research, and I am looking forward to hearing from you in the very near future.

Sincerely,

Lynn Darling

ECO
Dear
or Dear

MICHIGAN STATE
U N I V E R S I T Y

Private Clinic Recruitment Letter

Dear Clients,

My name is Lynn Darling and I am a doctoral student at Michigan State University in the Department of Family and Child Ecology. I am writing to invite you to participate in a study I am conducting about close relationships in adulthood. Dr. Thomas Luster is assisting me in this research. I am interested in relationship styles and how these styles are related to the importance people place on relationships and how they feel in relationships. I have enclosed a project information sheet with further details.

I would sincerely appreciate your participation in this project. If you choose to participate in this study, simply sign the enclosed consent forms and return them to me in the enclosed envelope. I will then mail you the questionnaire booklets. The booklets will take approximately forty-five minutes to complete. Please be assured the information gathered in this study will be strictly confidential. No one other than your therapist and myself will read your responses and the final reports of the research will consist of summarized results with no information regarding specific individuals. (There will be an identification number on your questionnaires, however, for mailing purposes.)

If you have any questions about this project, I will be happy to answer them if you will call me at 676-1197. Your therapist can also answer most of your questions, if you prefer. If you wish to have a copy of the study's findings, please check the box on the bottom of the consent form and I will mail you the results when the study has been completed. Thank you for your consideration of this project. I hope you'll decide to join me in this research, and I'm looking forward to hearing from you in the near future.

Sincerely,

Lynn Darling

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Participant Acknowledgment Letter

Dear Project Participant,

Thank you so much for your willingness to participate in the study I am conducting on close relationships in adulthood.

I have enclosed a questionnaire booklet for you to complete. This should require no more than twenty to thirty minutes of your time. Please do not write your name on the questionnaire booklet. Please follow the directions, answering as honestly as you can. Let me once again assure you that your responses will be strictly confidential. After you have completed your responses, please mail them to me in the enclosed stamped, addressed envelope.

Please don't hesitate to contact me at any time should you have any questions or comments about the questionnaires or this project. I'll be happy to discuss any concerns with you.

Thank you again for your generosity in deciding to participate in this project. Without volunteers like yourself, it would be impossible for me to complete this study. I believe the information gathered will be important in understanding how adults interact in, and feel about close relationships.

Sincerely,

Lynn Darling

985 Ives Road
Mason, MI 48854
(517) 676-1197

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MICHIGAN STATE
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Second Recruitment Letter

Dear

My name is Lynn Darling and I am a doctoral candidate at Michigan State University in the Department of Family and Child Ecology. Several weeks ago I invited you to participate in a study I am conducting on close relationships in adulthood. Professor Thomas Luster is assisting me in this research.

You have not yet indicated that you would like to participate in this project. Your participation would contribute significantly to the success of this research and I hope you are still considering becoming involved in this study. If you have not responded because you have questions which have not yet been answered, please feel free to call me (676-1197) and I will provide you with the additional information you desire. In the event you have misplaced the original invitation, I have enclosed additional consent forms and a project information sheet.

If you decide to join the project, simply sign the consent forms and return them in the enclosed stamped, addressed envelope and your questionnaires will be mailed to you. Although I would appreciate the participation of you both, I would also welcome your individual involvement.

I sincerely hope you will choose to participate in this study and I look forward to hearing from you soon. Thank you for your time and consideration of this invitation.

Sincerely,

Lynn Darling
(517) 676-1197

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Reminder Postcard

Just a reminder - If you have not yet returned your Adult Relationship questionnaire booklet(s), please do so at your earliest convenience. If you have changed your mind about participating, please let me know so I can find a replacement for you. If you've already returned your booklet(s), many thanks!

Lynn Darling

Final Reminder

Dear Project Participant,

Some weeks ago I mailed your Adult Relationship booklet to you. If you have not yet returned it, I hope you will do so, as the University deadline for completion of my dissertation is quickly approaching. If possible, please complete and return your booklet by January 23, 1993. If you have already mailed your booklet back to me, please accept my gratitude for your participation. In case you have misplaced the original booklet, I have enclosed another for your convenience, as well as a stamped return envelope.

Thank you very much for agreeing to participate in this study. Your contribution is extremely important to my work and without your assistance I would not be able to successfully complete my project.

Sincerely,

Lynn Darling

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Mason, MI 48854
(517) 676-1197**

NON-CLINICAL CONSENT FORM

The purpose of this study is to gain a better understanding of close relationships in adulthood. I understand and agree to the following:

1. I freely and voluntarily consent to participate in the study of close adult relationships conducted by Lynn Darling, a graduate student in the Michigan State University Department of Family and Child Ecology. I understand this research will be conducted under the supervision of Dr. Thomas Luster, Associate Professor of Family and Child Ecology at Michigan State University.
2. I understand my participation in this project will involve completing a questionnaire booklet in my home and returning it to the researcher. These questionnaire booklet will ask questions about my patterns of behavior in relationships, how I feel about close relationships, and how I feel about myself in relationships. I also understand general demographic questions will be asked (gender, marital status, education, and so on). This will require 20 to 30 minutes.
3. I understand my name will only be known to the project investigator, and then, only for mailing purposes. I also understand my name will not appear on the questionnaire booklet or in reports of the research findings. Further, the information I provide will be held in strict confidence and the results of this study will only be presented in summarized form with no information regarding specific individuals.
4. I understand that I may withdraw from this study at any time with no penalty to me.
5. I understand I may request a summary of this project's findings by checking the box at the bottom of this consent form. I also understand the findings will not be immediately available, but will be mailed to me upon completion of the study.
6. I understand that if any questions or concerns arise as a result of my participation in this study, I may contact Lynn Darling (676-1197) or Dr. Thomas Luster (353-3867).

Signed by: _____ Date _____

☐ Yes, I would like a copy of the results of this study upon its completion.

FAMILY & CHILD CLINIC CONSENT FORM

The purpose of this study is to gain a better understanding of close relationships in adulthood. I understand and agree to the following:

1. I freely and voluntarily consent to participate in the study of close adult relationships conducted by Lynn Darling, a graduate student in the Michigan State University Department of Family and Child Ecology. I understand this research will be conducted under the supervision of Dr. Thomas Luster, Associate Professor of Family and Child Ecology at Michigan State University.
2. I understand my participation in this project will involve completing a set of questionnaires in my home and returning them to the researcher. These questionnaires will ask questions about my patterns of behavior in relationships, how I feel about close relationships, how I feel about myself in relationships, and my recollections of my childhood relationship with a parent. I also understand general demographic questions will be asked (gender, marital status, education, etc.). This will require 45 minutes to 1 hour.
3. I understand my name will only be known to the project investigators, and then, only for mailing purposes. I also understand my name will never appear on any of the questionnaires or in reports of the research findings. Further, the information I provide in the questionnaires will be held in strict confidence and the results of this study will only be presented in summarized form with no information regarding specific individuals.
4. I understand my participation in this study will in no way affect the therapy I receive at the Family and Child Clinic. I understand none of the staff, including my therapist, will know of my participation, unless I choose to inform them. Further, no one at the clinic will have access to any of the information I provide in this study.
5. I understand that I may withdraw from this study at any time with no penalty to me.
6. I understand I may request a summary of this project's findings by checking the box at the bottom of this consent form. I also understand the findings will not be immediately available, but will be mailed to me upon completion of the study.
7. I understand that if any questions or concerns arise as a result of my participation in this study, that I may contact Lynn Darling (676-1197) or Dr. Thomas Luster (353-3867).

Signed by: _____ **Date** _____
[I] Yes, I would like a copy of the results of this study upon its completion.

PRIVATE CLINIC CONSENT FORM

The purpose of this study is to gain a better understanding of close relationships in adulthood. I understand and agree to the following:

1. I freely and voluntarily consent to participate in the study of close adult relationships conducted by Lynn Darling, a graduate student in the Michigan State University Department of Family and Child Ecology. I understand this research will be conducted under the supervision of Dr. Thomas Luster, Associate Professor of Family and Child Ecology at Michigan State University.
2. I understand my participation in this project will involve completing a questionnaire booklet in my home and returning it to the researcher. These questionnaires will ask questions about my patterns of behavior in relationships, how I feel about close relationships, how I feel about myself in relationships, and my recollections of my childhood relationship with a parent. I also understand general demographic questions will be asked (gender, marital status, education, and so on). Completing the booklet will require approximately forty-five minutes.
3. I understand my name will only be known to the project investigators and my therapist and only they will read my responses. I also understand my name will not appear on the booklet nor in reports of the research findings.
4. I understand I may withdraw from this study at any time with no penalty to me.
5. I understand I may request a summary of this project's findings by checking the box at the bottom of this consent form. I also understand the findings will not be immediately available, but will be mailed to me upon completion of the study.
6. I understand that if any questions or concerns arise as a result of my participation in this study, that I may contact Lynn Darling (676-1197), Dr. Thomas Luster (353-3867), or my therapist.

Signed by: _____ Date _____

Address

☐ Yes, I would like a copy of the results of this study upon its completion.

NON-CLINICAL PROJECT INFORMATION SHEET

WHAT IS THIS PROJECT ABOUT?

The purpose of this project is to better understand how adults interact in close relationships, how they feel about themselves in these relationships, and how they feel about being in close relationships.

WHO IS IN CHARGE OF THIS PROJECT?

This research is being conducted by Lynn Darling, who is a doctoral candidate in the Department of Family and Child Ecology at Michigan State University. All doctoral candidates are required to conduct original research as the final requirement for their degrees. This project is being conducted under the supervision of Dr. Thomas Luster, Department of Family and Child Ecology.

WHY SHOULD I PARTICIPATE IN THIS PROJECT?

Your participation in this study will add to our knowledge about adult relationships. This information, along with findings from other studies, can help professionals to better understand and assist individuals and families to increase their satisfaction in relationships of all kinds. You may also find that by completing the questionnaires you have a clearer understanding of yourself and your own relationship expectations and patterns.

HOW MUCH OF MY TIME WILL BE REQUIRED IF I PARTICIPATE IN THIS PROJECT?

Your participation in this project will require approximately 20 to 30 minutes of your time.

WHAT WILL I BE EXPECTED TO DO?

You will be asked to complete a questionnaire booklet in your home. The booklet will be mailed to you upon receipt of your signed consent form. After you have completed the questionnaire booklet, you simply mail it back to the researcher in the stamped, addressed envelope which is provided to you.

WHO WILL SEE THE INFORMATION I PROVIDE?

As with all research, the information gathered is strictly confidential. Your name will not appear on any of the questionnaire booklet. All results will be reported in a summary form, with no reference to a specific individual's answers. Only the researchers will ever have access to the names of participants, and that is for mailing purposes only.

WHAT IF I CHANGE MY MIND ABOUT PARTICIPATION AFTER CONSENTING TO PARTICIPATE?

Although we would like all participants to complete all parts of the study, you have the right to withdraw from the study at any time with no penalty. Because only a limited number of individuals will be involved in the study, we ask, however, that you notify Lynn Darling of your decision so that she may find someone to take your place.

WILL I BE ABLE TO FIND OUT THE RESULTS OF THIS PROJECT?

Yes, if you wish, we will send you a report of the study's conclusions. Simply check the box at the bottom of the consent form and the results will be mailed to you when the study is completed.

WHOM SHOULD I CONTACT IF I HAVE ANY QUESTIONS OR CONCERNS?

You may contact the primary researcher, Lynn Darling, at (517) 676-1197 or Dr. Thomas Luster, Associate Professor, Department of Family and Child Ecology, at (517) 353-3867 if at any time you have questions or concerns about your participation or about the study in general.

Primary Researcher: Lynn Darling
985 Ives Road
Mason, MI 48854
(517) 676-1197

FAMILY & CHILD CLINIC PROJECT INFORMATION SHEET**WHAT IS THIS PROJECT ABOUT?**

The purpose of this project is to better understand how adults interact in close relationships, how they feel about themselves in these relationships, how they feel about being in close relationships, and how their relationship expectations developed.

WHO IS IN CHARGE OF THIS PROJECT?

This research is being conducted by Lynn Darling, who is a doctoral candidate in the Department of Family and Child Ecology at Michigan State University. All doctoral candidates are required to conduct original research as the final requirement for their degrees. This project is being conducted under the supervision of Dr. Thomas Luster, Department of Family and Child Ecology.

WHY SHOULD I PARTICIPATE IN THIS PROJECT?

Your participation in this study will add to our knowledge about adult relationships. This information, along with findings from other studies, may help professionals to better understand and assist individuals and families to increase their satisfaction in relationships of all kinds. You may find that by completing the questionnaires you have a clearer understanding of yourself and your own relationship expectations and patterns.

HOW MUCH OF MY TIME WILL BE REQUIRED IF I PARTICIPATE IN THIS PROJECT?

Your participation in this project will require approximately 45 minutes to 1 hour of your time.

WHAT WILL I BE EXPECTED TO DO?

You will be asked to complete a set of questionnaires in your home. These questionnaires will be mailed to you upon receipt of your signed consent form. After you have completed the questionnaires, you simply mail them back to the primary researcher in a stamped, addressed envelope which is provided to you.

WHO WILL SEE THE INFORMATION I PROVIDE?

As with all research, the information gathered is strictly confidential. Your name will not appear on any of the questionnaires. All results will be reported in a summary form, with no reference to a specific individual's answers. Only the researchers will ever have access to the names of participants, and that is for mailing purposes only.

No one at the Family and Child Clinic, including your therapist, will know if you are participating in this study. No one will have access to any information regarding your responses. You, of course, are free to discuss your participation, if you wish.

WHAT IF I CHANGE MY MIND ABOUT PARTICIPATION AFTER CONSENTING TO PARTICIPATE?

Although we would like all participants to complete all parts of the study, you have the right to withdraw from the study at any time with no penalty. Because only a limited number of individuals will be involved in the study, we ask, however, that you notify Lynn Darling of your decision so that she may find someone to take your place.

WILL I BE ABLE TO FIND OUT THE RESULTS OF THIS PROJECT?

Yes, if you wish, we will send you a report of the study's conclusions. Simply check the box at the bottom of the consent form and the results will be mailed to you when the study is completed.

WHOM SHOULD I CONTACT IF I HAVE ANY QUESTIONS OR CONCERNS?

You may contact the primary researcher, Lynn Darling, at (517) 676-1197 or Dr. Thomas Luster, Associate Professor, Department of Family and Child Ecology, at (517) 353-3867 if at any time you have questions or concerns about your participation or about the study in general.

Primary Researcher: Lynn Darling
985 Ives Road
Mason, MI 48854
(517) 676-1197

PRIVATE CLINIC PROJECT INFORMATION SHEET**WHAT IS THIS PROJECT ABOUT?**

The purpose of this project is to better understand how adults interact in close relationships, how they feel about themselves in these relationships, how they feel about being in close relationships, and how their relationship expectations developed.

WHO IS IN CHARGE OF THIS PROJECT?

This research is being conducted by Lynn Darling, who is a doctoral candidate in the Department of Family and Child Ecology at Michigan State University. All doctoral candidates are required to conduct original research as the final requirement for their degrees. This project is being conducted under the supervision of Dr. Thomas Luster, Department of Family and Child Ecology.

WHY SHOULD I PARTICIPATE IN THIS PROJECT?

Your participation in this study will add to our knowledge about adult relationships. This information, along with findings from other studies, may help professionals to better understand and assist individuals and families to increase their satisfaction in relationships of all kinds. You may find that by completing the questionnaires you have a clearer understanding of yourself and your own relationship expectations and patterns.

HOW MUCH OF MY TIME WILL BE REQUIRED IF I PARTICIPATE IN THIS PROJECT?

Your participation in this project will require approximately forty-five minutes of your time.

WHAT WILL I BE EXPECTED TO DO?

You will be asked to complete a questionnaire booklet in your home. This booklet will be mailed to you upon receipt of your signed consent form. After you have completed the questionnaires, you may return them to your therapist for use in your therapy. He will return them to me.

WHO WILL SEE THE INFORMATION I PROVIDE?

As with all research, the information gathered is strictly confidential. Your name will not appear on the questionnaire booklet. Only your therapist and myself will read your responses. All results will be reported in summary form, with no reference to specific individual's answers.

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WHAT IF I CHANGE MY MIND ABOUT PARTICIPATION AFTER CONSENTING TO PARTICIPATE?

Although we would like all participants to complete all parts of the study, you have the right to withdraw from the study at any time with no penalty. Because only a limited number of individuals will be involved in the study, we ask, however, that you notify Lynn Darling or your therapist of your decision so someone can be found to take your place.

WILL I BE ABLE TO FIND OUT THE RESULTS OF THIS PROJECT?

Yes, if you wish, we will send you a report of the study's conclusions. Simply check the box at the bottom of the consent form and the results will be mailed to you when the study is completed.

WHOM SHOULD I CONTACT IF I HAVE ANY QUESTIONS OR CONCERNS?

You may contact the primary researcher, Lynn Darling, at (517) 676-1197 or Dr. Thomas Luster, Associate Professor, Department of Family and Child Ecology, at (517) 353-3867 if at any time you have questions or concerns about your participation or about the study in general. Your therapist will also be available to respond to your questions or concerns.

Primary Researcher: Lynn Darling
985 Ives Road
Mason, MI 48854
(517) 676-1197

APPENDIX C
INSTRUMENTS

Relationship Questionnaire

SECTION I - Part One

Instructions: Please answer the following questions about yourself.

1. What is your gender?
(Please check one)
 1. ☐ Male
 2. ☐ Female
2. What is your birth date?
(Month/Day/Year)

____/____/____
3. What is your marital status? (Please check one)
 1. ☐ Never married (Please go to Question 6)
 2. ☐ Married for the first time For how long? ____ (Please go to Question 6)
 3. ☐ Remarried For how long? ____
 4. ☐ Separated, but not divorced For how long? ____
 5. ☐ Divorced For how long? ____
 6. ☐ Widowed For how long? ____
4. How many times have you been married? ____
5. How many times have you been divorced? ____
6. What is your current relationship status? (Please check one)
 1. ☐ Not currently in a relationship
 2. ☐ Dating more than one person
 3. ☐ In a monogamous non-married relationship
 4. ☐ In a monogamous married relationship
7. How many children do you have? Please include your children who are living away from home. If you have no children, please write "0". ____
8. Are you a biological or adopted child of the parents who primarily raised you?
 1. ☐ Biological
 2. ☐ Adopted
9. What is the current marital status of your parents? (Please check one)
 1. ☐ Never married
 2. ☐ Married
 3. ☐ Separated Your age at time of separation? ____
 4. ☐ Divorced Your age at time of divorce? ____
 5. ☐ Widowed Your age at time of death? ____
 6. ☐ Both parents are deceased Your age at times of death? ____

10. If your parents did not live together while you were growing up, with whom did you live?

- | | |
|-----------------------|--------------------------|
| 1. _____ Mother | 4. _____ Other relatives |
| 2. _____ Father | 5. _____ Non-relatives |
| 3. _____ Grandparents | |

11. How many sisters and brothers do you have? Please include stepsisters and stepbrothers who lived with you. If none, please write "0".

- | | |
|------------------|-------------------|
| 1. _____ Sisters | 2. _____ Brothers |
|------------------|-------------------|

12. Are you currently engaged in counseling with a mental health professional?

- | | |
|--------------|---------------------|
| 1. _____ Yes | For how long? _____ |
| 2. _____ No | |

13. Have you ever been in counseling with a mental health professional?

- | | |
|--------------|---------------------|
| 1. _____ Yes | For how long? _____ |
| 2. _____ No | |

14. Which of the following best describes your racial or ethnic identification? (Please check one)

- | | |
|--|--|
| 1. _____ African American | 4. _____ White (Caucasian) |
| 2. _____ Hispanic | 5. _____ Asian |
| 3. _____ Native American (American Indian) | 6. _____ Other _____
(Please specify) |

15. Please write the number of years of education you have. _____

16. What is your approximate individual yearly income as reported on your 1991 W-2 Forms?

- | | |
|--------------------------------|--------------------------------|
| 1. _____ None | 11. _____ \$45,000 to \$49,999 |
| 2. _____ Less than \$5,000 | 12. _____ \$50,000 to \$54,999 |
| 3. _____ \$5,000 to \$9,999 | 13. _____ \$55,000 to \$59,999 |
| 4. _____ \$10,000 to \$14,999 | 14. _____ \$60,000 to \$64,999 |
| 5. _____ \$15,000 to \$19,999 | 15. _____ \$65,000 to \$69,999 |
| 6. _____ \$20,000 to \$24,999 | 16. _____ \$70,000 to \$74,999 |
| 7. _____ \$25,000 to \$29,999 | 17. _____ \$75,000 to \$79,999 |
| 8. _____ \$30,000 to \$34,999 | 18. _____ \$80,000 to \$84,999 |
| 9. _____ \$35,000 to \$39,999 | 19. _____ \$85,000 to \$89,999 |
| 10. _____ \$40,000 to \$44,999 | 20. _____ \$90,000 and above |

SECTION ONE - Part Two

Instructions: The following paragraphs are descriptions of the four general relationship styles that people most often report. Please read each paragraph carefully. Then, circle the number underneath each of the paragraphs below indicating how much like you, or not like you, it is.

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

1	2	3	4	5	6	7
Not at all like me			Somewhat like me			Very much like me

- B. I am somewhat 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 sometimes 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 like me			Somewhat like me			Very much like me

- C. 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 like me			Somewhat like me			Very much like me

- D. 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			Somewhat like me			Very much like me

Now, circle the letter of the one paragraph that is most like you.

A B C D

Rosenberg Self-Esteem Inventory

SECTION TWO

Instructions: The following statements are opinions that people have about themselves. Read each statement and indicate how much you agree or disagree with these opinions. For each statement, circle one of the four responses that best represents your feelings.

1. I feel that I'm a person of worth, at least on an equal basis with others.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

2. I feel that I have a number of good qualities.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

3. All in all, I am inclined to feel that I am a failure.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

4. I am able to do things as well as most people.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

5. I feel I do not have much to be proud of.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

6. I take a positive attitude toward myself.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

7. On the whole, I am satisfied with myself.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

8. I wish I could have more respect for myself.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

9. I certainly feel useless at times.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

10. At times I think I am no good at all.

1	2	3	4
Strongly disagree	Disagree	Agree	Strongly agree

Miller Social Intimacy Scale

SECTION THREE

Instructions: Think about the closest relationship you are currently in. This may be with a spouse, partner, relative or friend. With that relationship in mind, please answer each of the following questions by circling the number below the question which best represents your feelings.

1. When you have leisure time, how often do you choose to spend it with him/her alone?

1	2	3	4	5	6	7	8	9	10
Very rarely				Some of the time					Almost always

2. How often do you keep very personal information to yourself and do not share it with him/her?

1	2	3	4	5	6	7	8	9	10
Very rarely				Some of the time					Almost always

3. How often do you show him/her affection?

1	2	3	4	5	6	7	8	9	10
Very rarely				Some of the time					Almost always

4. How often do you confide very personal information to him/her?

1	2	3	4	5	6	7	8	9	10
Very rarely				Some of the time					Almost always

5. How often are you able to understand his/her feelings?

1	2	3	4	5	6	7	8	9	10
Very rarely				Some of the time					Almost always

6. How often do you feel close to him/her?

1	2	3	4	5	6	7	8	9	10
Very rarely				Some of the time					Almost always

7. How much do you like to spend time alone with him/her?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

8. How much do you feel like being encouraging and supportive to him/her when he/she is unhappy?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

9. How close do you feel to him/her most of the time?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

10. How important is it to you to listen to his/her very personal concerns?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

11. How satisfying is your relationship with him/her?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

12. How affectionate do you feel towards him/her?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

13. How important is it to you that he/she understands your feelings?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

14. How much damage is caused by a typical disagreement in your relationship with him/her?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

15. How important is it to you that he/she be encouraging and supportive to you when you are unhappy?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

16. How important is it to you that he/she show you affection?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

17. How important is your relationship with him/her in your life?

1	2	3	4	5	6	7	8	9	10
Not much				A little					A great deal

Interpersonal Dependency Inventory

SECTION FOUR

Instructions: Please indicate how much you agree or disagree with the following statements by circling the number under the statement that best represents how you feel.

- | | | | | |
|--|---|---|---|-------|
| 1. I prefer to be by myself. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 2. When I have a decision to make, I always ask for advice. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 3. I do my best work when I know it will be appreciated. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 4. I can't stand being fussed over when I am sick. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 5. I would rather be a follower than a leader. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 6. I believe people could do a lot more for me if they wanted to. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 7. As a child, pleasing my parents was very important to me. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 8. I don't need other people to make me feel good. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 9. Disapproval by someone I care about is very painful to me. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 10. I feel confident of my ability to deal with most of the personal problems I am likely to meet in life. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 11. I'm the only person I want to please. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 12. The idea of losing a close friend is terrifying to me. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |
| 13. I am quick to agree with the opinions expressed by others. | 1 | 2 | 3 | 4 |
| Disagree | | | | Agree |

14. I rely only on myself.
1 Disagree 2 3 4 Agree
15. I would be completely lost if I didn't have someone special.
1 Disagree 2 3 4 Agree
16. I get upset when someone discovers a mistake I've made.
1 Disagree 2 3 4 Agree
17. It is hard for me to ask someone for a favor.
1 Disagree 2 3 4 Agree
18. I hate it when people offer me sympathy.
1 Disagree 2 3 4 Agree
19. I easily get discouraged when I don't get what I need from others.
1 Disagree 2 3 4 Agree
20. In an argument, I give in easily.
1 Disagree 2 3 4 Agree
21. I don't need much from people.
1 Disagree 2 3 4 Agree
22. I must have one person who is very special to me.
1 Disagree 2 3 4 Agree
23. When I go to a party, I expect that the other people will like me.
1 Disagree 2 3 4 Agree
24. When I am sick, I prefer that my friends leave me alone.
1 Disagree 2 3 4 Agree
25. I'm never happier than when people say I've done a good job.
1 Disagree 2 3 4 Agree
26. It is hard for me to make up my mind about a TV show or movie until I know what other people think.
1 Disagree 2 3 4 Agree
27. I am willing to disregard other people's feelings in order to accomplish something that's important to me.
1 Disagree 2 3 4 Agree

42. I am very confident about my own judgement.
1 2 3 4
Disagree Agree
43. I have always had a terrible fear that I will lose the love and support of people I desperately need.
1 2 3 4
Disagree Agree
44. I don't have what it takes to be a good leader.
1 2 3 4
Disagree Agree
45. I would feel helpless if deserted by someone I love.
1 2 3 4
Disagree Agree
46. What other people say doesn't bother me.
1 2 3 4
Disagree Agree

Inventory of Interpersonal Problems

SECTION FIVE

Here is a list of problems that people report in relating to other people. Please read the list below, and for each item, consider whether that problem has been a problem for you with respect to any significant person in your life. Then select the number that describes how distressing that problem has been, and circle that number.

EXAMPLE

How much have you been distressed by this problem?

It is hard for me to:	Not at all	A little bit	Moderately	Quite a bit	Extremely
00. Get along with my relatives	0	(1)	2	3	4

Part I. The following are things you find hard to do with other people.

It is hard for me to:	Not at all	A little bit	Moderately	Quite a bit	Extremely
1. trust other people.	0	1	2	3	4
2. say "no" to other people.	0	1	2	3	4
3. join in on groups.	0	1	2	3	4
4. keep things private from people.	0	1	2	3	4
5. let other people know what I want.	0	1	2	3	4
6. tell a person to stop bothering me.	0	1	2	3	4
7. introduce myself to new people.	0	1	2	3	4
8. confront people with problems that come up.	0	1	2	3	4
9. be assertive with another person.	0	1	2	3	4
10. make friends.	0	1	2	3	4
11. express my admiration for another person.	0	1	2	3	4
12. have someone dependent on me.	0	1	2	3	4
13. disagree with other people.	0	1	2	3	4
14. let other people know when I'm angry.	0	1	2	3	4
15. make a long-term commitment to another person.	0	1	2	3	4
16. stick to my own point of view and not be swayed by other people.	0	1	2	3	4
17. be another person's boss.	0	1	2	3	4
18. do what another person wants me to do.	0	1	2	3	4

It is hard for me to:	Not at all	A little bit	Moderately	Quite a bit	Extremely
19. get along with people who have authority over me.	0	1	2	3	4
20. be aggressive toward other people when the situation calls for it.	0	1	2	3	4
21. compete against other people.	0	1	2	3	4
22. make reasonable demands on other people.	0	1	2	3	4
23. socialize with other people.	0	1	2	3	4
24. get out of a relationship that I don't want to be in.	0	1	2	3	4
25. take charge of my own affairs without help from other people.	0	1	2	3	4
26. show affection to other people.	0	1	2	3	4
27. feel comfortable around other people.	0	1	2	3	4
28. get along with people.	0	1	2	3	4
29. understand another person's point of view.	0	1	2	3	4
30. tell personal things to other people.	0	1	2	3	4
31. believe that I'm loveable to other people.	0	1	2	3	4
32. express my feelings to other people directly.	0	1	2	3	4
33. be firm when I need to be.	0	1	2	3	4
34. experience a feeling of love for another person.	0	1	2	3	4
35. be competitive when the situation calls for it.	0	1	2	3	4
36. set limits on other people.	0	1	2	3	4
37. be honest with other people.	0	1	2	3	4
38. be supportive of another person's goals in life.	0	1	2	3	4
39. feel close to other people.	0	1	2	3	4
40. really care about other people's problems.	0	1	2	3	4
41. argue with another person.	0	1	2	3	4
42. relax and enjoy myself when I go out with other people.	0	1	2	3	4
43. feel superior to another person.	0	1	2	3	4
44. become sexually aroused toward the person I really care about.	0	1	2	3	4

It is hard for me to:	Not at all	A little bit	Moderately	Quite a bit	Extremely
45. feel that I deserve another person's affection.	0	1	2	3	4
46. keep up my side of a friendship.	0	1	2	3	4
47. spend time alone.	0	1	2	3	4
48. give a gift to another person.	0	1	2	3	4
49. have loving and angry feelings towards the same person.	0	1	2	3	4
50. maintain a working relationship with someone I don't like.	0	1	2	3	4
51. set goals for myself without other people's advice.	0	1	2	3	4
52. accept another person's authority over me.	0	1	2	3	4
53. feel good about winning.	0	1	2	3	4
54. ignore criticism from other people.	0	1	2	3	4
55. feel like a separate person when I am in a relationship.	0	1	2	3	4
56. allow myself to be more successful than other people.	0	1	2	3	4
57. feel or act competent in my role as parent.	0	1	2	3	4
58. let myself feel angry at someone I like.	0	1	2	3	4
59. respond sexually to another person.	0	1	2	3	4
60. accept praise from another person.	0	1	2	3	4
61. put somebody else's needs before my own.	0	1	2	3	4
62. give credit to another person for doing something well.	0	1	2	3	4
63. stay out of other people's business.	0	1	2	3	4
64. take instructions from people who have authority over me.	0	1	2	3	4
65. feel good about another person's happiness.	0	1	2	3	4
66. get over the feeling of loss after a relationship has ended.	0	1	2	3	4
67. ask other people to get together socially with me.	0	1	2	3	4
68. feel angry at other people.	0	1	2	3	4

It is hard for me to:	Not at all	A little bit	Moderately	Quite a bit	Extremely
69. give constructive criticism to another person.	0	1	2	3	4
70. experience sexual satisfaction.	0	1	2	3	4
71. open up and tell my feelings to another person.	0	1	2	3	4
72. forgive another person after I've been angry.	0	1	2	3	4
73. attend to my own welfare when somebody else is needy.	0	1	2	3	4
74. be assertive without worrying about hurting the other person's feelings.	0	1	2	3	4
75. be involved with another person without feeling trapped.	0	1	2	3	4
76. do work for my own sake instead of for someone else's approval.	0	1	2	3	4
77. be close to somebody without feeling that I'm betraying somebody else.	0	1	2	3	4
78. be self-confident when I am with other people.	0	1	2	3	4

Part II. The following are things that you do too much.

79. I fight with other people too much.	0	1	2	3	4
80. I am too sensitive to criticism.	0	1	2	3	4
81. I feel too responsible for solving other people's problems.	0	1	2	3	4
82. I get irritated or annoyed too easily.	0	1	2	3	4
83. I am too easily persuaded by other people.	0	1	2	3	4
84. I want people to admire me too much.	0	1	2	3	4
85. I act like a child too much.	0	1	2	3	4
86. I am too dependent on other people.	0	1	2	3	4
87. I am too sensitive to rejection.	0	1	2	3	4
88. I open up to people too much.	0	1	2	3	4
89. I am too independent.	0	1	2	3	4
90. I am too aggressive toward other people.	0	1	2	3	4
91. I try to please other people too much.	0	1	2	3	4
92. I feel attacked by other people too much.	0	1	2	3	4

The following are things that you do too much.	Not at all	A little bit	Moderately	Quite a bit	Extremely
93. I feel too guilty for what I have done.	0	1	2	3	4
94. I clown around too much.	0	1	2	3	4
95. I want to be noticed too much.	0	1	2	3	4
96. I criticize other people too much.	0	1	2	3	4
97. I trust other people too much.	0	1	2	3	4
98. I try to control other people too much.	0	1	2	3	4
99. I avoid other people too much.	0	1	2	3	4
100. I am affected by another person's moods too much.	0	1	2	3	4
101. I put other people's needs before my own too much.	0	1	2	3	4
102. I try to change other people too much.	0	1	2	3	4
103. I am too gullible.	0	1	2	3	4
104. I am overly generous to other people.	0	1	2	3	4
105. I am too afraid of other people.	0	1	2	3	4
106. I worry too much about other people's reactions to me.	0	1	2	3	4
107. I am too suspicious of other people.	0	1	2	3	4
108. I am influenced too much by another person's thoughts and feelings.	0	1	2	3	4
109. I compliment other people too much.	0	1	2	3	4
110. I worry too much about disappointing other people.	0	1	2	3	4
111. I manipulate other people too much to get what I want.	0	1	2	3	4
112. I lose my temper too easily.	0	1	2	3	4
113. I tell personal things to other people too much.	0	1	2	3	4
114. I blame myself too much for causing other people's problems.	0	1	2	3	4
115. I am too easily bothered by other people making demands of me.	0	1	2	3	4
116. I argue with other people too much.	0	1	2	3	4

The following are things that you do too much.	Not at all	A little bit	Moderately	Quite a bit	Extremely
117. I am too envious and jealous of other people.	0	1	2	3	4
118. I keep other people at a distance too much.	0	1	2	3	4
119. I worry too much about my family's reactions to me.	0	1	2	3	4
120. I let other people take advantage of me too much.	0	1	2	3	4
121. I too easily lose a sense of myself when I am around a strong-minded person.	0	1	2	3	4
122. I feel too guilty for what I have failed to do.	0	1	2	3	4
123. I feel competitive even when the situation does not call for it.	0	1	2	3	4
124. I feel embarrassed in front of other people too much.	0	1	2	3	4
125. I feel too anxious when I am involved with another person.	0	1	2	3	4
126. I am affected by another person's misery too much.	0	1	2	3	4
127. I want to get revenge against people too much.	0	1	2	3	4

Adult Parental Acceptance-Rejection Questionnaire

SECTION SIX

Instructions: The following statements describe the way different mothers act toward their children. Read each statement carefully and think about how well it describes the way your mother treated you while you were growing up, especially during the time when you were about 7 - 12 years old. If someone else was your major caregiver, respond to the statements with that person in mind.

Major caregiver, if not your mother _____

Answer quickly. Give your first impression, then go to the next item. If a statement is *basically* true about the way your mother treated you, then ask yourself, "Was it almost *always* true?" If you think your mother almost always treated you that way, circle "4". If the statement was sometimes true about the way your mother treated you, circle "3." If you feel the statement is *basically* untrue about how your mother treated you, then ask yourself, "Is it *rarely* true?" or "Is it almost *never* true?" If it is rarely true, circle "2"; if it is almost never true, circle "1."

Remember, there are no right or wrong answers to any statement. Respond to each statement the way you feel your mother really was, rather than the way you might have liked her to be.

EXAMPLE

	Almost Never True	Rarely True	Sometimes True	Almost Always True
00. My mother hugged and kissed me when I was good.	1	2	3	4

	Almost Never True	Rarely True	Sometimes True	Almost Always True
MY MOTHER				
1. Said nice things about me.	1	2	3	4
2. Nagged or scolded me when I was bad.	1	2	3	4
3. Totally ignored me.	1	2	3	4
4. Did not really love me.	1	2	3	4
5. Talked to me about our plans and listened to what I had to say.	1	2	3	4
6. Complained about me to others when I did not listen to her.	1	2	3	4
7. Took an active interest in me.	1	2	3	4
8. Encouraged me to bring my friends home and tried to make things pleasant for them.	1	2	3	4
9. Ridiculed and made fun of me.	1	2	3	4

	Almost Never True	Rarely True	Sometimes True	Almost Always True
MY MOTHER				
10. Ignored me as long as I did not do anything to bother her.	1	2	3	4
11. Yelled at me when she was angry.	1	2	3	4
12. Made it easy for me to tell her things that were important.	1	2	3	4
13. Treated me harshly.	1	2	3	4
14. Enjoyed having me around her.	1	2	3	4
15. Made me feel proud when I did well.	1	2	3	4
16. Hit me even when I did not deserve it.	1	2	3	4
17. Forgot things she was supposed to do for me.	1	2	3	4
18. Saw me as a big bother.	1	2	3	4
19. Praised me to others.	1	2	3	4
20. Punished me severely when she was angry.	1	2	3	4
21. Made sure I had the right kind of food to eat.	1	2	3	4
22. Talked to me in a warm and loving way.	1	2	3	4
23. Got angry at me easily.	1	2	3	4
24. Was too busy to answer my questions.	1	2	3	4
25. Seemed to dislike me.	1	2	3	4
26. Said nice things to me when I deserved them.	1	2	3	4
27. Got mad quickly and picked on me.	1	2	3	4
28. Was concerned who my friends were.	1	2	3	4
29. Was really interested in what I did.	1	2	3	4
30. Said many unkind things to me.	1	2	3	4
31. Ignored me when I asked for help.	1	2	3	4

	Almost Never True	Rarely True	Sometimes True	Almost Always True
MY MOTHER				
32. Thought it was my own fault when I was having trouble.	1	2	3	4
33. Made me feel wanted and needed.	1	2	3	4
34. Told me that I got on her nerves.	1	2	3	4
35. Paid a lot of attention to me.	1	2	3	4
36. Told me how proud she was of me when I was good.	1	2	3	4
37. Went out of her way to hurt my feelings.	1	2	3	4
38. Forgot important things I thought she should remember.	1	2	3	4
39. Made me feel I was not loved any more if I misbehaved.	1	2	3	4
40. Made me feel what I did was important.	1	2	3	4
41. Frightened or threatened me when I did something wrong.	1	2	3	4
42. Liked to spend time with me.	1	2	3	4
43. Tried to help me when I was scared or upset.	1	2	3	4
44. Shamed me in front of my playmates when I misbehaved.	1	2	3	4
45. Tried to stay away from me.	1	2	3	4
46. Complained about me.	1	2	3	4
47. Cared about what I thought and liked me to talk about it.	1	2	3	4
48. Felt other children were better than I was no matter what I did.	1	2	3	4
49. Cared about what I would like when she made plans.	1	2	3	4
50. Let me do things I thought were important, even if it was inconvenient for her.	1	2	3	4
51. Thought other children behaved better than I did.	1	2	3	4

	Almost Never True	Rarely True	Sometimes True	Almost Always True
MY MOTHER				
52. Made other people take care of me (for example, a neighbor or relative.)	1	2	3	4
53. Let me know I was not wanted.	1	2	3	4
54. Was interested in the things I did.	1	2	3	4
55. Tried to make me feel better when I was hurt or sick.	1	2	3	4
56. Told me how ashamed she was when I misbehaved.	1	2	3	4
57. Let me know she loved me.	1	2	3	4
58. Treated me gently and with kindness.	1	2	3	4
59. Made me feel ashamed or guilty when I misbehaved.	1	2	3	4
60. Tried to make me happy.	1	2	3	4

APPENDIX D
TABLE 14: DEMOGRAPHIC INFORMATION

Table 14
Demographic Information

Variable	Non-Clinical	Mean	Clinical	Mean
Gender				
Male	22 (40.7%)		15 (40.5%)	
Female	32 (59.3%)		22 (59.5%)	
Age				
21-24	0		1	
25-29	6		9	
30-34	13		4	
35-39	15	38.7	5	37.2
40-44	7		11	
45-49	4		4	
50-54	1		2	
55-59	5		1	
60 +	1		0	
Marital Status				
Never Married	9 (17%)		2 (5%)	
First Marriage	34 (63%)		17 (46%)	
Remarried	7 (13%)		4 (11%)	
Separated	0 (0%)		5 (13%)	
Divorced	4 (7%)		8 (22%)	
Widowed	0 (0%)		1 (3%)	
Number of Marriages				
0	9		2	
1	37	1	27	1.2
2	8		6	
3	0		2	
Number of Divorces				
0	44		23	
1	9	.2	10	.5
2	1		3	
3	0		1	
Current Relationship Status				
None	7 (13%)		4 (11%)	
Dating > one	0 (0%)		0 (0%)	
Dating one	6 (11%)		8 (22%)	
Married	41 (76%)		25 (68%) ^a	

^aincludes persons who are separated but not divorced

Table 14 (con't).

Variable	Non-Clinical	Mean	Clinical	Mean
Number of Years Married				
1-5	7	11.7	3	11.3
6-10	14		11	
11-15	10		0	
16-20	5		4	
21-25	2		1	
26 +	3		2	
Number of children				
0	14	1.7	11	2.0
1	6		5	
2	20		10	
3	12		6	
4 +	2		5	
Biological child	54 (100%)		35 (95%)	
Adopted child	0		2 (5%)	
Parents' Marital Status				
Never Married	0 (0%)		1 (3%)	
Married	29 (54%)		22 (59%)	
Separated	1 (2%)		0 (0%)	
Divorced	9 (17%)		5 (14%)	
Widowed	10 (18%)		7 (19%)	
Both deceased	5 (9%)		2 (5%)	
Person raising child, if not parents together				
Mother	2		2	
Father	1		0	
Grandparents	1		0	
Other relative	0		0	
No. of Siblings				
Sisters		1.3		1.4
0	14		9	
1	16		9	
2	15		12	
3	7		6	
≥4	2		1	
Brothers		1.5		1.5
0	14		5	
1	16		19	
2	13		6	
3	7		5	
≥4	4		2	

Table 14 (con't).

Variable	Non-Clinical	Mean	Clinical	Mean
Currently in counseling?				
Yes	0		37	
No	54		0	
No. of months in counseling				
≤ 3 months			15	
≤ 6 months			6	
≤ 12 months	NA		4	18.5
≤ 18 months			6	
≤ 24 months			2	
> 24 months			3	
Missing Data			1	
Ever in counseling?				
Yes	14		25	
No	37		10	
Missing Data	1		2	
No. of months in counseling				
≤ 3 months	4		5	
≤ 6 months	2		1	
≤ 12 months	2	10.5	3	25.0
≤ 18 months	0		2	
≤ 24 months	1		4	
> 24 months	3		7	
Missing Data	2		3	
Race				
African-Am.	1 (2%)		1 (3%)	
Asian	3 (6%)		0	
Caucasian	50 (92%)		36 (97%)	
Education (yrs)				
12	7		4	
13-16	19	16.4	19	15.6
17-18	17		9	
19-24	6		4	

Table 14 (con't).

Variable	Non-Clinical	Mean	Clinical	Mean
Income				
None	2		0	
< 5,000	0		4	
5-9,999	1		4	
10-14,999	4		2	
15-19,999	3		2	
20-24,999	11		5	
25-29,999	8		2	
30-34,999	5	30-	3	25-
35-39,999	2	34,999	5	29,000
40-44,999	9		0	
45-49,999	0		1	
50-54,999	1		1	
55-59,999	0		2	
60-64,999	1		2	
65-69,999	0		2	
70-74,999	0		1	
75-79,999	1		1	
80,000 +	3		0	

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