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**THE RELATIONSHIP BETWEEN EARLY MALTREATMENT, LATER  
ATTACHMENT, AND SELF-ESTEEM IN OLDER CHILD ADOPTees**

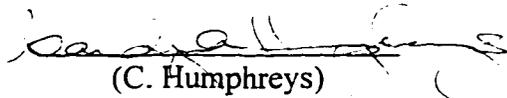
BY

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Accepted in partial fulfillment of the requirements for  
the degree of MASTER OF SCIENCE in Applied Psychology (Clinical)  
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## TABLE OF CONTENTS

List of Tables .....	iv
Abstract .....	v
Introduction	
History of Adoption .....	1
Older Child Adoptees .....	3
Examining Adjustment of Older Child Adoptees .....	5
Attachment Development .....	7
Attachment and Adolescent Adjustment .....	9
Relationship Between Early Maltreatment and Early Attachment .....	10
Ellis's A-B-C Model .....	15
Internal Working Models .....	16
Older Child Adoptees and Attachment to Caregivers .....	25
Attachment and Self-Esteem in Adopted Adolescents .....	27
Hypotheses .....	31
Method	
Participants .....	31
Measures .....	35
Procedure .....	38
Results .....	38
Correlations .....	39
Hypothesis 1 .....	43
Hypothesis 2 .....	50
Hypothesis 3 .....	51
Discussion .....	52
Hypothesis 1 .....	52
Hypothesis 2 .....	64
Hypothesis 3 .....	66
Summary .....	67
Major Conclusions .....	67
Confounds, Limitations and Suggestions for Future Research .....	69
References .....	73
Appendix A: Cover Letter .....	79
Appendix B: Life Experiences Questionnaire .....	80

## LIST OF TABLES

Table 1. Means and Standard Deviations on Demographic Variables .....	35
Table 2. Intercorrelations Between Attachment and Self-Esteem Measures Across Groups: Descriptive Information .....	40
Table 3. Clinical Older Child Adoptees: Intercorrelations Between Attachment and Self- Esteem Measures: Descriptive Information .....	41
Table 4. Clinical Infant Adoptees: Intercorrelations Between Attachment and Self-Esteem Measures: Descriptive Information .....	42
Table 5. Non-clinical Infant Adoptees: Intercorrelations Between Attachment and Self- Esteem Measures: Descriptive Information .....	43
Table 6. Means and Standard Deviations on Attachment and Self-Esteem Measures .....	45
Table 7. Regression Analysis: Prediction of Maternal Attachment by Demographic Variables .....	47
Table 8. Regression Analysis: Prediction of Paternal Attachment by Demographic Variables .....	48
Table 9. Regression Analysis: Prediction of Peer Attachment by Demographic Variables .....	49
Table 10. Regression Analysis: Prediction of General Attachment by Demographic Variables .....	50

## ABSTRACT

### The Relationship Between Early Maltreatment, Later Attachment, and Self-Esteem in Older Child Adoptees

By

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April, 1997

This study examined the effects of early maltreatment on later attachment and self-esteem in adolescent adoptees. Nine clinical older child adoptees with a history of maltreatment were examined in relation to ten clinical and 15 non-clinical infant adoptees with no history of maltreatment. Delayed removal from biological home suggested history of maltreatment. Subjects currently receiving psychological services were classified as clinical, while those who had never received psychological services were classified as non-clinical. The Inventory of Parent and Peer Attachment (IPPA - Armsden and Greenberg, 1987), and the Revised UCLA Loneliness Scale (RULS - Russell, Peplau, & Cutrona, 1980) were used to obtain attachment information. Level of self-esteem was assessed using the Rosenberg Self-Esteem Scale (RSE - Rosenberg, 1979). Early maltreatment did not predict poor attachment or low self-esteem, as evidenced by older child adoptees' high scores on the respective measures. Of the three groups examined, clinical infant adoptees demonstrated the lowest levels of self-esteem and attachment. Finally, self-esteem and attachment were found to be positively correlated in all three adoptive groups. Implications for parental and therapeutic roles in the amendment of early maltreatment, resolution of adoption-related issues and development of attachment and self-esteem are discussed.

## **THE RELATIONSHIP BETWEEN EARLY MALTREATMENT, LATER ATTACHMENT, AND SELF-ESTEEM IN OLDER CHILD ADOPTEES**

### History of Adoption

Adoption is defined as “the act of establishing a person as parent to one who is not in fact or in law his (/her) child” (Brittanica, 1985, p. 105). Adoption may be distinguished from fostering by its characteristic of permanency. That is, whereas the latter is a temporary placement of the child with alternate caregivers, adoption is a permanent placement in which the child’s legal ties to his/her biological parents are severed. Historically, the main purpose of adoption was to ensure continuity of the male line in a particular family, usually for political, religious, or economic reasons. The adoptive parents, having failed to produce a son of their own, used adoption as a method of procuring a male lineage. Thus the adoptees were always male, with the adoption often taking place in adulthood.

The desire to continue one’s family line or secure rights to inheritance are no longer considered the primary motives for adoption. Today, the desire to create a parent-child relationship is the most frequently cited reason for adoption. Although traditionally adoptive parents have consisted of young, married, middle- to upper-class couples who were unable to bear children of their own, these criteria for adoptive candidacy are being broadened in recent years. For instance, there is increasing acceptance of wider age gaps between adopter and adoptee, low income families, families in which the mother is employed outside the home, single-parent families, and transracial and transreligious adoptions. Additionally, applicants now include individuals able to procreate but seeking an alternate form of family building. These individuals opt for adoption rather than

natural childbirth for various personal reasons, such as the desire to not contribute to the growing world population, or as an act of compassion toward parentless children. Given these changing trends, there has been a resultant increase in the pool of adoptive applicants.

Adoptive parents have typically preferred to bring infant children rather than older children into their homes. The rationale is that by adopting an infant, one will be able to simulate, as much as possible, a biological parent-child relationship. Specifically, one will be able to experience the parenting of an infant, and impact on his/her early socialization. According to Kadushin (1970), in 1967, the median age of children at the time of adoptive placement was 2.1 months. The practice of infant adoption was very popular, whereas that of older child adoption was not. Hence, the prospect of adoption for individuals not placed in infancy was very grim. Although infants have remained the adoptee of choice, since the mid 1970's the resistance to adopting older children has begun to dissipate, and older adoptees, like their infant counterparts, are beginning to find increasing acceptance in adoptive placement (Jewitt, 1978). This gradual broadening of acceptance has been due, perhaps in large part, to the lack of available infants in relation to prospective adoptive parents (Reitz & Watson, 1992). Another factor has been the growing number of older couples that seek to adopt. These couples often prefer older children with whom there is a more proportionate age gap; the rationale being the anticipation of a better goodness-of-fit between parents and child.

The experiences of parents adopting an older child, however, differ in many respects from those adopting an infant. Older child adoptees, in general, have experienced

events and circumstances in their families of origin unlike those that are experienced by infant adoptees in their adoptive homes.

### Older Child Adoptees

For the purpose of the present study, older child adoptees are defined as individuals who have been removed from their birth families at no earlier than 18 months of age, and therefore, have spent a portion of their early lives with their biological parent(s). The relevant demographic statistics, although obtained through an American study (Kadushin, 1970), are applicable to Canadian older child adoptions. The cohort of older adoptees included in the present study were largely born between 1976 and 1978, thus, only six to eight years after the completion of Kadushin's survey. Thus, the demographics surrounding adoption at this historical period would be appropriate to describe the subjects examined in the present study.

According to Kadushin (1970), birth parents of older child adoptees are typically ill-prepared and ill-equipped to raise families. They have substantially less formal education than average adults, and tend to hold generally lower paying jobs. For example in 1960, about 43% of all white adults had completed high school, compared to only 9% of the biological parents of older child adoptees. Consequently, 82% of these biological fathers and 85% of the biological mothers held occupations requiring minimal to no formal training. Many of these families were living at or below the level of poverty (Kadushin, 1970).

Biological parents of older child adoptees tend to have atypically large families. In 1962, 52% of these families had five or more children compared to 10.5% of families in the general public (Kadushin, 1970). The biological families of older child adoptees are

more likely than those in the general population to live in substandard, overcrowded housing facilities. There tends to be a high incidence of pathology in older child adoptees' biological parents, including mental deficiency, mental illness, emotional instability, alcoholism, prostitution, and erratic work history. For example, 31% of the mothers and 21% of the fathers in Kadushin's study were noted as emotionally unstable, and 20% of the mothers and 47% of the fathers were regarded as alcoholic. Furthermore, the biological parents of older child adoptees tend to have experienced poor parenting and personal deprivation in their own upbringings. In Kadushin's study, 28% of this group evidenced such background histories. Finally, the marriages of older child adoptee biological parents are more likely than those in the general population to be characterized by discord, arguing, instability, separations, and extramarital affairs.

Older child adoptees typically receive less than adequate care in their families of origin, and often are subjected to various forms of abuse (physical, sexual, or emotional) and/or neglect (physical or emotional). Physical neglect, according to Kadushin (1970), is defined as the inadequate provision of food, clothing, health needs, or living conditions. Emotional neglect includes parenting that is characterized by indifference - a lack of affection, recognition, encouragement, and approval of the child. In general, older child adoptees are deprived by their biological parents of the type of parental relationship considered necessary for secure attachment and healthy emotional development.

As a result of their deprived life circumstances, biological families of older child adoptees are often unable to adequately rear their children. This situation generally results in one of two outcomes. In some cases, the biological parents realize that they are unable to provide sufficient care for their child and so relinquish him/her to foster care. More

often, however, the child is legally removed by authorities that have been made aware of the ongoing abuse and/or neglect and the child is then rendered to foster care. In some cases, these biological parents will attempt to better their parenting skills and living situation in order to regain custody of their child. In other cases, however, the parents are either unable or unwilling to prove themselves to be fit parents and hence eventually lose their parental rights. Their children must then remain in foster care until a permanent adoptive placement can be found. For some older child adoptees, particularly those who have incurred early maltreatment, the interim between removal from biological family and placement with adoptive family may last several years and include several foster placements (Reitz & Watson, 1992). Once a permanent placement is found, there is usually a probationary adoptive period, generally about one year, following which the adoption may be either disrupted or finalized (Kadushin, 1970; Jewitt, 1978).

#### Examining Adjustment of Older Child Adoptees

This study is concerned with older child adoptions that are finalized, and the adjustment that the older child adoptee must make to his/her new family. The aspects of adjustment that are of particular concern are those of attachment, and self-esteem. Each will be discussed in sequence.

Attachment is considered by many to be the foundation of healthy social and emotional development (Bowlby, 1969,1973,1980; Ainsworth, Blehar, Waters, & Wall, 1978; Kadushin, 1970; Gleitman, 1991), and yet relatively little research has explored its quality in older child adoptees (Barth & Berry, 1988). Furthermore, the research that has been conducted has generally not been empirical in nature, relying instead on case study and qualitative methods (Schmidt, Rosenthal, & Bombeck, 1988). Finally, most

researchers make inferences about adoptee attachment from parental reports or dyadic observations which threatens the validity of their conclusions, as either method is subject to personal bias. Parents' reports may be biased by their view of the attachment relationship, while dyadic observations may be biased by the theoretical orientation of the observer (Groze, 1992). Thus, to avoid these potential sources of error, Andrews (1971) and Groze (1992) suggest that data should be gathered directly from the adoptee. It should be noted, however, that doing so provides the perspective of only one member of the attachment dyad. However, since the present study is examining the relationship between the adoptee's early life experiences and aspects of later well-being, it is the adoptee's subjective point of view on the attachment relationship that is of primary concern. As such, the present study investigates older child adoptee attachment, specifically from the perspective of the older child adoptee.

The focus of the present study is on older child adoptees who have reached adolescence. Adolescents, unlike young children, have the capacity for abstract thought, which affects their perceptions of and experiences in close relationships. That is, they are able to formulate impressions of parents and peers that incorporate not only observable behavior, but underlying intent and motivation as well. For example, a young child who is disallowed to sleep late on a weeknight may interpret the parent's actions as deliberately hurtful, whereas the adolescent, while resenting this constraint may simultaneously be able to appreciate the parent's underlying positive intent. Thus, while the infant tends to alternatively idealize or devalue the attachment figure, the adolescent's perception is characterized by greater depth and stability. Examining adolescents also provides the opportunity to examine the impact of early experiences after several years in

a presumably stable family environment. Finally, adolescent adoptees, unlike their younger counterparts are old enough to complete self-report measures assessing their sense of attachment to significant others. This is important because it allows data to be obtained about the adolescent's experience of the attachment relationship through a direct inquiry method.

### Attachment Development

Attachment refers to the strong and long-lasting emotional tie that develops between certain individuals. The attachment between an infant and his/her primary caregiver, in particular, is regarded with great importance because it is said to lay the foundation for all later relationships (Gleitman, 1991). Furthermore, once formed, attachment patterns are believed to persist over time into adolescence and young adulthood, as will be illustrated in the sections on internal working model stability and transference. Thus, in order to fully appreciate the quality of attachment in adolescence, it is important to understand how attachment develops in infancy. Additionally, a discussion of infant attachment serves to introduce the reader to both attachment theory and relevant terminology. This early affective bond evolves from certain behavioral exchanges between the infant and the primary caregiver (Bowlby, 1969). These exchanges consist of attachment overtures by the infant and responses by the caregiver to these overtures.

Attachment behaviors are emitted by the infant and are designed to maintain or obtain proximity to or contact with one's primary caregiver. According to Bischof (1975) and Sroufe and Waters (1977), the child's underlying goal in exhibiting these closeness-promoting behaviors is to experience a sense of security. Examples of attachment

behavior in infancy include crying, eye contact, head turning, sucking, smiling, babbling, clinging, and reaching. As the infant grows older, more advanced verbal and locomotive behaviors are introduced. Crawling, walking, words and short phrases are added to the child's repertoire of attachment behaviors. Attachment behaviors are most reliably activated when the infant feels threatened, fatigued, or sick. When the infant's primary caregiver responds to these behaviors as desired, that is, by affectionately holding or being close to the infant, the infant's discomfort is assuaged and the attachment bond is strengthened. (Bowlby, 1969). According to Bowlby (1969), the propensity to engage in attachment behaviors is instinctive or "in-built". Attachment behavior serves the biological function of protecting the attached individual from physical and psychological harm, and thus has survival value. Hence, in summary, attachment is what occurs when proximity-inducing behaviors, with felt security as their goal, are engaged in by the infant and responded to by the primary caregiver.

As mentioned previously, the focus of the present study is on the attachment relationships of adolescents, which are believed to evolve from attachments in infancy. The proposed link between infant and adolescent attachment has received support, albeit largely retrospective in nature. Both the theory and relevant research will be discussed in detail in the discussion on internal working models. Adolescent attachment to parents and peers has been associated with adolescent development and adjustment in several studies (Greenberg, Siegel, & Leitch, 1983; Armsden & Greenberg, 1987; Kenny, 1987; Richman & Flaherty, 1987; Kobak & Sceery, 1988; Ryan & Lynch, 1989; Lapsley, Rice, & Fitzgerald, 1990), and as such, may be considered an important area of study. Three of the aforementioned studies in particular, will be discussed because each has examined

attachment in relation to relevant dimensions of adolescent adjustment, specifically, self-esteem, life satisfaction, affective status, psychological symptomatology, social and dating competence, assertiveness, and adjustment to college.

#### Attachment and Adolescent Adjustment

Armsden and Greenberg (1987) examined the relationship between adolescent attachment and several aspects of psychological well-being, including self-esteem, life satisfaction, and affective status. Subjects consisted of 32 male and 54 female undergraduate students ranging in age from 17 to 20 years. Adolescent attachment to parents and peers was assessed through the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987), and self-esteem through the Tennessee Self-Concept Scale (Fitts, 1965). A single global question rated on a five-point Likert scale assessed life satisfaction, while Bachman's Affective States Index (Bachman, 1970) assessed emotional status. Adolescents who classified themselves as securely attached to their parents and peers reported greater self-esteem and life satisfaction and more positive emotional functioning than their less securely attached counterparts.

In a similar study, Kobak and Sceery (1988) examined the relationship between adolescent attachment and psychological symptomatology, social competence, dating competence, and assertiveness. Fifty-three first year college students with a mean age of 18.2 years were asked to complete the Adult Attachment Interview (George, Kaplan, & Main, 1985, as cited in Kobak & Sceery, 1988) to assess attachment, the Hopkins Symptom Checklist-90 (Derogatis, 1977) to assess psychological symptomatology, the Texas Social Behavior Inventory (Helmrich & Stapp, 1974) to assess social competence, and the Dating and Assertion Questionnaire (Levenson & Gottman, 1978) to assess

dating competence and assertiveness. In general, securely attached adolescents manifested fewer psychological symptoms than insecurely attached adolescents. Likewise, attachment security was also positively correlated with social competence, dating competence, and assertiveness.

Finally, Lapsley, Rice, and FitzGerald (1990) examined adolescent attachment in relation to identity development and adjustment to college. Subjects were 148 male and 105 female university undergraduates. They used the Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987) to measure adolescent attachment, the Aspects of Identity Questionnaire (Cheek & Briggs, 1982) to measure identity development, and the Student Adaptation to College Questionnaire (Baker & Siryk, 1984) to measure adjustment to college. As expected, attachment security was positively associated with identity development and adjustment to college. Given the apparent relevance of adolescent attachment to socioemotional functioning, as suggested by the studies cited above, there is tangible basis for investigating the relationship of attachment to the adjustment of adolescent, older child adoptees.

#### Relationship Between Early Maltreatment and Early Attachment

Literature suggests a relationship between early maltreatment and attachment to one's primary caregiver (Egeland & Sroufe, 1981; Schneider-Rosen & Cicchetti, 1984; Lamb, Gaensbauer, Malkin, & Schultz, 1985; Schneider-Rosen, Braunwald, Carlson, & Cicchetti, 1985; Crittenden, 1988; Carlson, Barnett, Braunwald, & Cicchetti, 1989; Carlson, Cicchetti, Barnett, & Braunwald, 1989). Maltreating parents appear to be less responsive to their infants' cues for proximity and contact, and as such, are less likely to engender secure attachment formation. A discussion of relevant literature should be

preceded, however, by a brief discussion of Ainsworth's (1978) attachment classification system because her system is used by studies of infant attachment.

According to Ainsworth, et al., (1978), and Sroufe, (1979), the quality or security of the attachment relationship depends on the responsiveness of the caregiver. Securely attached infants have primary caregivers who are reliably responsive to their cues for proximity or contact. Insecurely attached infants, on the other hand, have primary caregivers who are insensitive and inconsistently responsive to their attachment behaviors.

According to Ainsworth et al. (1978), the quality of attachment may be assessed by observing infant and toddler reactions to reunion after brief separations from their primary caregivers. Ainsworth and her colleagues developed a structured laboratory observation tool known as the Ainsworth Strange Situation to simulate these brief separation experiences. The Strange Situation involves observing a toddler between the ages of 12 and 18 months with his/her primary caregiver, and a "stranger". The toddler and his/her caregiver enter an unfamiliar room containing several playthings. After the child has had a few minutes to become accustomed to his/her surroundings, a stranger enters, talks to the primary caregiver, and then approaches the child. At this point, the caregiver briefly steps out of the room. The purpose of this separation is to leave the child alone in an unfamiliar environment with an unknown individual - a situation that typically evokes some degree of anxiety in toddlers. The child's behavior during separation and upon the caregiver's return is monitored.

According to Ainsworth et al. (1978), the type of behavior the child emits reveals which of three attachment patterns the child possesses. One of the three patterns indicates

secure attachment, whereas the remaining two indicate insecure attachment. Infants who explore, play and approach the stranger during the separation period, seek comfort, proximity and contact when the caregiver returns, and then gradually and comfortably return to play are classified as having a secure attachment pattern (type B). Infants who show little distress during separation, and then actively avoid their caregiver, turning or moving away when he/she returns are referred to as insecure-avoidant (type A). Finally, infants who become panicky during separation, and then show anger and resistance to the caregiver, combined with a desire for proximity or contact, and an inability to be comforted are classified as insecure-ambivalent (type C).

Subsequent research suggests the presence of a third insecure attachment pattern known as disorganized-disoriented attachment (type D). (Main & Hesse, 1990; Main, Kaplan, & Cassidy, 1985; Main & Solomon, 1986). Infants who display this attachment pattern react to reunion with contradictory behaviors. For example, they may show strong proximity seeking followed by strong avoidance. They also may appear dazed and disoriented when the caregiver returns.

The Ainsworth classification system was used in each of the following studies examining the relationship between early maltreatment and attachment to one's primary caregiver. Egeland and Sroufe (1981) examined quality of maternal care in relation to infant-mother attachment. Thirty-one maltreated infants were compared to 33 infants, matched on socioeconomic level, who had a history of excellent care. Quality of care was evaluated by trained testers using the Child Care Rating Scale (Egeland & Brunquell, 1979). Maltreated infants were those who had been seriously neglected or abused by their mothers, as evidenced by meeting at least three of the following criteria: 1) untreated

wounds, infections, or serious ailments; 2) no place for the child to sleep; 3) routine exposure of the child to hazards; 4) persistent failure to change diapers or clothing; and 5) leaving the infant without arranging for its care. Excellent care infants, on the other hand, had mothers who provided adequate care in terms of feeding, met the child's health care needs, protected the child from possibly dangerous situations in the home, and did not leave the baby alone or with unknown baby-sitters. Mothers in this group actively encouraged their child's growth and development. Quality of attachment was assessed at 12 months using Ainsworth's Strange Situation procedure. In the excellent care group, 75% of the infants were securely attached to their mothers as compared to only 38% of the maltreated group. Correspondingly, 9% of the excellent care infants were classified as insecure-ambivalent in contrast with 38% of the maltreated group. Proportionately more maltreated infants (24%) than excellent care infants (16%) were classified as insecure-avoidant, but this difference was not significant. Thus maltreated infants were significantly less secure and more insecure-ambivalent than their excellent care counterparts.

Schneider-Rosen and Cichetti (1984) compared 18 maltreated infants (mean age 19 months-9 days) with 19 nonmaltreated infants (mean age 18 months-29 days). The infants were matched in terms of family income and occupational status, mother's education, mother's age, number of children in the home, and race. Subjects were selected from a larger sample of children, who were being studied as part of the ongoing, longitudinal Harvard Child Maltreatment Project, enabling the experimenters to match on several variables mentioned above (Cichetti & Rizley, 1981). Legal record of child maltreatment, corroborated by an interview with the child's social worker, identified those infants who

had been maltreated by their mothers. Absence of a legal record of child maltreatment, corroborated by a home interview, identified those infants who had not experienced maltreatment. The Strange Situation procedure again was used to classify the infant's attachment pattern to mother as one of either secure, insecure-avoidant, or insecure-ambivalent. As expected, the nonmaltreated group had a significantly higher proportion of securely attached infants (74%) than did the maltreated group (33%). Likewise, collapsing across the two insecure attachment patterns revealed that the maltreated group had a significantly higher percentage of insecurely attached infants (67%) than did the nonmaltreated group (26%).

Finally, Carlson, Cicchetti, Barnett, and Braunwald (1989) conducted a similar study of the relationship between early maltreatment and attachment to caregiver. Subjects consisted of 22 maltreated infants and 21 nonmaltreated infants (mean age 12.8 months), matched on socioeconomic status. Maltreated infants came from families receiving protective services for issues of child abuse and or neglect, whereas nonmaltreated infants came from families with no protective service involvement. Like previous studies in this area, Ainsworth's Strange Situation was used to classify attachment pattern. However, unlike the earlier studies, Carlson and her colleagues coded infant behavior according to four attachment patterns instead of three. Hence, in addition to insecure-avoidant (type A), secure (type B), and insecure-ambivalent (type C), they also identified infants whose reunion behaviors suggested disorganized-disoriented attachment (type D). As expected, significantly fewer maltreated infants were securely attached (14%) compared to their nonmaltreated counterparts (53%). Similarly, proportionately more maltreated infants (86%) than nonmaltreated infants (47%) were

insecurely attached, i.e., type A, C, or D. The results of the studies described above are congruent with what is known about the association between inconsistent responsiveness to infant attachment behavior, and quality of attachment. It appears that maltreating parents are unreliably receptive to their infants' cues for proximity and contact, resulting in the impairment of infant-caregiver attachment. Based on the results of these studies, it would appear that early caregiving experiences directly impact on the quality of attachment. However, if viewed from a cognitive theoretical framework, there appears to be an additional intermediate contributor in effect.

#### Ellis's A-B-C Model

According to Albert Ellis (1973), a person's cognitions about events, not the events themselves, determine subsequent emotions and/or behavior. He proposed the A-B-C model to represent the effect of cognition on emotions and behavior. In this model, A is the objective event, B is the person's interpretation of the event, and C is the person's emotional or behavioral reaction. Although the objective event (A) contributes to the person's emotional or behavioral reaction (C), it is the person's thoughts, beliefs, or interpretation of the event (B) that are considered to play a pivotal role in shaping his/her reaction.

Hence, in applying the A-B-C model to the discussion of attachment thus far, the objective event (A) would be the individual's early attachment experiences with primary caregivers, while the consequent emotion (C) would be the individual's experience of attachment, e.g., sense of safety, protection, etc.. There is also another psychological state that appears to be the result of one's early attachment experiences, namely self-esteem,

which will be discussed later in more detail. The interpretation of the event (B) as it pertains to attachment theory will be discussed in the ensuing sections.

### Internal Working Models

According to Bowlby (1969, 1973, 1980), through early attachment experiences, an infant develops beliefs and expectations regarding both the availability of the attachment figure and the worthiness of the self. These internal representations of the caregiver and of the self are known as internal working models. They are complementary in nature in that they represent obverse aspects of the same relationship. For example, if a parent frequently rejects or ridicules the child's attempts to gain proximity or contact, the child will develop an internal working model of the attachment figure as rejecting, and of the self as unworthy of help and comfort. On the other hand, if a parent consistently meets the child's needs for closeness or contact, the child will develop an internal working model of the attachment figure as loving, and of the self as a person worthy of help and comfort.

Internal working models represent the B in Ellis's A-B-C model and, as such, are the outcomes of our early attachment experiences (A), and the determinants of the disposition we have toward others (attachment), and ourselves (self-esteem) (C). Specifically, internal working models of the caregiver are responsible for our pattern of attachment, while internal working models of the self are responsible for our sense of self-esteem. Positive early attachment experiences promote healthy internal working models which in turn cultivate high self-esteem and strong attachment. Negative early attachment experiences on the other hand, foster unhealthy internal working models, and inhibit the formation of high self-esteem and strong attachment.

According to Bowlby, there is a critical period during which internal working models are formed, specifically between the ages of six months and five years. This period is critical because it is within this time-span that attachment behaviors are most frequently activated. That is, it is at this time that a child's sense of basic security is most easily threatened, resulting in the frequent emission of proximity-inducing behaviors by the child. Consequently, it is also the period during which the primary caregiver's reliability as an attachment figure is most often tested, hence providing opportunities for the child to develop internal representations of the caregiver and of the self. As the child grows older however, he or she becomes better able to discern between situations that were once threatening, cope selectively with those that still are, and avoid those that are perceived as too threatening. As a result, attachment behavior becomes less frequent, and there is less opportunity to modify internal working models. Furthermore, once the critical period has elapsed and the internal working models have been formed, they become increasingly resistant to change. Their persistence may be attributed to the fact that they generally operate outside conscious awareness and assimilate new information to fit the existing model structure, thus often persisting despite repeated contradictory evidence. In other words, they are actively self-perpetuating (Bretherton, 1985; Main, Kaplan, & Cassidy; 1985). Evidence consistent with this theory will be presented in the ensuing sections.

The purpose of internal working models is to guide not only ongoing interactions with one's caregivers, but ongoing and future interactions in other relationships as well (Bowlby, 1969, 1973, 1980; Collins & Read, 1990; Groze, 1992; Groze & Rosenthal, 1993). Specifically, internal working models are used to guide the individual's

expectations, perception, and behavior in social exchanges, creating a continuity in attachment style from one relationship to the next (Collins & Read, 1990). Thus children whose early attachment experiences have resulted in internal working models of the caregiver as loving and of the self as lovable will tend to be confident that others will find them lovable too. These individuals tend to relate to others with confidence and security. They are likely to perceive others as trustworthy and, when faced with threatening situations, either cope with them effectively or seek assistance in doing so. Conversely, children whose early attachment experiences have led them to form internal working models of the caregiver as rejecting and of the self as unworthy of care will likely be predisposed to see others as rejecting and continue to view themselves as unworthy. These individuals tend to expect others to be unavailable and undependable. They are likely to view the world as comfortless and unpredictable, and respond either by withdrawing from it or doing battle with it.

Much of the empirical support for the existence of internal working models comes from the results of research on continuity of attachment patterns. As mentioned, internal working models are hypothesized to be the mediators of one's pattern of attachment, and the mechanism by which patterns both remain stable over time and are transferred to future relationships. Some researchers have studied the stability of internal working models over time, whereas others are more concerned with the transference of these models to new relationships.

#### Evidence for Stability of Internal Working Models

Support for the stability of internal working models comes from studies that demonstrate constancy of attachment patterns over time. Main, Kaplan, and Cassidy

(1985) examined 40 mothers, fathers and their six-year old children from families that were college educated and predominantly upper-middle class. They were drawn from an earlier study (Main & Weston, 1981) in which security of attachment to mother had been assessed at 12 months and to father at 18 months using the Ainsworth Strange Situation. Quality of attachment to each parent was assessed by observing the six year olds reaction to reunion following one hour of separation. Security of attachment to mother at one year was positively correlated with security of attachment to mother at six years of age ( $r = .76, p < .001$ ). Likewise, attachment to father at 18 months was positively correlated with attachment to father at six years ( $r = .30, p < .05$ ). According to Main, et al., the results of their longitudinal study supported Bowlby's proposal that internal working models, once established, have a propensity towards stability. Apparently, attachment patterns established in infancy have a tendency to persist into early childhood.

In another study, Collins and Read (1990) examined internal working model stability in a sample of 80 female and 38 male university undergraduates ranging in age from 17 to 24. Subjects' early internal working models of their caregivers were elicited by asking them to rate on a nine-point scale the extent to which each of three paragraphs accurately described their childhood relationship with each parent. One paragraph described a warm, responsive parent; the second described a cold, rejecting parent, and the third described an ambivalent, inconsistent parent (Hazan & Shaver, 1987). Stability of these models was assessed via two similar investigations. In the first, the models were examined in relation to current attachment style. Current attachment style was assessed using the Adult Attachment Scale developed by Collins and Read (1990). In the second, the models were examined in relation to current working models, both of the self and

other. Current internal working models of the self were defined as subjects' level of self-esteem, expressiveness, and instrumentality, and were elicited through the Rosenberg Self Esteem Scale (Rosenberg, 1965), the Texas Social Behavior Inventory (Helmreich & Stapp, 1974), the Personal Attributes Questionnaire (Spence & Helmreich, 1978), and the Opener Scale (Miller, Berg, & Archer, 1983). Current internal working models of others were considered subjects' trust in others, and beliefs about human nature, and were determined from scores on the Rotter Trust Scale (Rotter, 1967), and the Philosophies of Human Nature Scale (Wrightsman, 1964).

As expected, the results of the first investigation showed that subjects who as children perceived their parents as warm and responsive were more likely as adults to feel that they could depend on others, less likely to be anxious about being abandoned or unloved, and more likely to feel comfortable with closeness and intimacy than were subjects who perceived their parents as inconsistently responsive. Because the later attachment styles of these subjects were consistent with their early internal working models, the above results support the notion of continuity over time of the internal working model.

The results of the second investigation by Collins and Read (1990) showed first, that current internal working models of the self were consistent with early internal working models of the caregiver. That is, subjects who as children perceived their parents as warm tended as adults to be higher in self-esteem, expressiveness, and social confidence than those who perceived their parents as cold or inconsistent. Second, current internal working models of others were consistent with early internal working models of the caregiver. That is, subjects who recalled that, as children, their parents were warm and

responsive indicated, as adults, greater trust in the dependability of others and generally viewed people as more altruistic, independent, and rational than subjects who recalled perceiving their parents as cold or inconsistent. Given the complementary nature of internal working models of the self and of the caregiver, these results support the idea of internal working model constancy.

Finally, McCormick and Kennedy (1994), found support for the stability of internal working models in a sample of 218 introductory psychology students (mean age = 18.46 years). Initial and current models of attachment toward each parent were established using the Rocky Mountain Survey (RMS) developed by Hazen and Shaver (1987), with initial models being assessed retrospectively. Scores on the RMS identify subjects as possessing one of three attachment patterns, "A" (insecure-avoidant), "B" (secure), or "C" (insecure-ambivalent), all corresponding to Ainsworth's et al. (1978) attachment patterns. Current attachment pattern was significantly correlated to initial pattern, for each parent. That is, subjects who classified themselves as securely attached in their current relationship with either parent also classified themselves as initially securely attached to that parent. Subjects who were currently insecure-avoidant in their attachment to either parent were also insecure-avoidant in their initial relationship with that parent. Likewise, subjects who were classified as currently insecure-ambivalent toward either parent were also classified as such in their initial relationship with that parent. According to McCormick and Kennedy, these results were consistent with internal working model continuity over time for both maternal and paternal attachment relationships.

In both Collins and Read's (1990) and McCormick and Kennedy's (1994) studies, the primary limitation was the reliance on self-report measures that assessed subjects'

early internal working models retrospectively. Subjects may have either been unable to remember the quality of their early relationship with their parents, or biased in their judgement by their current attitudes toward their parents. In either case, the results would have suggested a correlation not between early and current internal working models, but rather between several current attachment-related constructs. Both Collins and Read (1990) and McCormick and Kennedy (1994), acknowledged the possibility of such error in the interpretation of their results, and took some steps to reduce contamination in designing test protocol. For example, McCormick and Kennedy (1994), designated separate sessions for assessment of early and current attachment relationships. This precaution may have lessened the likelihood that both sets of responses were similar to one another simply because of temporal proximity, but it is difficult to ascertain whether accuracy of recall data was in any way enhanced. Although longitudinal evidence of attachment pattern continuity into adolescence would have avoided the possibility of recall error, such evidence was unavailable in the literature.

#### Evidence for Transference of Internal Working Models

In addition to support for internal working model stability, there is evidence for the application of internal working models to new interpersonal relationships. In the present study, older child adoptees are expected to show impairments in current attachments similar to impairments that presumably existed in their early attachments. Evidence for the transference of internal working models to future relationships provides support for this hypothesis, as well as a mechanism by which such consistencies in attachment pattern may occur. In a study by Main and Weston (1981), infant-parent attachment was examined in relation to social responsiveness to a new person. The sample consisted of

61 families - mothers (N=46), fathers (N=15), and their 12 month old infants. The Ainsworth Strange Situation was used to assess infant-parent attachment. In order to assess responsiveness to a new person, the infant was first allowed to engage in a period of free play with the mother or father. The play session was conducted in a brightly decorated room filled with toys. Following the period of free play, a clown entered the room and briefly attempted to interact with the infant. The infant's response to the clown was observed by two trained judges blind to the quality of the infant's attachment to each parent. The infant's readiness to establish a positive social relationship with the clown was based on the extent of active efforts to engage in eye contact with the clown, positive responses to the clown's overtures, interest in a game of ball with the clown, and affective responses to the clown's changing moods. As expected, securely attached infants were more positively socially responsive to the clown than infants judged to be either insecure-avoidant, insecure-ambivalent, or disorganized-disoriented. The results suggested that the infants' internal working models, formed as a result of early attachment experiences with caregivers, guided their behavior with the novel individual. Apparently, the internal working models associated with secure infant-parent attachment facilitated positive social responsiveness, whereas the internal working models associated with insecure infant-parent attachment inhibited positive social responsiveness.

George and Main (1979) also found evidence for this phenomenon, that is, internal working model transference, in a sample of physically abused and nonabused children. In this study, 10 abused and 10 nonabused toddlers (ages one to three years) were observed during social interactions with caregivers and peers in their daycare settings. Subjects were matched on sex, age, race, marital status of parents, mother's education and

occupation, father's education and occupation, and the adult(s) with whom the child was living at the time of the study. Subjects were observed by trained students, who were blind to the child's abuse status, for 30 minute periods on four separate occasions.

Abused toddlers were more physically aggressive toward their peers than were nonabused toddlers. Similarly, they were more likely than the nonabused toddlers to harass others verbally and nonverbally, and to assault or threaten to assault their caregivers. Even more remarkable were their responses to friendly overtures (e.g., efforts to assist the child in an activity or to amiably check on mood state; initiation of friendly physical contact, and offers of toys or nourishment) by caregivers and peers. In response to both caregivers and peers, but particularly caregivers, the abused toddlers were much less likely than their nonabused counterparts to positively reciprocate these friendly overtures. George and Main (1979) proposed that these results indicate that infants who have had reason to regard caregiving figures as dangerous are more likely than other infants to assault and harass those figures. Correspondingly, the results also suggest support for the tenacity of internal working models. Apparently the abused toddlers' internal working models of others, particularly primary caregivers, as abusive and rejecting extended to daycare staff and persisted despite contradictory evidence, such as the absence of abuse, and friendly overtures.

Support for the transference of internal working models to new relationships can also be found in the loneliness literature. Hecht and Baum (1984) examined the relationship between early attachment to parents and loneliness in young adults.

Loneliness was defined as the feeling of isolation that results from one's inability to form attachment relationships. Subjects were 47 introductory psychology students with a mean

age of 18.9 years. All subjects were white, middle class, and healthy with no physical disability or impairment. Early attachment to parents was assessed using the Attachment History Questionnaire (Wallace, as cited in Hecht & Baum, 1984). The Revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980) was used to assess loneliness. As anticipated, poor early attachment was significantly correlated with current loneliness. Thus, the results suggested that internal working models, developed in response to one's early attachment experiences, carry forward into new relationships. Furthermore, internal working models associated with negative early attachments may impede the formation of later attachments. Because early attachment was assessed retrospectively, as in the studies by Collins and Read (1990), and McCormick and Kennedy (1994), the obtained data may have been contaminated by recall error. That is, subjects may have been either unable to remember their early parental relationships, or their responses may have been influenced by their perceptions of current parental relationships. Hecht and Baum did not address this issue in their report; however, retrospective methods do generally weaken the findings obtained through empirical research.

#### Older Child Adoptees and Attachment to Caregivers

Older child adoptees, unlike individuals adopted in infancy, typically have a history of maltreatment which may impair the formation of early attachment to primary caregivers. Although not investigated longitudinally, such impairments in attachment may persist into adolescence and young adulthood, mediated by internal working models. Thus, if early maltreatment is related to poor early attachment, which, in turn, is related to poor later attachment, one would expect early maltreatment to be related to poor later attachment. If there is a relationship between early parental maltreatment, as determined

by adoptive status, and later attachment, then adolescent older child adoptees should have poorer attachment relationships with their adoptive parents and peers, than adolescents adopted as infants, notwithstanding potential confounds. Similarly, since age at time of removal from biological home, age at time of adoption, and number of foster placements correlate with adoptive status and adjustment (Reitz and Watson, 1992), they would also be expected to predict attachment, with older age at time of removal and adoption, and greater number of foster placements predicting poorer attachment. No other demographic variables would be expected to predict attachment.

The few studies which have examined the relationship between early maltreatment and later attachment (Groze & Rosenthal, 1993; Howes & Segal, 1993; Livingston-Smith & Howard, 1994), have done so from the perspective of the parent rather than the child. Furthermore, they have not examined this relationship in families of adolescent older child adoptees. For example, Groze and Rosenthal (1993) examined quality of attachment in a sample of 197 special needs adoptees (mean age = 10.7 years). Subjects were considered to have a special need if they were older at placement, disabled, of minority heritage, or members of a sibling group. Subjects were recruited through the Iowa Department of Human Services, enabling the investigators to learn that 135 of the children were known or suspected to have been physically or sexually abused before placement. Adoptees' quality of attachment to parents was assessed by asking parents to respond to items regarding communication, time spent together, trust, and the degree to which their child displayed either anxious-ambivalent (e.g., crying, whining) or anxious-avoidant (e.g., physical aggression, fear of animals) behaviors. Attachment was most positive for children with no abuse histories and least positive for children with multiple

abuse histories. According to Groze and Rosenthal, these findings suggest that early maltreatment is related to attachment in young children. However, because child attachment to parent was inferred from parent report, the results may have been biased according to the responding parent's attitude toward the child.

As mentioned previously, internal working models, the cognitive structures believed to shape and determine one's attachment experiences, are also believed to play a pivotal role in one's development of self-esteem. As such, the second variable of interest in the present study is self-esteem. Its quality in adoptees was examined in relation to both early maltreatment and level of attachment.

#### Attachment and Self-Esteem in Adopted Adolescents

Self-esteem may be defined as:

"1) confidence in our ability to think, confidence in our ability to cope with the basic challenges of life; and

2) confidence in our right to be successful and happy, the feeling of being worthy, deserving, entitled to assert our needs and wants, achieve our values, and enjoy the fruits of our efforts" (Branden, 1994, p. 4).

In short, to have self-esteem is to feel both competent, and worthy of happiness.

Self-esteem, like attachment, appears to evolve from early attachment experiences with primary caregivers. Just as attachment is believed to be the product of one's internal working models of others, self-esteem is believed to be the product of one's internal working models of the self. Self-esteem, then, is another C, or consequent psychological state in the A-B-C model of attachment. As described previously, early attachment experiences with one's primary caregivers (A) are the basis for one's internal working

models of self and other (B), which in turn, are responsible for one's experience of self-esteem and attachment (C). For example, if an individual's early attachment behaviors consistently receive affectionate responses, the child will likely form internal working models of others as reliable and caring and internal working models of the self as capable of eliciting and deserving of care. The internal working models of others will promote secure attachment to caregivers, while the internal working models of the self will promote a sense of competence and self-worth. Conversely, if an individual's early attachment behaviors are not met with proximity or contact comfort, he or she will likely form internal working models of others as rejecting and uncaring and internal working models of the self as incapable of eliciting and undeserving of care. The internal working models of others will generate a pattern of insecure attachment while the internal working models of the self will generate a sense of incompetence and worthlessness.

Internal working models of the self and other are related because they are believed to derive from the same early attachment experiences. Assuming that patterns of attachment and self-esteem are the result of these internal working models, one would expect that they, too, must be related. Several studies, including the Armsden and Greenberg (1987) study cited earlier, have demonstrated this relationship in the general adolescent population. For example, McCormick and Kennedy (1994), assessed self-esteem and attachment to parents in a sample of 218 college students (mean age = 18.46 years). Epstein's Mother-Father-Peer Scale (MFP; Epstein, 1983), and the Hazen and Shaver (1987) Rocky Mountain Survey (RMS) were used to determine parent-child attachment. The MFP yields scores on two dimensions of maternal and paternal behavior: independence-encouraging vs. overprotective, and accepting vs. rejecting. Scores on the

RMS indicate the category of attachment pattern - insecure-avoidant, secure, or insecure-ambivalent. Self-esteem was assessed using the Coopersmith Self-Esteem - Adult Form (SEI; Coopersmith, 1967). SEI scores were examined in relationship to MFP scores and RMS categories to investigate the association between self-esteem and attachment. As expected, SEI scores were positively correlated with both maternal and paternal independence-encouragement and acceptance on the MFP. Similarly, subjects categorized as secure according to the RMS scored higher on the SEI than subjects categorized as either insecure-avoidant, or insecure-ambivalent.

Ryan and Lynch (1989) also examined the relationship between self-esteem and attachment. Subjects were 104 undergraduates ranging in age from 17 to 22. The Emotional Autonomy Scale (EA; Steinberg & Silverberg, 1986) and the Mother-Father-Peer Scale (MFP; Epstein, 1983) were used to assess attachment. According to Ryan and Lynch, emotional autonomy represents detachment from parents; thus higher scores on the EA indicate the weakness of parent-child attachment. Self-esteem was examined using the Sources of Self-Esteem Scale (SOSE; O'Brien, 1981). The SOSE yields scores on nine dimensions of self-esteem, including lovability, competence, and global self-esteem subscales. Scores on the EA were negatively correlated with scores on the lovability subscale. That is, young adults with greater emotional autonomy were less likely to feel worthy of love than those with lower emotional autonomy. Additionally, maternal and paternal independence-encouragement and acceptance were associated with greater global self-esteem and perceived lovability. That is, parental communication of love and trust, constructs associated with attachment, were positively related to perception of high self-esteem.

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Thus, there appears to be a positive association between self-esteem and attachment. It is difficult to know the direction of this relationship because both are products of one's internal working models. However, it appears that each impels the other; that is, the level of our self-esteem influences our ability to form and maintain attachments which in turn influences our self-esteem (Branden, 1994). For example, Ainsworth et al. (1971, 1978) reported that children with secure attachments are confident that people will respond to them; they are both confident in their ability to elicit a response and confident in their worthiness of such a response, both characteristics of high self-esteem, while children with insecure attachments, on the other hand, do not possess that confidence. Sroufe and Waters (1977) supported and extended this theory by proposing that the higher self-esteem possessed by children in secure attachments serves to facilitate the formation of new attachments, which in turn enhances self-esteem, with the cycle repeating itself.

It appears then, at least in the general adolescent population, that self-esteem and attachment are positively correlated. This relationship has not been examined in research with adopted adolescents. It is likely, however, that less securely attached adoptees will have lower self-esteem than their more highly secure counterparts. Additionally, self-esteem should correlate with adoptive status; that is, older child adoptees, as a consequence of their early maltreatment, should have lower self-esteem than individuals adopted in infancy.

### Hypotheses

To summarize the hypotheses presented throughout the literature review:

H1. Relationship Between Early Maltreatment and Later Quality of Attachment: Older child adoptees are expected to demonstrate poorer attachment relationships than infant adoptees.

H2. Relationship Between Quality of Attachment and Level of Self-Esteem: Self-esteem and attachment are expected to correlate positively.

H3. Relationship Between Early Attachment and Later Level of Self-Esteem: Older child adoptees are expected to demonstrate lower self-esteem than infant adoptees.

### Method

#### Participants

Research participants consisted of 34 adoptees, 14 males and 20 females, ranging in age from 12 to 24 years. They were contacted through three sources: a local mental health clinic, a student employment center; and cable television advertising, and treated as per the guidelines described in the procedure. Participants were assigned to one of three groups based on information they provided. Age at time of removal from biological home determined both adoptive and abuse status. Individuals removed from their birth families before the age of 18 months were regarded as infant adoptees and were considered to have no history of maltreatment, while those removed beyond 18 months were regarded as older child adoptees and were considered to have a history of maltreatment. Using an 18 month cutoff increased the likelihood that older child adoptees differed from infant adoptees in terms of their abuse history, with older child adoptees having likely been removed after encountering maltreatment in their birth families, and infant adoptees

having likely been removed before experiencing such maltreatment. A lower cutoff would have increased the incidence of false positives in the maltreatment group, while a higher cutoff would have increased the incidence of false negatives in the nonmaltreatment groups. Participants were further categorized according to their history of mental health treatment. Current or prior recipients of mental health services were classified as clinical while non-recipients were classified as non-clinical.

Using the criteria described above, one group of subjects contained clinical older child adoptees (N = 4 males; 5 females, age range = 12 - 23 years). Subjects in this group were considered to have a history of maltreatment because delayed removal from one's birth family is typically a result of parental abuse and/or neglect. They were examined in relation to two groups of infant adoptees. The first group of infant adoptees were currently receiving mental health services (N = 5 males; 5 females, age range = 14 - 20 years), while the second had never received mental health services (N = 5 males; 10 females, age range = 12 - 24 years). Both clinical and non-clinical infant adoptees were assumed to have no history of maltreatment for two reasons. First, they had not been removed from their adoptive homes. Second, infants do not typically enter the adoption system as a consequence of parental abuse and/or neglect. Unlike older child adoptees, they are generally voluntarily relinquished by their birth parents (Reitz & Watson, 1992).

All of the older child adoptees were recipients of clinical treatment because it was not possible to obtain a non-clinical older child adoptee sample. Including a group of non-clinical infant adoptees provided a control condition in which subjects had been exposed to neither maltreatment nor mental health services. However, in order to isolate the effects of maltreatment, a clinical infant adoptee group was also needed.

Thus, in summary, there were three groups, one presumed to have a history of maltreatment and two presumed to have no history of maltreatment. The maltreatment group consisted of nine adolescent adoptees who had been removed from their birth families after 18 months, and were currently receiving clinical treatment. Subjects in this group were called older child adoptees. The first group of non-maltreated adolescents consisted of 10 adoptees who had been removed from their biological families at birth, and were also currently receiving clinical treatment. Subjects in this group were considered clinical infant adoptees. The second group of non-maltreated adolescents consisted of 15 adoptees who had also been removed from their biological families at birth, but had never received clinical treatment. Subjects in this group were considered non-clinical infant adoptees.

Subjects were compared with regard to age at time of removal from birth family, age at time of adoption, and number of foster placements (Table 1). Naturally, clinical older child adoptees were significantly older ( $M = 3.10$  years, range = 2.00 - 6.08 years) than clinical infant adoptees ( $M = .13$  years, range = birth - .42 years) and non-clinical infant adoptees ( $M = .08$  years, range = birth - .50 years),  $F(2,31) = 60.44$ ,  $p < .001$ , at the time of removal from their biological family, with the majority of infant adoptees removed at birth. Clinical older child adoptees were also older ( $M = 5.78$  years) than clinical and non-clinical infant adoptees at the time of their adoption (clinical infant adoptees,  $M = .37$  years; non-clinical infant adoptees,  $M = .14$  years),  $F(2,31) = 95.14$ ,  $p < .001$ , and had been placed in significantly more foster homes than clinical and non-clinical infant adoptees (clinical older child adoptees,  $M = 2.56$ ; clinical infant adoptees,

$M = .50$ ; non-clinical infant adoptees,  $M = .07$ ),  $F(2,31) = 12.43$ ,  $p < .001$ . There were no significant differences between the three groups on other demographic factors.

Table 1

Means and Standard Deviations on Demographic Variables

	Clinical Older Child Adoptees (n = 9)		Clinical Infant Adoptees (n = 10)		Non-clinical Infant Adoptees (n = 15)	
	Mean	(sd)	Mean	(sd)	Mean	(sd)
Age at Survey (yrs)	17.35	(4.09)	17.35	(1.59)	19.03	(4.11)
Years of Formal Educ	11.11	(4.01)	11.00	(1.41)	12.73	(3.35)
Age at Removal (yrs)	3.10	(1.30)	.13	(.32)	.08	(.26)
Age at Adoption (yrs)	5.78	(1.92)	.37	(.52)	.14	(.29)
# of Foster Placements	2.56	(2.30)	.50	(.53)	.07	(.26)

Measures

Materials included a cover letter outlining the purpose of the research project, task requirements, and any anticipated risks or benefits (Appendix A). Adoptive status, and participation in psychological and/or psychiatric treatment were determined from responses to the Life Experiences Questionnaire (LEQ - Appendix B). Quality of attachment to significant others was assessed using the Inventory of Parent and Peer Attachment (IPPA - Arnsden & Greenberg, 1987), and the Revised UCLA Loneliness Scale (RULS - Russell, Peplau, & Cutrona, 1980). Finally, self-esteem was examined using the Rosenberg Self-Esteem Scale (RSE - Rosenberg, 1979).

The Life Experiences Questionnaire (LEQ) is a 13 item assessment tool designed to elicit information related to adoptee placement history, and mental health service involvement. It was used to classify subjects according to their adoptive and clinical status.

The Inventory of Parent and Peer Attachment (IPPA - Armsden and Greenberg, 1987) is a self-report questionnaire designed to assess adolescents' sense of attachment to their parents and close friends, i.e., how well these figures serve as sources of psychological security. It contains 25 items in each of the mother, father, and peer sections. Total maternal (IPPA-M), paternal (IPPA-F) and peer (IPPA-P) attachment scores are obtained by summing all items after reverse- scoring the negatively worded items. Higher scores on the IPPA indicate higher levels of attachment. The IPPA has good internal consistency (IPPA-M,  $r = .87$ ; IPPA-F,  $r = .89$ ; IPPA-P,  $r = .92$ ). Concurrent validity studies show that the IPPA is moderately to highly positively correlated with family expressiveness (Armsden & Greenberg, 1987), family cohesion and adaptability, and degree of positive family coping (Lewis, Woods, & Ellison, 1987). Additionally, scores on the IPPA are negatively correlated with loneliness (Armsden, 1986).

The Revised UCLA Loneliness Scale (RULS - Russell, et al., 1980) is a 20 item scale designed to measure loneliness. Typically, scores on the RULS are calculated by summing all items after reverse-scoring the positively worded items, with higher scores indicating greater loneliness. However, to simplify interpretation, the present study scored the RULS by summing the items after reverse-scoring the negatively worded items so that higher scores would indicate less loneliness rather than more loneliness. Hecht and

Baum (1984) defined loneliness as the subjective state that results from the inability to form attachments. Conversely, less loneliness would suggest greater attachment. Thus, for the purpose of the present study, the RULS was a measure of attachment rather than lack of attachment. In this way, scores on all three scales, the IPPA, the RULS, and the RSE, were positively valenced. Higher scores on all scales were associated with positive attributes. The RULS does not provide an indication of how many attachment figure(s) individuals possess, only whether they possess any. Thus, someone with secure attachment only to one significant other may have scores similar to another with secure attachments to two or more figures. The key to a high score is that the individual has attached to at least one other person. Thus, the RULS is neither sensitive to quantity of attachment figures, nor specific to a particular attachment figure, i.e., it allows for the assessment of attachment between respondent and any significant other, e.g., grandparent, teacher, etc. Thus the RULS is a measure of general attachment. It was used in case subjects possessed attachment figures that fell outside the scope of the IPPA. That is, perhaps some subjects would not be attached to parents or peers, but would have an attachment relationship with a grandparent or sibling, for example. The RULS has excellent internal consistency ( $r = .94$ ). The RULS also has good construct validity, correlating positively with depression and negatively with self-esteem (Russell, et al., 1980). Scores on the RULS are also associated with more limited social activities and relationships, and with several emotions theoretically linked to loneliness (Russell, et al., 1980).

The Rosenberg Self-Esteem Scale (RSE - Rosenberg, 1979) is a 10 item self report scale developed to measure self-esteem. The RSE is scored by totaling all of the items

after reverse-scoring those negatively worded. Higher scores on the RSE indicate higher levels of self-esteem. The RSE has excellent internal consistency ( $r = .92$ ) with two-week test-retest reliability ( $r = .85$ ;  $r = .88$ ), indicating excellent stability (Rosenberg, 1979). As expected, the RSE is negatively correlated with measures of depression and anxiety, and positively correlated with peer group reputation, and with other self-esteem measures (Rosenberg, 1979).

### Procedure

Adoptees who expressed interest in participating in the study were sent complete questionnaire packages including a self-addressed, stamped envelope in which to return the completed questionnaires and a postcard which they could return to receive a summary of the study's results. The postcard was addressed to a different location than the questionnaire-return envelope in order to maintain confidentiality. Subjects were informed as to the purpose of the study, participation requirements, and likelihood of risks or benefits. They were assured that participation was on a voluntary basis and that all information would be held in confidence. Completion and return of all materials indicated that subjects had understood the nature of the study and had given their informed consent to participate. Subjects were not required to release any personally identifying information, (e.g., name, return address).

### Results

Three main hypotheses were examined in the present study. Hypothesis 1 predicted a negative relationship between early maltreatment and attachment. Hypothesis 2 predicted a positive correlation between attachment and self-esteem, and Hypothesis 3 predicted a negative relationship between early maltreatment and self-esteem. Preceding

the findings relating to these hypotheses, a brief discussion of the interrelationships among dependent variables will be presented. This information does not pertain to any given hypothesis, but rather provides descriptive information regarding the associations between dependent measures.

### Correlations

The dependent variables; maternal, paternal and peer attachment, general attachment, and self-esteem, were examined in relation to each other to determine if any intercorrelations existed. Pearson-product moment coefficients were calculated on this data. Table 2 presents the correlation matrix between study variables for the overall sample. Means and standard deviations also are included in this table. Maternal attachment correlated positively with paternal attachment ( $r = .62, p < .01$ ), general attachment ( $r = .46, p < .01$ ) and self-esteem ( $r = .55, p < .01$ ), but not with peer attachment ( $r = .15, p > .05$ ). Paternal attachment correlated positively with general attachment ( $r = .51, p < .01$ ) and self-esteem ( $r = .52, p < .01$ ), but not with peer attachment ( $r = .06, p > .05$ ). Peer attachment correlated positively with general attachment ( $r = .49, p < .01$ ), but not with self-esteem ( $r = .22, p > .05$ ). Finally, general attachment correlated positively with self-esteem ( $r = .52, p < .01$ ).

Table 2

Intercorrelations Between Attachment and Self-Esteem Measures Across Groups:  
Descriptive Information  
(N = 34)

	2	3	4	5	Mean	sd
1. IPPA - M	.62**	.15	.46**	.55**	93.91	24.46
2. IPPA - F	---	.06	.51**	.52**	94.03	24.61
3. IPPA - P		---	.49**	.22	99.82	15.89
4. RULS			---	.52**	62.85	12.42
5. RSE				---	30.53	5.54

\*  $p < .05$

\*\*  $p < .01$

Tables 3, 4 and 5 present the correlation matrices for clinical older child adoptees, clinical infant adoptees, and non-clinical infant adoptees, respectively. As in the overall sample, maternal attachment in clinical older child adoptees correlated positively with paternal attachment ( $r = .96, p < .01$ ), general attachment ( $r = .81, p < .01$ ) and self-esteem ( $r = .80, p < .01$ ), but unlike the overall sample, maternal attachment in clinical older child adoptees also correlated positively with peer attachment ( $r = .70, p < .05$ ). Paternal relationships were similar to those observed in the overall sample; paternal attachment correlated positively with general attachment ( $r = .70, p < .05$ ) and self-esteem

( $r = .78, p < .05$ ), but not with peer attachment ( $r = .61, p > .05$ ). Unlike the overall sample, peer attachment did not correlate with either general attachment or self-esteem, but general attachment continued to correlate positively with self-esteem ( $r = .89, p < .01$ ).

For the clinical infant group, only peer attachment and general attachment were correlated ( $r = .65, p < .05$ ). Finally, for the non-clinical infant group, maternal and paternal attachment were correlated ( $r = .65, p < .01$ ), as were paternal and general attachment ( $r = .72, p < .01$ ). No other significant correlations were found.

Table 3

Clinical Older Child Adoptees: Intercorrelations Between Attachment and Self-Esteem Measures: Descriptive Information (n = 9)

	2	3	4	5	Mean	sd
1. IPPA - M	.96**	.70*	.81**	.80**	109.22	11.86
2. IPPA - F	---	.61	.70*	.78*	108.00	13.00
3. IPPA - P		---	.39	.36	97.00	20.19
4. RULS			---	.89**	64.22	13.93
5. RSE				---	32.11	7.67

\*  $p < .05$

\*\*  $p < .01$

Table 4

Clinical Infant Adoptees: Intercorrelations Between Attachment and Self-Esteem Measures: Descriptive Information (n = 10)

	2	3	4	5	Mean	sd
1. IPPA - M	.04	.08	.22	.53	62.70	18.09
2. IPPA - F	---	-.26	.30	.37	73.60	31.27
3. IPPA - P		---	.65*	-.08	98.40	18.68
4. RULS			---	.15	57.20	15.65
5. RSE				---	27.40	4.77

\* p&lt;.05

\*\* p&lt;.01

Table 5

Non-Clinical Infant Adoptees: Intercorrelations Between Attachment and Self-Esteem Measures: Descriptive Information (n = 15)

	2	3	4	5	Mean	sd
1. IPPA - M	.65**	-.07	.44	.10	105.53	11.33
2. IPPA - F	---	.30	.72**	.34	99.27	15.81
3. IPPA - P		---	.39	.37	102.47	11.12
4. RULS			---	.15	65.80	7.87
5. RSE				---	31.67	3.75

\*  $p < .05$

\*\*  $p < .01$

Having examined the interrelationships between dependent variables, the results associated with each hypothesis will hereby be presented.

Hypothesis 1: Relationship Between Early Maltreatment and Later Quality of Attachment

Hypothesis 1 proposed that older child adoptees, having encountered early maltreatment, would demonstrate poorer attachment relationships than infant adoptees. A presumption of early maltreatment was based on the removal of older child adoptees from their birth families. Thus, age at time of removal from birth family was the independent variable. One-way analyses of variance were performed on the maternal, paternal and peer scales of the IPPA and on the RULS to test this hypothesis. Contrary to expectation,

while attachment to mother scores varied significantly in relation to adoptive status,  $F(2, 31) = 36.66$ ,  $p < .001$ , it was the clinical infant group that had significantly lower maternal attachment scores ( $M = 62.70$ ) than either the clinical older child ( $M = 109.22$ ) or non-clinical infant ( $M = 105.53$ ) groups. The clinical older child and non-clinical infant groups did not differ from each other as both were highly attached to their mothers. Attachment to father also varied with abuse status,  $F(2, 31) = 7.20$ ,  $p < .003$ . Here again, the clinical infant group had significantly lower paternal attachment scores ( $M = 73.60$ ) than the clinical older child ( $M = 108.00$ ) or non-clinical infant ( $M = 99.27$ ) groups. Again, paternal attachment scores for clinical older child and non-clinical infant groups did not differ from each other, with both groups again demonstrating relatively high paternal attachment. There were no significant relationships between either peer attachment or general attachment and abuse status. (see Table 6).

Table 6

Means and Standard Deviations on Attachment and Self-Esteem Measures

	Clinical Older Child Adoptees (n = 9)		Clinical Infant Adoptees (n = 10)		Non-clinical Infant Adoptees (n = 15)	
	Mean	(sd)	Mean	(sd)	Mean	(sd)
IPPA - m	109.22	(11.86)	62.70	(18.09)	105.53	(11.33)
IPPA - f	108.00	(13.00)	73.60	(31.27)	99.27	(15.81)
IPPA - p	97.00	(20.19)	98.40	(18.68)	102.47	(11.12)
RULS	64.22	(13.93)	57.20	(15.65)	65.80	(7.87)
RSE	32.11	(7.67)	27.40	(4.77)	31.67	(3.75)

Demographic Variables

In addition to early maltreatment, age at removal from biological family, age at adoption, and number of foster placements were expected to predict attachment. In addition to these variables, the demographics in question were age at time of survey, gender, and years of formal education. They were measured using the LEQ, and then examined in relation to attachment. A regression analysis was performed on the attachment and demographic data, collapsing across the three groups (see Tables 7-10). The IPPA and RULS scores served as dependent or outcome variables, while age at time of survey, years of formal education, age at time of removal from birth family, age at time of adoption, number of foster placements and gender served as independent or

predictor variables. None of the demographic variables predicted attachment to mother. Attachment to father was significantly predicted by years of formal education ( $p < .04$ ), and marginally predicted by gender ( $p < .06$ ) and age at time of survey ( $p < .08$ ). Years of formal education and being female were positively associated with paternal attachment, while age at time of survey was negatively associated with paternal attachment. The regression equation for paternal attachment was marginally significant ( $p < .06$ ). Being male was a positive predictor of peer attachment ( $p < .03$ ), while no demographic variable predicted general attachment.

Table 7

Regression Analysis: Prediction of Maternal Attachment by Demographic Variables  
(N = 34)

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	Beta Weight	T-ratio	Probability
Age at Survey	-.26	-.34	n.s.
Years of Formal Educ	.46	.58	n.s.
Age at Removal	-.15	-.23	n.s.
Age at Adoption	.90	.96	n.s.
# of Foster Placements	-.45	-.91	n.s.
Gender	.16	.83	n.s.

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R square = .249

F-ratio = 1.49 (p = .22)

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Table 8

Regression Analysis: Prediction of Paternal Attachment by Demographic Variables  
(N = 34)

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	Beta Weight	T-ratio	Probability
Age at Survey	-1.31	-1.85	.08
Years of Formal Educ	1.60	2.18	.04
Age at Removal	.51	.84	n.s.
Age at Adoption	-.12	-.14	n.s.
# of Foster Placements	.05	.10	n.s.
Gender	-.36	-1.95	.06

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R square = .348

F-ratio = 2.40 (p = .06)

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Table 9

Regression Analysis: Prediction of Peer Attachment by Demographic Variables (N = 34)

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	Beta Weight	T-ratio	Probability
Age at Survey	.56	.72	n.s.
Years of Formal Educ	-.47	-.58	n.s.
Age at Removal	-.26	-.39	n.s.
Age at Adoption	.24	.25	n.s.
# of Foster Placements	-.03	-.06	n.s.
Gender	.48	2.38	.03

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R square = .208

F-ratio = 1.18 (p = .35)

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Table 10

Regression Analysis: Prediction of General Attachment by Demographic Variables (N = 34)

	Beta Weight	T-ratio	Probability
Age at Survey	.40	.47	n.s.
Years of Formal Educ	-.41	-.46	n.s.
Age at Removal	-.57	-.79	n.s.
Age at Adoption	1.05	1.01	n.s.
# of Foster Placements	-.51	-.92	n.s.
Gender	.01	.04	n.s.

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R square = .058

F-ratio = .28 (p = .94)

Hypothesis 2: Relationship Between Quality of Attachment and Level of Self-Esteem

Hypothesis 2 proposed that self-esteem and attachment would correlate positively. This hypothesis was based on Bowlby's (1969, 1973, 1980) theory of internal working models. According to Bowlby, internal working models are generated by our early caregiving experiences, and are complementary in nature. That is, someone with positive internal working models of other is likely also to have positive internal working models

of the self. The reverse is also presumed true. Furthermore, internal working models of self and other are believed to shape patterns of self-esteem and attachment, respectively. Given that both internal working models of self and other are believed to be complementary in nature, self-esteem and attachment were expected to be complementary as well. Pearson-product moment coefficients were calculated on attachment and self-esteem data. When group membership was ignored (Table 2), self-esteem correlated positively with maternal attachment ( $r = .55, p < .01$ ), paternal attachment ( $r = .52, p < .01$ ) and general attachment ( $r = .52, p < .01$ ), but not with peer attachment. However, when group membership was considered, these same relationships held only for clinical older child adoptees. That is, self-esteem correlated positively with maternal attachment ( $r = .80, p < .01$ ), paternal attachment ( $r = .78, p < .05$ ) and general attachment ( $r = .89, p < .01$ ), but not peer attachment (Table 3). As shown in Tables 4 and 5, both clinical infant adoptees and non-clinical infant adoptees showed no relationship between self-esteem and attachment.

### Hypothesis 3: Relationship Between Early Attachment and Later Level of Self-Esteem

Hypothesis 3 proposed that older child adoptees, having encountered early maltreatment, would demonstrate lower self-esteem than infant adoptees. Once again, early maltreatment was presumed because subjects had incurred delayed removal from their biological families. As such, age at time of removal from biological family was the independent variable. A one-way analysis of variance was performed on data obtained through the RSE. However, each of the three groups demonstrated similar levels of self-esteem,  $F(2, 31) = 2.48, n.s.$  (Table 6).

## Discussion

The purpose of the present study was to examine the relationship between early maltreatment and two aspects of psychological well-being, namely, attachment and self-esteem. Subjects were three groups of adolescent adoptees differing in adoptive status. Adoptive status was based on age at time of removal from birth family. Subjects removed before the age of 18 months were considered infant adoptees, while those removed after 18 months were considered older child adoptees. Older child adoptees were presumed to have a history of maltreatment because delayed removal from one's birth family is typically a result of maltreatment. Subjects also differed in terms of their receipt of psychological services, with clinical subjects currently receiving treatment, and non-clinical subjects not receiving treatment. Three hypotheses were proposed by the present study. The first related to the association between early maltreatment and later quality of attachment.

### Hypothesis 1: Relationship Between Early Maltreatment and Later Quality of Attachment

The first hypothesis proposed by the present study was that older child adoptees, all of whom were receiving clinical treatment, would show less attachment to adoptive parents and peers than infant adoptees, both those who had received clinical treatment and those who had not. Clinical older child adoptees were expected to demonstrate impairment in their current attachments as a result of their early maltreatment histories. The older child adoptee enters the adoption system typically after being removed from maltreating biological parents. The maltreatment may take the form of abuse or neglect, and is believed to have a negative impact on the early attachment experiences between infant and parent. Poor early attachment experiences generate maladaptive internal

working models of the self and other, which once formed, are resistant to change, and guide the individual in ongoing and future attachment relationships. Thus, older child adoptees should have manifested their poor early upbringings in relationships with both adoptive parents and peers.

Contrary to theory, however, older child adoptees did not present with poor attachments to parents or peers. In fact, quality of attachments between clinical older child adoptees and significant others were comparable to those for non-clinical infant adoptees. Conversely, clinical infant adoptees presented with less attachment to each parent than did clinical older child adoptees and non-clinical infant adoptees, although all three groups showed similar levels of peer attachment and general attachment.

#### Attachment in Older Child Adoptees

First, older child adoptees did not show poor attachments in their relationships with significant others. This outcome does not support this study's primary hypothesis of early maltreatment leading to poor later attachments, and as such suggests a re-examination of the assumptions underlying the hypothesis.

The first assumption was that the older child adoptees examined in the present study, like older child adoptees in general, had experienced early maltreatment, resulting in the formation of negative internal working models. Due to ethical considerations, it was not possible to inquire whether subjects had experienced such maltreatment. However, according to Reitz and Watson (1992), three conditions that positively correlate with early neglect and abuse are age at time of removal from birth family, number of foster placements, and age at time of adoption. As such, one would expect older child adoptees to be older both at time of removal and adoption, and to have experienced more

foster placements than infant adoptees. Analyses of the data corroborated these expectations. Thus, it appears that the older child adoptees examined here had incurred parental maltreatment sufficient to warrant permanent removal from their families of origin, and to produce negative internal working models.

The second and more tenuous assumption pertained to the stability and transference of internal working models to new relationships. According to Bowlby (1969, 1973, 1980), internal working models, once formed, are highly resistant to change, and are used to guide ongoing and future interactions. Several studies illustrating internal working model persistence and transference were cited earlier in support of Bowlby's hypothesis. Based on their findings, older child adoptees in the present study, who as a result of presumed early maltreatment had developed negative internal working models as infants, were expected to carry forth their negative internal working models and to show poor attachments as adolescents. However, older child adoptees actually had good attachment relationships, similar in quality to those of non-clinical infant adoptees. Apparently, their early internal working models had not been transferred to their current relationships with adoptive parents and peers.

To account for this finding, it may be useful to refer once again to Ellis's (1973) A-B-C model, where A is the activating event, B is the person's interpretation of the event, and C is the person's emotional or behavioral reaction. According to this model, the feelings and behavior exhibited by an individual are not the direct result of a given event, but rather of one's interpretation of that event. Furthermore, because the thoughts underlying our feelings and behavior are learned, they may also be unlearned, either in response to opposing environmental stimuli and/or cognitive restructuring.

The foregoing tenets of the A-B-C model form the basis of cognitive therapy.

Maladaptive feelings and behavior are considered the products of underlying cognitive distortions. In the absence of intervention, these distortions are typically maintained or strengthened over time. In order to effect positive emotional or behavioral change, it may be necessary to alter the associated irrational or distorted thoughts. Generally, a combination of cognitive and behavioral techniques are used to achieve this goal. Both encourage the client to challenge and disprove his/her irrational beliefs, and develop more rational beliefs.

In the present study, older child adoptees, having developed negative internal working models (B) as a result of early maltreatment (A), were expected to show poor attachment and self-esteem as adolescents (C). According to attachment theory, early internal working models determine the quality of one's future attachments, regardless of the nature of one's intervening experiences. Cognitive theory, however, would suggest that the emotional outcome of negative early attachment experiences depends on the nature of one's subsequent and ongoing attachment experiences. That is, given continued reinforcement of negative internal working models, that is, inconsistent, unresponsive parenting, one would be likely to manifest poor self-esteem and attachment in adolescence. However, given persistent, reliable parenting over time, it may be possible to alter previously negative models of self and other, and consequently show more functional levels of self-esteem and attachment. Given the results of the present study, it would appear that the older child adoptees must have incurred attachment experiences in their adoptive families that compensated for their early maltreatment, and led to a positive shift in their working models, and subsequent patterns of self-esteem and attachment.

There are several reasons to suggest that older child adoptee parents, in general, may be more aware of and responsive to the special needs of their child, than infant adoptee parents. First, couples considering the adoption of an older child are generally required to participate in a psychoeducational training program, which helps them to understand the needs of their future adoptees. For example, couples are made aware that family therapy may be useful in the future and are sensitized to the early indicators of such a need. With infant adoption, a pre-adoptive training program is usually not required. Furthermore, many infant adoptions are conducted privately, in which case there may not even be any agency involvement. As such, parents of older child adoptees are more likely than their infant adoptee counterparts to have knowledge related to adoption issues. Second, and perhaps more critically, the older child adoptee, unlike the infant adoptee enters the adoptive family with some awareness both of his/her status as an adoptee, and of his/her pre-adoptive experiences, e.g., previous existence in biological and foster homes, history of maltreatment, loss of biological parents. As such, it is much more difficult for the adoptive parents of an older child to simulate the experience of a biologically created family than it is for those adopting infants. Similarly, older child adoptive parents, having missed the first few years of their child's life, and having had to deal with adoption issues from the conception of their roles as older child adoptive parents, are well aware of the atypical construction of their family, and consequently more likely than infant adoptive parents to acknowledge rather than to deny the differences adoption makes. According to Kirk (1984), the acknowledgment of differences is more conducive to good communication, order, and stability in adoptive families than the rejection of such differences.

Hence, in the present study, although the older child adoptees were believed to be predisposed toward poor attachments, as suggested by conditions that correlate with early maltreatment (e.g., late removal from biological home, late entry into adoptive home, and high number of foster placements), this predisposition may have been overpowered by the consistently receptive and responsive rearing style of the adoptive parents. A cognitive therapy model would explain the presence of good attachments in older child adoptees by suggesting that early maltreatment is resolvable. That is, in the absence of continued maltreatment and in the presence of positive ongoing attachment experiences, the effects of early maltreatment may attenuate. Quality of attachment appears to be the result of interactions between the adoptee and adoptive parent, rather than a characteristic of the adoptee alone. Although not addressed in the present study, this is consistent with a family systems perspective which encourages understanding about attachment in the context of family relationships (Johnson & Fein, 1991). The family systems perspective supports a consideration not only of the individuals within a family, but of the interrelationships between members of the family. Connection to the family is an important issue considering that one of the challenges of the adopted child is to integrate into a new family.

#### Attachment in Clinical Infant Adoptees

The second major finding of this study was that clinical infant adoptees were less attached to their parents than were clinical older child adoptees or non-clinical infant adoptees. Had clinical infant adoptees shown similar impairments in all of their attachment relationships, one might deduce an overall inability to attach on the part of clinical infant adoptees. However, clinical infant adoptees showed good peer and general

attachments, similar in quality to those shown by clinical older child adoptees and non-clinical infant adoptees. In other words, impairments in the attachments of clinical infant adoptees were localized to their relationships with parents only. This suggests that the quality of attachment is a result of the interaction between adoptee and attachment figure. Apparently, the relationships between clinical infant adoptees and their parents were not as successful as those between clinical infant adoptees and their peers, once again supporting a systems theory of self-esteem and attachment development.

There are several possible explanations for why parents of infant adoptees may not be keenly sensitive to the needs of their children. First, these parents often have been unable to conceive children of their own, and may be struggling with issues of infertility. They may be resentful and self-conscious of the adoptive status of their family. This may inhibit the interactions in infancy that promote strong attachment. For example, parents who have difficulty accepting the child as their own may not feel as emotionally connected to the child as if he/she were their biological child, and thus be less responsive to the infant's cues for proximity or contact.

Conversely, parents who deny the adoptive status of their family may also be unlikely to engage in attachment-building behaviors. For example, as adoptees mature and develop their own identities, there is often need to resolve several issues pertaining to their status as adoptees, e.g., why they were relinquished, where/who they come from, loss of birth parents, in order to have successful adoptive relations (Reitz & Watson, 1992). Parents who attempt to simulate a biological parent-child relationship may avoid dealing with issues related to the child's status as an adoptee. If never given an opportunity to express his/her adoption concerns, the child may feel inhibited to initiate

such discussion, or may lack the awareness of the importance of such a discussion (Raynor, 1980). As such, issues that may need to be resolved are repressed, and may later manifest as attachment disorders.

On the other hand, adoptive parents open to discussion about the adoption facilitate the resolution of these issues. These adoptive parents are typically more comfortable with and less insecure about their status as adoptive parents, having generally resolved their own issues around such things as infertility and their decision to adopt. They are more willing to accept the differences that adoption makes, promote the child's sense of belonging, and allow the older adoptee to both acknowledge his/her birth family and discuss or remember his/her past. Although not examined directly, it may be speculated that the clinical infant adoptees examined in the present study did not have this type of parent-child relationship, i.e., one characterized by the unconditional acceptance and responsiveness required to form strong early internal working models, and as a result were unable to form sound attachments to their adoptive parents as infants. Clinical infant adoptees' negative early internal working models, once formed, were then likely perpetuated by continued insufficient attachment experiences with adoptive parents.

Finally, the insecure attachments manifested by clinical infant adoptees may have been related to internal family strife unassociated with adoption issues. Just as in a birth family, an adoptive family may experience the stress of problems that independently or in conjunction with adoption issues serve to create poor attachment experiences and disturbance in resultant attachment relationships. It may be that the families of this group of subjects were dealing with such problems.

### Comparison of Attachment in Clinical Groups

The discrepancy in quality of attachment between the two clinical groups is interesting. Whereas older child adoptees receiving therapy showed good attachments, infant adoptees receiving therapy did not. Since it was assumed that older child adoptees, unlike infant adoptees, encountered early maltreatment resulting in the formation of negative internal working models, it is unlikely that the attachments of older child adoptees were initially better than those of infant adoptees. Thus, this result would suggest that the therapeutic needs of clinical older child adoptees were met more so than those of clinical infant adoptees. The clinical issues being encountered by each group may have been either adoption and /or non-adoption related. However, either case would have benefited from therapist sensitivity to adoption related dynamics. According to Reitz and Watson (1992), although there has been a proliferation in the literature on both family therapy and adoption, little attention has been focused on treatment of families involved in adoption. Because of the dearth of information in this area, family therapists are often ill-prepared to provide specialized treatment to adoptees and their parents. Particularly in their dealings with individuals adopted as infants, therapists may attempt to approach therapy as they might with biological parent-child dyads, ignoring the issues related to adoption, such as loss of birth family and identity formation.

It is possible that therapists may fare somewhat better with clinical older child adoptees. Older child adoptees and their families, unlike infant adoptees and their families, tend to be aware of the issues they are being challenged by, for example, child's separation from birth parents, or the need to resolve prior maltreatment. They may also be more likely to expect the need for clinical intervention and thus be more receptive to

related health services. Infant adoptees and their families may be less likely to associate their difficulties with the adoption. Because these individuals came together as a family unit before the adoptee had conscious awareness of his/her adoptive status, they may downplay the impact of the nature of the child's entry into their family on their current life circumstances. Consequently, older child adoptees and their families may be better able to convey the underlying nature of the presenting problem. As such, therapists of older child adoptees may be likely to address adoption-related issues, e.g., loss and grief, identity formation, etc., during the course of treatment, which may be another factor that may have helped clinical older child adoptees overcome their histories of maltreatment.

Differences in non-adoption related issues between infant and older child adoptive families may also play a role in ability to benefit from therapy. Variables such as socioeconomic status, parental education, and personal views may influence families openness and receptivity to psychological services.

Negative internal working models, as mentioned previously, are the driving beliefs behind patterns of poor attachment and low self-esteem, and are formed through the repeated experience of negative attachment events. The aim of cognitive therapy is to improve the emotional well-being of its clients by: 1) replacing irrational beliefs with rational beliefs; and 2) promoting the repeated experience of events that undermine the irrational belief, and reinforce the rational one. As such, therapy has the potential to be a major vehicle for restructuring internal working models, and deserves to be emphasized as a requisite for those adoptive families encountering difficulties. Additionally, the relationship between therapy and attachment-building suggests a need for greater focus in the area of adoptive family therapy within the context of family therapy education.

### Peer and General Attachment Between Groups

Finally, all three groups showed similar and relatively high levels of peer and general attachment (see Table 6). According to attachment theory, internal working models are involved in the formation of all attachment relationships. As such, it is consistent for older child adoptees and non-clinical infant adoptees to have shown positive attachments to peers, because they also showed positive attachments to adoptive parents. However, according to this theory, clinical infant adoptees, having shown negative attachments to parents, should not have shown positive attachments to peers.

Here again, there is evidence to suggest that the quality of one's attachments depends not only on early life experiences, but also on the quality of future relationships. That is, an attachment is the result of thoughts and behaviors of two individuals, not just one. Thus, here it would appear that the parental relationships of clinical infant adoptees were not conducive to attachment-building, while their peer relationships were. Alternatively or additionally, Ryan and Lynch (1989), proposed that among adolescents lacking in emotional support at home, peer attachment may reflect a compensatory dynamic designed to obtain extra-familial acceptance and security.

The fact that all three groups showed similar levels of general attachment can be explained by referring to the RULS. The RULS, as mentioned previously, is designed to assess whether an individual has any attachment relationships, not how many. Thus, if every subject surveyed had at least one attachment relationship, their RULS scores would be similar. Thus, although the clinical infant adoptees were not attached to adoptive parents, the presence of peer attachment would be sufficient to yield general attachment

scores comparative to those obtained by older child and non-clinical infant adoptees, both of whom showed positive attachments to parents and peers.

### Demographic Variables

Age at time of removal from biological family, age at time of adoption, and number of foster placements were expected to predict attachment because each of these variables correlates with adoptive status and predicts adjustment. No formal predictions were made regarding the role of age at time of survey, years of formal education and gender. None of the demographic variables predicted maternal and general attachment. Years of formal education, gender and age at time of survey predicted paternal attachment. Gender predicted peer attachment. The positive relationship between grade level and paternal attachment may be explained by looking at typical parenting roles and expectations. As infants, children typically require a caregiving style that is characterized by nurturance and protection, whereas as adolescents, they tend to seek a caregiving style that encourages independence and self-sufficiency, while still maintaining moderate dependence. Since mothers may typically provide more nurturing experiences than fathers, and fathers may generally provide more independence encouraging experiences than mothers, maternal attachment may remain constant while paternal attachment may increase in intensity as children enter higher grade levels. On the other hand, the negative relationship between age at time of survey and paternal attachment supports the thesis that as children grow older, there is a tendency for parental attachments to be supplemented by other attachment relationships, e.g., peers, romantic partners, etc. Thus, although adoptees' attachment to fathers appears to increase with grade, there also appears to be a downward shift in paternal attachment with age.

Being female was also found to predict paternal attachment. Clinical literature suggests that female adoptees may have more difficulty than male adoptees in resolving the loss of their birth mothers, because of loyalty issues. Thus it may be easier for such children to develop a stronger attachment to a paternal rather than maternal attachment figure. The relationship between gender and paternal attachment appears to reflect this “dual mother” conflict (Donovan & McIntyre, 1990). Finally, being male was found to predict peer attachment. Being strongly attached to peers, especially for males, is typical because traditionally, boys more so than girls depend on peers for their socialization process (Gleitman, 1991).

In addition to the variables that did predict attachment, it is interesting to note the variables that consistently did not. Age at time of removal from birth family, age at time of adoptive placement, and number of foster placements are of particular interest because they are traditionally considered to be the most important predictors of adoptee adjustment. The lack of association between these three variables and attachment attests once again, to the resiliency of adoptees to withstand early maltreatment conditions, and suggests that equally successful adoptions can occur with infant as well as older child adoptees.

#### Hypothesis 2: Relationship Between Quality of Attachment and Level of Self-Esteem

The second question proposed by the present study pertained to the relationship between self-esteem and attachment. It was hypothesized that level of self-esteem would be positively correlated with quality of attachment. Because internal working models of both the self and other are a result of the same early attachment experiences with primary caregivers, they are complementary in nature. That is, if one has healthy internal working

models of others, one is likely also to have healthy internal working models of the self. Conversely, individuals with negative internal working models of others are correspondingly likely to have negative internal working models of the self. Since internal working models are the antecedents of our patterns of attachment and self-esteem, one would expect attachment and self-esteem to be complementary processes as well.

When examined across groups, self-esteem was moderately positively correlated with attachment to mother, attachment to father and general attachment. Self-esteem was not substantially correlated with attachment to peers. Similar results were found when responses were analyzed for older child adoptees only. However, neither of the infant adoptee groups demonstrated congruent results. In these groups, although the correlations between self-esteem and attachment were largely positive, they were not significant.

These results suggest that for older child adoptees, the most important source of self-esteem is their relationship with adoptive parents. Conversely, it appears that for infant adoptees, self-esteem is not as closely associated with attachment to parents. The explanation for these results may lie in developmental theory. For most young children, parents are the most important source of self-esteem. However, as they grow older, and enter adolescence, parents become one of many sources of self-esteem. Classmates, teachers, coaches, academic performance, and athletic achievement, for example affect and shape adolescents' level of self-esteem. Infant adoptees' development is generally consistent with this format. Older child adoptees, although progressing through the same developmental milestones, may continue to derive most of their self-esteem from their parents longer than infant adoptees. Having been adopted at a later age, older child

adoptees have had relatively fewer years to cultivate their relationships with adoptive parents. As a result, perhaps older child adoptees are older than infant adoptees when they have developed a secure enough base from which to expand their network of self-esteem providers. Thus, whereas infant adoptees may have many possible sources of self-esteem by the time they reach adolescence, older child adoptees are still primarily dependent on their parents for the same support.

### Hypothesis 3: Relationship Between Early Maltreatment and Later Level of Self-Esteem

Finally, the third question proposed by the present study concerned the relationship between early maltreatment and self-esteem. In addition to poorer attachment, older child adoptees were expected to show less self-esteem than clinical infant adoptees and non-clinical infant adoptees, provided self-esteem was correlated with attachment. Again, older child adoptees were expected to show poor attachment because of the maltreatment they had encountered as infants. Self-esteem was expected to be positively correlated with attachment because both are products of internal working models which are complementary in nature.

Self-esteem was moderately correlated with attachment. However, clinical infant adoptees, not older child adoptees, showed the least attachment among the three groups. Correspondingly, clinical infant adoptees showed the lowest levels of self-esteem compared to older child adoptees and non-clinical infant adoptees. The demonstration of both low self-esteem and low attachment by clinical infant adoptees suggests that self-esteem and attachment are complementary derivatives of internal working models of self and other. However, this relationship only approached significance. This suggests that either the relationship between adoptive status and self-esteem is not a very powerful one

and /or the number of subjects surveyed were inadequate to conclusively demonstrate this relationship.

### Summary

To reiterate the major findings of the present study: older child adoptees showed sound attachment relationships; clinical infant adoptees showed the poorest attachments among the three groups surveyed; self-esteem was moderately correlated with attachment to parents; and self-esteem was marginally related to adoptive status, with clinical infant adoptees showing the lowest levels of self-esteem among the three groups.

Three hypotheses were tested: 1. that older child adoptees would show less attachment than clinical infant adoptees and non-clinical infant adoptees; 2. that self-esteem would be positively correlated with attachment; and 3. that older child adoptees would show less self-esteem than either clinical infant adoptees or non-clinical infant adoptees. Only the second hypothesis was supported.

### Major Conclusions

Several conclusions may be drawn from the results of the present study. First, early internal working models may not necessarily determine the quality of future attachments and level of self-esteem in adolescent adoptees. The adaptive levels of self-esteem and attachment demonstrated by older child adoptees in the present study indicate that early internal working models, once formed, are amenable to change, contrary to predictions based on attachment theory. The results are consistent with cognitive theory, according to which maladaptive beliefs, in this case negative internal working models, may be changed, with consequent positive emotional and behavioral repercussions.

Clinically, this finding suggests that early maltreatment, as defined by delayed removal from birth home, in adoptees may be resolvable. There is an underlying assumption in attachment theory that the experiences a child has in his/her early years will predict his/her later life adjustment regardless of the nature of his/her later childhood, adolescent or adult life experiences. Although the theoretical basis for this assumption is strong, it was not supported by the findings of the present study. That is, although early life experiences may have long-term effects, the results of the present study suggest that they alone do not exclusively dictate the quality of older child adoptees' adjustment as adolescents.

Although not tested directly, it appears that adoptive parents play an integral role in the development of their children's attachment relationships and sense of self-esteem. The acknowledgment of adoption-related differences, unconditional acceptance of the adoptee and his/her background, and willingness to openly discuss issues pertinent to the adoptee, appear to be key ingredients in a successful adoptive experience (Reitz & Watson, 1992). Conversely, parents who deny the existence of adoption-related differences, feel uncomfortable with the child's status as an adoptee, and do not encourage open dialogue with regard to the adoption, may be unlikely to provide the responsive parenting required for attachment-building experiences with their children, with consequent emotional and behavioral ill-effects.

Similarly, it is important for therapists to be aware of adoption-related issues in their treatment of infant adoptees as well as older child adoptees, whether presenting concerns are adoption related or not. In the present study, of the two clinical groups examined - older child adoptees and clinical infant adoptees - only the former showed

good attachment and self-esteem. This would suggest, as mentioned previously, that there is a tendency for therapists to overlook adoption-related issues in their treatment of infant adoptees. Given the lack of education in the area of adoptive family therapy, it is not negligence, but rather lack of knowledge that leads to such therapeutic error, suggesting the need to promote greater training in this area.

Self-esteem and attachment to parents are correlated constructs. This result is consistent with attachment theory, which predicts that self-esteem and attachment will be positively correlated because they are the products of internal working models of self and other, which in turn are the complementary offspring of early attachment experiences. Additionally, the observed relationship between self-esteem and attachment is consistent with findings of former studies in the area of attachment research (Armsden & Greenberg, 1987; Groze, 1992; McCormick and Kennedy, 1994; Ryan and Lynch, 1989). Finally, the high scores obtained by older child adoptees and non-clinical infant adoptees on measures of attachment and self-esteem suggest that adoption itself is not a threat to good attachment relationships and sense of personal worth.

#### Confounds, Limitations and Suggestions for Future Research

Participants in the three groups did not differ in age or educational level. Therefore it appears that the observed between group differences were not related to either of these constructs. However, there may have been other contributing variables that affected the development of attachment and self-esteem but were not controlled for. It may have been useful to consider variables such as temperament of adoptee, or child-rearing beliefs of adoptive parent. For example, “easy” temperament adoptees may have been more likely to engage in attachment-building behaviors than their “difficult” temperament

counterparts. Similarly, adoptive parents who believe in consistently reinforcing their child's cues for comfort may have been more responsive to attachment overtures than parents who believe such responsiveness spoils the child.

As seen in Table 6, clinical infant adoptees showed consistently lower levels of attachment and self-esteem than either older child adoptees or non-clinical infant adoptees across all measures except peer attachment. Although only two of these differences were statistically significant, namely maternal and paternal attachment, the consistent pattern strengthens the finding that clinical infant adoptees were less well-adjusted to their adoptive families than either older child adoptees or non-clinical infant adoptees. It is possible that the lack of significance in between group differences on general attachment and self-esteem were due to insufficient sample sizes. Thus, a limitation of the present study may have been the small sample size in each group.

The conclusions of the present study may have been strengthened if there had been some measurement of the clinical concerns being addressed by adoptees. The inclusion of a fourth group - clinical non-adoptees - would have provided further information on this matter. If the clinical non-adoptees had demonstrated higher attachment and self-esteem than clinical infant adoptees, it would be possible to more conclusively assert that the poor attachment and self-esteem of clinical infant adoptees were related to lack of resolution of adoption-related issues. However, had the clinical non-adoptees demonstrated similar levels of attachment and self-esteem as clinical infant adoptees, it would have suggested that the latter group's failure to attach and low self-esteem may have been related to issues common to both adoptive and biological families more so than those specific to adoptive families. Another way in which this information could have

been obtained is to have simply inquired as to the nature of subjects' clinical concerns. However, attempting to obtain such personal information may have reduced subject participation or aroused parental concern.

The conclusions may also have been strengthened if not only the level of attachment to parents and peers, but also the nature of that attachment had been assessed. Just as the Strange Situation (Ainsworth, et al., 1978), allows researchers to categorize infant attachment, and speculate how a given attachment pattern developed, knowing the adolescent's style of attachment could provide some indication as to the strengths or deficits in caregiving that he/she may have incurred. Knowing what may have led to a given pattern of attachment might enable therapists and parents to better judge where the focus of remediation or reinforcement should be.

Finally, in future studies of adoption outcome, it may be useful to obtain data regarding the quality of the adoptive family's functioning. As mentioned earlier, attachment is developed through interactions between the child and caregiver, not by the child alone. Thus, a closer examination of the attachment behaviors of adoptees, caregiving behaviors of adoptive parents, and exchanges between adoptee and parent could elucidate which behaviors and interactions facilitate or discourage the development of secure attachment relationships. This information would allow for the substantiation of possibilities that have only been speculated upon in the present study, namely that the adoptive parent-child relationship has the ability to transform early internal working models. This knowledge could also have both preventative and remedial benefits. For families seeking to adopt, or having recently done so, promotion of attachment-building behaviors, by social workers involved in placement, could help to avoid adoption

disruption at a later date. Other families may already be experiencing difficulties in their relationships with adoptees. Here, being able to identify both attachment-building and attachment-inhibiting behaviors, and encouraging the former while discouraging the latter could form an important part of treatment.

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## Appendix A

Cover Letter

We are writing to ask for your assistance in our attempt to better understand the relationships of adolescent and young adult adoptees. As an adoptee, we believe that you are part of a distinct group of individuals who have encountered many unique life experiences. We are interested in learning about your experiences, and about your relationships with your adoptive parents, and your peers. We hope that our study will serve to promote a better understanding of the issues you and other adolescent adoptees face. We also hope that our findings will help psychologists, social workers, and adoptive parents make more informed decisions in their efforts to help adoptees adjust to their adoptive environments.

To make our study possible, we would like to ask for your help in terms of completing the enclosed questionnaires, namely the **Life Experiences Questionnaire**, the **Parent and Peer Relationships Questionnaire**, the **Social Questionnaire**, and the **Self Questionnaire**. Your cooperation is entirely on a voluntary basis and you may discontinue participation at any time. We do not require any personally identifying information. All collected data will be held completely confidential and there are no anticipated risks associated with participation. Completion of the questionnaires should take approximately 45 minutes in total.

This research is part of my Master's thesis in clinical psychology, and it has received complete approval from the Saint Mary's University Ethics Committee. My supervisor is Dr. Carolyn Humphreys, an adjunct professor at Saint Mary's University, and a full time clinician at Breakthrough which is a family therapy clinic in metro Halifax. Should you have any questions or concerns, please feel free to contact either myself, Mona Kumar at the Department of Psychology, Saint Mary's University, Halifax, Nova Scotia B3H 3C3 (902) 420-5146, or Carolyn Humphreys, Ph.D. at Breakthrough 6009 Quinpool Road, Suite 700, Halifax, Nova Scotia B3K 5J7 (902) 423-9939.

Should you agree to participate, we would request that all forms be returned to us by May 20, 1996. Once you have completed the questionnaires, we would request that you return them to us in the enclosed self-addressed envelope. I would like to reiterate that we do not require any personally identifying information, i.e., name, return address, etc. Should you wish to receive a summary of the results of this study, please indicate this on the enclosed postcard which is addressed to a different location than the questionnaire return envelope. *Completion of the enclosed materials will indicate that you have understood the nature of the study, and have agreed to give your informed consent to participate.*

Thank-you in advance for taking the time to contribute your valuable insight to our study.

Mona Kumar

Carolyn Humphreys, Ph.D.

