Attachment to Mother/ Attachment to Father: Links to Peer Relations in Late Childhood and Early Adolescence

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Abstract

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The purpose of this study was to examine the influence of the parent-child attachment relationship on children's friendships and acceptance by peers during late childhood and early adolescence. Intergenerational similarities in attachment patterns were also examined.

130 elementary (grades 4-6) and 226 high school students (grades 7-8) participated. Closeness of friendship, number of friends, and sociometric status were determined from unlimited same-sex positive and negative peer nominations. Security of attachment was assessed using the Kerns Security Scale (Kerns, in press), a 15-item self-report measure. Parent attachment style was inferred from self-reported attachment in romantic relationships (Simpson, 1990).

Children securely attached to their mothers were more likely than insecure children to be involved in a best/good friendship, rather than a lower level reciprocated friendship. Surprisingly, secure and insecure children did not differ in frequency of not having any friends. Secure children were also more likely than insecure children to be of average sociometric status, than to be rejected or neglected by their peers, but were no more likely to be popular.

Security to father was not significantly related to friendship closeness or to sociometric status.

Children rating themselves as secure to either parent had mothers who were themselves more secure in close relationships, whereas insecure children had mothers who were higher in insecurity. No relation was found between father's security and child's security to either parent, suggesting that children's reported security to both mother and father may reflect aspects of the mother-child attachment relationship.

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Introduction

Research examining processes in the development and maintenance of children's peer relations has dramatically increased over the past decade. The importance of peer relations as a contributor to the development of children's social skills, sense of security, and conceptions and feelings about the self has been demonstrated (Bukowski & Hoza, 1989). Children who are well-liked or accepted by their peers are unlikely to develop later adjustment problems (Coie, Dodge & Kupersmidt, 1990). On the other hand, early social difficulties with peers may place children at risk for later academic problems and psychological disorders (Parker & Asher, 1987). These findings have stimulated interest in the origins of individual differences in children's peer relations; recently, special interest has focused on the influence of family variables. The purpose of this research is to examine the influence of parent-child relationships, specifically the attachment relationship, on children's friendships and acceptance levels within the peer group.

Social Status and Friendship

Peer relations can be conceptualized in terms of both social status and friendship. Friendship is the experience of having a close, mutually positive dyadic relation, whereas social status, or popularity, is the experience of being liked or accepted by the members of one's peer group (Bukowski & Hoza, 1989). Popularity and friendship are empirically and conceptually related. That is, children who are well-accepted by their peers are more likely to be involved

in a specific dyadic friendship than children who are less accepted; though it is also possible to be highly accepted and have few friends, and/or to be rejected and have many friends. In a recent study, Parker & Asher (1993) found that high and average accepted children were twice as likely to have a "very best" friend than low accepted children. Nonetheless, although friendship and social status are related, they also serve different functions and contribute uniquely to children's social development.

For example, in a study examining fourth and fifth grade children over a one year period, Bukowski, Hoza & Newcomb (1991) cited in Hartup (1993), found that having a reciprocated friendship was significantly related to self-esteem, but not to self-reported attributions of social skills; while social status was significantly related to self-reported social competence, but not to self-esteem. Further, in a study examining popularity and friendship in grade five and six children, Bukowski, Hoza & Boivin (1993) found that popularity was linked to social belongingness, while mutual friendship was linked to absence of loneliness. Parker & Asher (1993) discovered that children's friendship adjustment had an influence on children's feelings of loneliness above and beyond peer group acceptance. Therefore, it is important to study both social status and presence of friendships as distinct contributors to children's adjustment.

The measurement of social status has undergone many changes over the past few decades. Early studies used a unidimensional approach, which

was based on the number of nominations children received as a friend or a playmate. However, with the realization that peer rejection and peer neglect were just as important as peer acceptance in determining a child's social status, and that positive nomination scores only correlated with negative nomination scores at a -.2 level (Asher & Hymel, 1981), many researchers turned to a two-dimensional model of sociometric status. This new approach enabled researchers to differentiate between social impact (the relative degree that children are noticed by their peers) and social preference (the extent to which children are liked or disliked by their peers; Newcomb, Bukowski & Pattee, 1993).

The most widely used measure for classifying children into social status categories was developed by Coie, Dodge, & Coppotelli (1982). Using this measure, level of acceptance and rejection are determined based on the number of "most liked" and "least liked" nominations that each child receives from peers, standardized within grade level. Social impact (standardized sum of acceptance plus rejection) and social preference (standardized difference of acceptance minus rejection) are then calculated based on these scores, and are used to distinguish five peer status categories. These categories include popular, (many positive, few negative nominations), rejected, (few positive, many negative nominations), neglected, (few positive, few negative nominations), controversial, (many positive, many negative nominations) and average, (those who cluster around the mean for both types of nominations).

Much research has focused on the relation between sociometric status and behavioral characteristics as defined by the popular, rejected and neglected subgroups (Coie, Dodge & Kupersmidt, 1990; Cantrell & Prinz, 1985; Dodge, 1983). In a recent review, Newcomb, Bukowski & Pattee (1993) found that the behaviour correlates of children in each sociometric group were linked to the quality of their social relations. Popular children evidence more positive social traits, greater social problem solving and friendship skills, are less likely to show disruptive behaviour, and are less lonely than average children. On the other hand, children who are rejected by their peers are described as less sociable and cognitively skilled than average children (Newcomb et al., 1993), more aggressive and disruptive (Coie et al., 1990; Coie et al., 1982; Dodge, 1983), more lonely (Asher & Wheeler, 1985), and are more likely to drop out of school and/or to become delinquents in adolescence (Parker & Asher, 1987). Therefore, level of acceptance within the peer group is an important predictor, and perhaps contributor, to social competence and positive adjustment in childhood and adolescence.

Presence of a reciprocated "best" or "good" friendship, as distinguished from acceptance within the peer group, is also an important contributor to children's adjustment. Although the significance of friendship during childhood and its contribution to subsequent development have not been well researched, evidence suggests that friendships serve essential socialization functions throughout the life-span (Hartup, 1983). Sullivan (1953) proposed that

friendships, especially in pre-adolescence, provide children with unique experiences that foster the growth of various social competencies. According to his theory, intimate interactions which occur in children's friendships tend to validate their sense of self and increase their sensitivity to the needs of others (Sullivan, 1953). Friendships provide children with emotional security and support. Children with stable, reciprocated friendships are more socially competent (Hartup, 1993), more altruistic (Mannarino, 1976), and have higher self-esteem (Bukowski, Newcomb & Hoza, 1987) than children without friends, whereas friendless children report higher incidences of loneliness and depression (Asher, Hymel & Renshaw, 1984; Parker & Asher, 1993). Therefore, the development of a close reciprocated friendship, may contribute positively to children's adjustment.

Friendship is commonly assessed by determining whether reciprocated, positive feelings exist between a given child and at least one specific peer. This is accomplished using mutual positive nominations (Bukowski & Hoza, 1989). Evidence suggests that children involved in mutual friendships perceive their relationships as less conflictual, and as providing more companionship, helpfulness, closeness and security than non-mutual relationships (Bukowski, Boivin & Hoza, 1991). Another level of assessment deals with the number of friends that a child has (Bukowski & Hoza, 1989). However, several studies in this area have shown that presence, and/or quality of friendship, but not number of friends, are important influences on children's adjustment. In

Bukowski, Hoza & Newcomb's (1987) study examining popularity and friendship in adolescence, no differences were found in self-concept for boys and girls who had one, two, or three mutual friends. In a study examining attachment and friendship quality, Kerns, Klepac & Gruys (under review), found that number of friendships was not related to friendship quality, but was related to peer acceptance and loneliness. This is consistent with the sociometric literature, which has suggested that children who are highly accepted by their peer group tend to have more reciprocated friendships than low accepted children (Parker & Asher, 1993). Therefore, presence of a close friendship, rather than number of friends, is more likely to contribute differentially from popularity to children's social adjustment.

In addition, few studies have differentiated between presence of a mutual "best" friend and a mutual "good" friend, or the level of "closeness" in children's friendships. In comparison to children with good friendships, children involved in best friendships are assumed to be "closer" (Price & Ladd, 1986). Recent literature has suggested that "best" and "good" friendships differ in quality and are differentially related to adjustment (Hardy, Doyle, Markiewicz & Spector, under review). In a study examining children in grades 3-6, Hardy et al., found that children with stable mutual "best" friendships rated their friendships more positively on qualities such as helpfulness, closeness, companionship, and security, than children with stable mutual "good" friendships, or those with no mutual friendships. In addition, the distinctions between participation in a stable

best, stable good and no stable friendship, uniquely predicted children's self-evaluation of competence with peers. Therefore, when assessing children's friendships in relation to subsequent adjustment, differences between "good" and "best" friendships, (in addition to lower level reciprocations and no reciprocations), should be examined. In addition, the relationship between friendship closeness and sociometric status should be outlined.

Parental Influences on Children's Peer Relations

Most research examining the antecedents of children's sociometric status, (acceptance level within the peer group), and children's friendships, have focused on children's behavioral and social-cognitive characteristics. Little research, however, has focused on the role that parents play in the development and maintenance of their children's friendships and acceptance level within the peer group. Since children's most important social and emotional experiences occur within the family environment, it appears reasonable to expect that parent-child relations will influence the development of children's peer relations (Putallaz & Heflin, 1990; Parke, MacDonald, Beitel & Bhavnagri, 1988). In addition, since the relation between social status and social behaviour appears early (Putallaz & Heflin, 1990), and since friendships emerge as early as infancy or toddlerhood (Howes, 1983), parental influence on the development of children's social competence among peers is very likely.

Parents influence children's peer relations **directly,** through arranging or supervising peer contacts, and by explicitly teaching them about social

behaviour through suggestions, instructions, or expression of approval and disapproval (Rubin & Sloman, 1984). Parents also affect their children **indirectly,** by influencing the expectations that they form of their relationships with others (Sroufe & Fleeson, 1986). These indirect influences become important in middle childhood, when direct caregiving is less imperative. Within the parent-child relationship, behavioral skills (ie. initiation and maintenance of relationships), social-cognitive skills (ie. conflict resolution strategies; Pettit, Dodge & Brown, 1988; Putallaz, 1987), and expectancies of the outcome of social strategies (Hart, Ladd & Burlson, 1990) are acquired. These seem to be important skills for both the development of friendships and for acceptance within the peer group.

In a study by Putallaz (1987), evidence was found suggesting that maternal behaviour (involvement, warmth, moderate control), plays a significant role in the development of children's social competence and acceptance level among peers. Mothers of children with higher peer status were more positive, more focused on their children's feelings, and less disagreeable and demanding when interacting with their children, than mothers of lower status children. In addition, the behaviour that mothers exhibited with their children was highly related to the manner in which their children acted with both them and with their peers, suggesting that children may acquire some of their social behaviour through interaction with their mothers (Putallaz, 1987). This learning would affect both social status and presence of a mutual friendship. Parents' child-

rearing style has also been implicated as a determinant of children's prosocial behavicur and sociometric status (Dekovic & Janssens, 1992; Peery, Jensen & Adams, 1985). Studies have indicated that parents of popular children are more likely to adopt an authoritative/democratic style in their interactions, are more sensitive to their children's signals and are more involved with their children. Parents of rejected children tend to use an authoritarian/restrictive style, and display fewer positive emotions in response to their children (Dekovic & Janssens, 1992).

This implies that parents who are more involved with their children, show greater warmth, and are more sensitive to their children's signals, will have a positive influence children's peer relations. This effect may be direct, or it may be mediated by children's security of attachment. Nonetheless, although it seems most logical to expect parents to set children's social atmosphere, it is also possible that higher status, more socially competent children, elicit positive responses from their parents.

The Parent-Child Attachment Relationship

Studies with young children suggest that the quality of children's relationship with their parents, especially with their mother, may influence the quality of the relationship with their peers (Cohn, Patterson & Christopoulos, 1991; Elicker, Egeland & Sroufe, 1992; Putallaz & Heflin, 1990). The attachment relationship in infancy, one of the most important means of describing the parent-child relationship, has been linked to peer adjustment in

preschool, and more recently, to peer adjustment in later childhood (Bretherton, 1985; Grossman & Grossman, 1991; Elicker et al., 1992). Security of attachment in infancy has generally be assessed using Ainsworth's Strange Situation, a series of eight episodes where infants are observed in an unfamiliar playroom with a stranger, during a sequence of separations and reunions with the mother. The extent to which children cope with the distress of separation, and their need for proximity upon reunion, reflect their quality of attachment. Securely attached infants (group B) greet their mothers actively and positively, insecure-resistant infants (group C) show angry, resistant behavior combined with contact-seeking behavior, while insecure-avoidant infants (group A) avoid or snub the mother upon reunion (Bretherton, 1985).

Research indicates that infants identified as securely attached, are generally confident in exploring their environment, in performing tasks, and in initiating interactions with others. Children identified as securely attached in infancy have been observed as more socially competent and affectively positive around their preschool classmates (Waters, Wippman & Sroufe, 1979), have more reciprocal interactions with unfamiliar peers (Lieberman, 1977), and are less dependent on their preschool teachers (Sroufe, Fox & Pancake, 1983), when compared with insecurely attached infants. On the other hand, children identified as insecurely attached in infancy show more hostile and negative behaviour with unfamiliar peers than those identified as securely attached, and tend to have social interaction deficits (Lieberman, 1977). Because the

behavioral characteristics of securely and insecurely attached children are related to social competence and social skills, it is very likely that the parent-child attachment relationship will effect both friendship development and acceptance by peers.

The relationship between parent-infant attachment and subsequent adjustment in childhood has primarily been attributed to John Bowlby's (1969, 1982) notion of children's "internal working models" of both the attachment figure and of "the self." An internal working model is defined as a mental representation of an aspect of the world, self, and/or others, or relationship to others, that is of special relevance to the individual (Bowlby, 1982). Bowlby (1973) explains that children develop working models of relationships based on their experiences and interactions with their primary caregivers. These working models foster expectations about how others are likely to behave, as well as how children themselves should behave. Bowlby (1980) suggests that internal working models of attachment figures, once organized, tend to operate outside of conscious awareness, and are resistant to dramatic change. Nonetheless, Bretherton (1985) argues that internal working models must be revised, especially during childhood, when development is taking place at a rapid pace. As the child grows cognitively and affectively, internal models of the 'self', and of 'others' become more sophisticated, changing the behavioral components regulated by the attachment system over age. Bowlby (1979) explains that although the frequency and intensity of parent-child attachment behaviour

declines with age, the attachment bond does not necessarily decrease.

The mother-child relationship has been shown to be the foundation for the child's representational model of "the self." Mothers of secure infants have been found to respond consistently and sensitively to the infants' communication signals, providing the infant with a secure base from which to explore the environment (Ainsworth, Blehar, Waters & Wall, 1978). Securely attached children are encouraged to develop independently, while at the same time, are confident that their emotional needs will be met. Consequently, they will be most likely to approach peer relations in later childhood with a sense of self-confidence. Mothers of insecure-avoidant babies have been found to be insensitive to their infants' signals and often block or reject their infants' attempts towards access (Main, Kaplan & Cassidy, 1985), whereas mothers of insecure-resistant babies have been observed to be inconsistently responsive to their infants' signals (Ainsworth et al., 1978). In turn, insecure children tend to develop a view of the "self" as unworthy or undeserving of their mother's love. Consequently, these children may lack self-confidence as they develop, causing them to have difficulties with peers.

In addition to fostering the child's model of "the self," the child's interactional involvement with the caregiver shapes his or her expectations of how others will respond. For example, children who develop positive, secure attachments to their primary caregiver develop a "working model" of the parent as responsive, and of themselves as worthy of their parent's love (Bowlby,

1973; Sroufe & Fleeson, 1986). Consequently, securely attached children are more likely expect their peers to be sensitive and responsive to their needs, and as Cohn et al. (1991) suggest, will be more likely to elicit positive responses from them. These children are likely to behave in a synchronous, co-operative manner, enabling them to establish close friendships with peers, and/or to be popular with their peers. Insecurely attached children develop a working model of their parents as either rejecting (avoidant), or inconsistently responsive (resistant), and tend to feel that they themselves are unworthy and incompetent, and that others, such as their peers, will be unresponsive to their needs. This may lead to subsequent withdrawal from social interaction, or utilization of inappropriate interaction strategies with peers, causing peer rejection or neglect, and/or an inability to establish friendships.

Youngblade & Belsky (1992) suggest that the attachment relationship allows children opportunities to learn how to handle intimacy and closeness, which may be more important for the formation of friendships, rather than for acceptance by peers. In addition, both the attachment relationship and the friendship relationship are on a dyadic level, and therefore, the friendship relationship may be more closely linked to attachment than to social status (group level). However, since empirical research with young children has found that a broad range of peer relations are affected (LaFreniere & Sroufe, 1985), the present study will examine both close friendships and peer acceptance in older children, in order to clarify this issue.

Sullivan (1953) proposed that for school-aged children, acceptance by peers is of great concern, while during early adolescence, friendship (based on intimacy and self-disclosure), rather than popularity, gains emphasis. This suggests that the dyadic parental attachment relationship may be more strongly linked to friendship in early adolescence, and to acceptance by peers in late childhood. Additional research is needed in order to examine the differential effect of attachment status on friendship and sociometric status at different age levels.

Attachment Beyond Infancy

Although much research has examined attachment in infancy as a predictor of social competence in preschool (Park & Waters, 1989; LaFreniere & Sroufe, 1985; Waters et al., 1979), few studies have investigated the relationship between attachment and social competence in childhood and early adolescence. Bowlby (1969, 1982) explains that human beings, at any age, are most well adjusted when they have confidence in the accessibility and responsiveness of a trusted "other." Again, despite age-related changes in attachment behavior, expectations of attachment figures based on earlier experiences are believed to persist and influence children's patterns of relating to others. Bretherton (1985) suggests that attachment beyond infancy and early childhood is reflected in the continuity in the organization of the child's "internal working model." In addition, Bowlby (1987, cited in Ainsworth, 1990) explains that older children rely on the availability of attachment figures as a

secure base from which to explore, and as a source of comfort in times of stress. Availability of the attachment figure is determined by a child's belief that the attachment figure is open to communication, physically accessible, and responsive if help is needed (Bowlby, 1987, cited in Ainsworth, 1990).

Three recent longitudinal studies of infant-parent attachment have extended beyond preschool. Elicker et al. (1992), in an observational study of ten-year-old children at summer camp, found that children who were classified as securely attached in infancy were rated by their camp counsellors as more sociable and more popular with their peers than insecurely attached children. Observational data and children's self-reports also illustrated that secure children were more likely to have developed a reciprocal friendship than insecure children (Elicker et al., 1992). Looking at a German sample, Grossman & Grossman (1991), showed that ten-year-old children with secure attachment histories were more likely to report having one or more "good" friends, while insecure children reported having fewer friends, and encountered more problems within the peer group. Lewis & Feiring (1989) found that at nine years of age, securely attached boys, but not secure girls, were more likely to have a higher number of friends than insecurely attached boys.

The two latter studies reported number of friendships, rather than presence or closeness of friendships. Because number of friendships may not be indicative of children's adjustment, and has little influence on their self concept when other indices are controlled (Bukowski et al., 1987), the

importance of this finding, independent of popularity, is unclear. In addition, in the Elicker et. al. (1992) study, popularity ratings (but not ratings of rejection and neglect), were determined by camp counsellors. Most evidence indicates that within the classroom, peers, rather than teachers, and by analogy, counsellors, are more accurate assessors of social status in middle childhood (Cowen, Babigian, Izzo & Trost, 1973). Therefore, research is needed on the relationship between parent-child attachment and closeness of friendships (best, good, none), rather than number of friendships; and social status as assessed by peers, rather than by an outside observer. The present study will attempt to clarify these issues.

Some researchers disagree with Bowlby's (1982) claims that quality of attachment in infancy remains stable throughout childhood due to stable internal working models, which exist outside of consciousness. Stability of attachment classification in infancy to mother is a well-replicated finding in white, middle-class families (Main & Cassidy, 1987). However, in poor families experiencing stressful events, low, but significant, stability of attachment classification has been found in some samples (Vaughn, Egeland, Sroufe & Waters, 1979), while instability has been found in others (Thompson, Lamb, & Estes, 1982). Stability of attachment status in middle-class samples, (who have experienced few stressful life-events), has been attributed to the assumed stability of mother-infant interactions across time, while the lesser stability of attachment status in the poverty samples has been attributed to life-events which change the

mother's own relationships and functioning, which in turn, alter the structure of the relationship with her infant.

Main et al. (1985) suggest that it is possible that internal working models can be altered, but only in response to concrete experience. For example, studies have shown that stressful events in the child's family lead to either detrimental or beneficial reorganizations of the attachment relationship (Vaughn et al., 1979; Thompson et al., 1982). Egeland & Sroufe (1981) found that in abusive families, the quality of the infant-mother relationship tends to deteriorate from 12-18 months, especially when the mother is psychologically depressed and unavailable. However, changes in attachment status are not necessarily permanent. Longitudinal data are required to examine factors affecting permanent versus temporary changes in the attachment relationship.

When studying the relation of quality of parent-child relationships to other factors, it is unclear whether it is the early, or the concurrent attachment status which is more important. Therefore, it would be useful to assess the quality of current attachment relationships (Lamb & Nash, 1989; Main et al., 1985). Recently, measures for assessing security of attachment in preschoolers and young school age-children (Main & Cassidy, 1987; Main et al., 1985; Waters & Deane, 1985) and in older children (Kerns, under review; Armsden & Greenberg, 1987), have made it possible to examine the concurrent association between child-parent attachment and social competence in school-aged children and adolescents. Kerns' (in press) attachment quality scale allows researchers

to assess the child's current specific attachment relationship to both mother and father from the child's point of view.

If attachment is in fact stable over time as Bowlby (1982) has suggested, then children should theoretically receive the same classification as they would have in infancy. If, however, attachment status is modified due to stressful life experiences, or due to reorganization of the internal working model, it will most likely be tapped by a concurrent measure. Lewis & Feiring (1991) suggest that attachment status should not be looked at as a stable trait which develops in infancy and influences later behavior, but that the child's environment plays a crucial role, influencing child outcome. They provide some evidence suggesting that children's attachment status in infancy and in early childhood is related to the environment at each of these points, and that the environment is somewhat stable from infancy into the early school years (Lewis & Feiring, 1989). Nonetheless, validity studies examining stability of infant attachment status into middle childhood are lacking.

Main & Cassidy (1987), found that attachment classifications to mother at age six, assessed by unstructured reunions with parents in a laboratory setting, were highly predictable from infancy attachment classifications (84% of cases predicted). Lower, but significant, predictability was found for attachment to father (61% of cases predicted). Only one known study has examined the concurrent relationship between parent-child attachment in late childhood and peer relations. Using their own self-report measure, Kerns et al., (under

review), found that 5th graders who viewed their relationship with their mother as more secure were significantly more accepted by peers, had more reciprocated friendships, and were less lonely than children who rated their relationships as less secure. Although these results are similar to those found among preschool children, where secure attachment to mother predicted positive social relations (Park & Waters, 1989), additional studies should examine school-age children in order to replicate and extend Kerns' et al., (under review), results.

The Role of Fathers vs. Mothers

Although attachment to mother has been implicated in the development of children's social competence and sociometric status (LaFreniere & Sroufe, 1985; Lieberman, 1977; Park & Waters, 1989), few studies have examined children's attachment to their fathers. In a recent meta-analysis examining infant attachment to mother and father, Fox, Kimmerly & Schafer (1991) concluded that attachment to one parent was associated with security of attachment to the other parent as assessed by Ainsworth's strange situation. In addition, type of insecurity (avoidant/resistant) to one parent was also associated with the subcategory classification to the other. These results may be due to the fact that children develop a primary relationship with one parent, causing the development of a primary expectation pattern which may apply across individuals. This argument is congruent with Bowlby's (1982) theory of internal working models. Main et al. (1985) suggest that in the construction of

the working model, one parent (most likely the primary attachment figure), may be more influential than the other. Since mothers tend to be the preferred attachment figure in Western cultures, (fathers tend to be the preferred playmate; Lamb, 1977; 1978), it is expected that child's security of attachment to mother may have a stronger influence on peer relations than security of attachment to father.

Research in this area is controversial. Concordance in security of attachment to both parents has been found in some samples (Lamb, 1978; Main et al., 1985), although not in others (Main & Weston, 1981). In the Fox et al. (1991) meta-analysis, which looked at eleven studies, in order for the concordant attachment classification to reach significance, the sample size was required to be quite large, (>540). Also, the age of the infant varied from study to study, which may have influenced concordance of attachment. Perhaps concordance of attachment classification to both parents varies according to the developmental level of the child and the role of each parent during that developmental stage. Research should extend beyond infancy in order to examine the nature of children's attachment relationship with both their mother and their father at each developmental stage.

Despite the controversial results found regarding concordance of mother/father attachment status, attachment to both mother and father have been found to play a significant role in predicting the social behaviour of toddlers, (i.e. the extent to which they showed a readiness to establish a

positive social relationship with a clown; Main & Weston, 1981), and the overall functioning of six-year-olds during a "warm up" familiarization session (Main et al., 1985), although the infant-mother relationship was a more powerful predictor. These results were replicated by Suess, Grossman & Sroufe (1992) who found that although there were occasional significant relations with the father attachment predictor, and that father and mother attachment taken together did predict better than mother attachment alone, infant-mother attachment was a more powerful predictor of children's competence in observed play, conflict management, behavioral problems, and social perception.

In contrast to Suess et. al. (1992), Youngblade, Park & Belsky (1993), using two separate measures of attachment at 12 and 18 months, found no significant relation between mother-child attachment and children's friendship quality at age five. They used both Ainsworth's Strange Situation, and the Water's & Deane (1985) Attachment Q-sort, (parent ranks items about his/her relationship with the child by sorting them into 9 piles based on how characteristic the items are of their relationship). However, a significant relation was found between infant-father attachment and friendship quality at age five, using the Attachment Q-sort. Children identified as more secure with their fathers at 13 and 37 months, were observed at age 5 as engaging in more positive interactions with a friend. The same results were not obtained using Ainsworth's Strange Situation classification with fathers. These findings suggest that the Strange Situation and the Attachment Q-sort may measure somewhat

different aspects of the parent-child relationship for both mother and father (Youngblade et al., 1993). Therefore, further research on the predictability of peer relations from security of attachment to father and mother are needed, in particular, with current measures of attachment.

These results do not imply that fathers play a less significant role in child development than do mothers. Lamb (1981) explains that studies of infants, toddlers and preschoolers have shown that in **most** ways fathers are as competent in caregiving, and are as significant to their children, as mothers are. However, although mothers and fathers are both involved in their children's caregiving, their roles can be substantially different, which may differentially influence the attachment relationship. In a study examining infant attachment to both mother and father, Lamb (1977) found that infants were clearly attached to both parents from the beginning of the attachment relationship, but the nature of their interactions differed qualitatively and consistently. Whereas mothers held infants more to engage in caretaking functions, fathers held them most in play. Russell & Russell (1987) found highly significant mother-father differences in parent-child interactions in a study where the eldest child was six to seven years of age. Overall, mothers interacted more frequently with their children, were more directive, and were more involved in family management. Fathers were more involved in physical/outdoor play interactions, engaged in more physical affection, and displayed more warmth and playful/joking behaviour toward the children than mothers did. Therefore, children's relationships with

their father may be just as important as attachment to mother, but it may be manifested in a different way and may contribute differentially to children's development.

MacDonald & Parke (1984) & MacDonald (1987) explain that because fathers serve as playmates, they may help their children learn the skills necessary for peer interaction. MacDonald (1987) suggests that through physical play, fathers play a more important role than mothers in teaching children social skills such as affect regulation, which is important in the establishment and maintenance of peer relationships. Therefore, children who are securely attached to their fathers may spend more time engaging in physical play, and in turn, may be more skilled with their friends. Further research is needed to validate this hypothesis.

Gender Differences

Little research has examined gender differences in security of attachment to mother and to father. Research has indicated that at age one (Bretherton, 1985), age 5 (Suess et al., 1992) and age 6 (Main et al., 1985), boys and girls did not differ in the proportion securely attached to their mothers or fathers. Cohn (1990) studied the relationship between child-mother attachment in infancy and peer social competence in grade-one students. Using peer sociometric ratings, she discovered that boys who were insecurely attached to their mothers were more likely to be rejected by their peers, were less well-liked, and were perceived by peers as more aggressive and disruptive than

securely attached boys. Teacher reports indicated that insecure boys displayed more behaviour problems, and were less socially competent than boys in the secure group. The results for girls were in the predicted direction, although they were not significant. Similarly, Lewis, Feiring, McGuffog & Jaskir (1984) reported that infant-mother attachment was related to maternal reports of behaviour problems at age six for boys, but not for girls.

These results suggest that the link between attachment quality and peer relations in childhood, (especially sociometric status), may be stronger for boys than for girls. On the other hand, these differences may be due to the fact that boys tend to exhibit more externalizing behaviour problems (i.e. aggression) which may cause active rejection by the peer group, while girls tend to exhibit more internalizing problems (e.g. depression; Esser, Schmidt & Woerner, 1990), which is less apparent. As well, measures of sociometric status may be more sensitive indices of peer competence for boys than for girls (Cohn et al., 1991). Since boys tend to play in groups, while girls select one or two partners, sociometric techniques that rely on ratings from all children in the class, may provide a more accurate picture of boys' social relations.

On the other hand, Suess et al., (1992), looking at five-year-old children, found that the effect of attachment quality to mother was significant for girls, but not for boys, in the areas of competence in play and conflict resolution. In addition, girls who were securely attached to their mothers had fewer behaviour problems than insecurely attached girls, although this difference was not as

prominent for boys. No gender differences were discovered in the relation of attachment to overall competence in functioning and to frequency of behaviour problems. Similar results were obtained by LaFreniere & Sroufe (1985) who found significantly higher scores for four and five-year-old securely attached girls than securely attached boys on measures of social competence and sociometric status. These studies seem to conflict with the results obtained by Cohn (1990). This may be due to the fact that Cohn (1990) examined factors related to peer rejection and aggressive behavior, which are more prevalent and easier to measure in boys, whereas Suess et al., (1992) examined play competence and conflict resolution, which are necessary skills for friendship development in both boys and girls. Therefore, when measuring acceptance and rejection, attachment to parents may be more important for boys, and when measuring friendship and positive interaction with peers, attachment may be a more important predictor for girls.

In addition, research has shown that friendship in middle childhood differs for boys and girls. By middle childhood, children's social interactions occur predominantly with members of the same gender (Maccoby, 1988). Although most studies have shown that boys and girls have the same number of best friends, boys generally form larger social networks than girls (Benenson, 1990). Since the parent-child relationship is dyadic, and since girls tend to select one or two play partners (Maccoby, 1988), it is expected that attachment status may have a stronger influence on girls' friendships than on boys'

friendships. Conversely, since boys play in large groups, it is expected that attachment may have a stronger influence on their social status within the peer group.

Also, in early adolescence, friends become the key providers of intimacy for girls, while development of intimacy in boys' friendships may lag behind (Buhrmester & Furman, 1987). Therefore, the intimate parent-child attachment relationship may be more strongly linked to friendship in girls, but not in boys. Because studies have only recently began to examine gender differences in attachment relationships and subsequent effects on behaviour, adjustment, and social competence in school-aged children, additional research is required.

Intergenerational Transmission of Attachment

Throughout the developmental life-span, several different attachment relationships develop (i.e., mother, father, spouse). Although these attachment relationships are expected to differ, they are also not completely independent of one another. For example, earlier relationships may generate expectations about relationships, in addition to specific behavioral patterns to meet those expectations (Crittenden, Partridge & Claussen, 1991). Research has shown that the quality of earlier relationships is related to the way individuals relate to social partners, including both romantic partners and their own children (Hazan & Shaver, 1987; Armsden & Greenberg, 1987). Empirical studies have examined the direct transmission of quality of attachment from parents to children retrospectively, concurrently, and prospectively with promising results

(Cohn, Silver, Cowan, Cowan & Pearson, 1992; Grossman, Fremmer-Bombik, Rudolph & Grossman, 1988). In a recent study examining the relationship between adult attachment styles (via interview) and child attachment security (Strange Situation) in an economically disadvantaged sample, it was discovered that both mother's and father's attachment style (secure vs. insecure) were significantly related to child's quality of attachment to mother (Crittenden et al., 1991), although specific matches were not found between parent-child attachment classifications (secure, anxious, avoidant). Fonagy, Steele & Steele (1991) examined the attachment patterns in expecting mothers, and followed them up one year later, in order to determine the attachment status of their infants. Maternal representations of attachment predicted subsequent infant-mother attachment patterns 75% of the time. Research must continue to examine the nature of these relationships in school-aged children.

Summary

The main goal of the present study was to examine the association between the attachment relationship reported by boys and girls to their mother and father, and to determine the extent to which attachment status is related to friendship closeness, children's acceptance level within the peer group, and number of friends. Attachment status was determined based on children's current reports of attachment, rather than on classification determined in infancy. As previously noted, current attachment status is at least equally significant to attachment status determined in infancy in predicting peer

competence (Lamb & Nash, 1989). Contrary to the theoretical view that attachment should generalize to only close relationships (Youngblade et al., 1993; Bowlby, 1969), empirical research has found that a broad range of peer relations are affected (LaFrieniere & Sroufe, 1985). Therefore, attachment is not expected to be more closely linked to friendship than to acceptance by peers.

It was expected that children who rate themselves as securely attached to their parents, would be more likely to have closer reciprocated friendships and would be more accepted within the peer group, whereas insecurely attached children would be less likely to have a close friendship and would be less accepted by the peer group. The relationship between number of friends and attachment status was also examined, and was expected to parallel peer acceptance.

Differential effects of attachment to each parent was observed at two different developmental levels, late childhood and early adolescence. The attachment relationship may have a stronger influence on popularity in late childhood, but on friendship only in older children, since these relationships are age-appropriate. It was also expected that attachment to mother would be more strongly linked to both friendship and social status than attachment to father.

Gender differences in attachment patterns were also examined (i.e., whether attachment status contributes differentially to social status and

friendship patterns for boys and girls). It was expected that when measuring acceptance and rejection (social status), attachment classification may be more important for boys, and when measuring friendship, attachment status may be a more important predictor for girls. However, because studies have only recently begun to examine gender differences in attachment relationships and subsequent effects on adjustment in early and middle childhood, these are speculative hypotheses.

Last, intergenerational transmission of attachment style was examined. Although parents' attachment style has been linked to attachment in infants and pre-school children, few studies have examined this link in school-aged children. The present study examined the relationship between self-reported adult romantic attachment style, (which is correlated with attachment to parent in family of origin; Cohn et al., 1992), and parent-child attachment in school aged children, for both mother and father.

Hypotheses

1. Children who rate themselves as securely attached to their mother and/or father will be more likely to have close reciprocated friendships (best, good), whereas children who rate themselves as insecurely attached to their mother and/or father will be less likely to be involved in close reciprocated friendships.

2. Children who rate themselves as securely attached to their mother and/or father will be more accepted by their peer group than insecurely attached children. Specifically, children who rate themselves as securely attached to their mother and/or father are more likely to be classified as popular and average, and children who are insecurely attached are more likely to be classified as rejected or neglected.

3. It is expected that attachment to mother will be more strongly linked to both friendship and sociometric status than will attachment to father.

4. Children who rate themselves as securely attached to their mother and/or father will have a higher mean number of reciprocated friendships than insecure children.

5. The attachment relationship may have a stronger influence on popularity in younger children, and on friendship in older children.

6. It is expected that when measuring sociometric status, attachment classification may be more important for boys, and when measuring friendship, attachment status may be more important for girls.

7. It is expected that mother's attachment in her own romantic relationships will influence children's attachment status. Children whose mothers are securely attached in romantic relationships will be more securely attached to their mothers, while children who have insecure mothers (anxious-ambivalent /avoidant), will be insecurely attached to their mothers. The same pattern is expected for fathers, although the relationship is not expected to be as strong.

Method

Subjects

The sample for the present study was recruited from two elementary schools and one high school in suburban Montreal. One elementary school was from the Sault St. Louis School Board, and the second elementary school and the high school were from the Baldwin-Cartier School Board. Subjects consisted of 130 elementary school children and 226 high school students, 178 boys and 178 girls. All subjects were from two-parent families, and only one child from each family participated, (eliminating 84 high school students & 45 elementary school students). An additional 100 elementary school children and 67 high school students participated exclusively in sociometrics (phase 1 of the study), but did not consent to continue for phase two. There was a 90-95% response rate for phase one (sociometrics), and a 60-70% response rate for phase two (due to the requirement of parent participation; See procedure).

Children from the two elementary schools were in grades 4-6 (age range 9 to 11), and children from the high school were in grades 7 and 8 (age range 12 to 14). All participating schools were for English speaking children. Only children with written parental consent were included in the study. According to the Hollingshead four factor index of social status, the sample had a mean socio-economic status of 42, (medium business owners, minor professionals and technical workers), ranging from lower to middle class. Based on partial data from a representative sample, the current sample was 88% White, 9% Black, and 2% Asian.

Instruments

Sociometric Status and Friendship Nominations.

Using a grade list, children were asked to write the first and last names of their best friends in order of preference. Same-sex nominations were used, since friendships in middle childhood tend to be with predominantly same-sex children (Maccoby, 1988), and a grade list including both boys and girls would have been much too lengthy, especially in the high school. The children were instructed to list their "very" best friend first, their second best friend second, until they had listed all of their best friends. Children were permitted to list up to eight friends. Next, using the same grade list, children were asked to list the children who they did not like to spend time with. Again, they were permitted to list a maximum of eight children. These data were used to calculate both sociometric status and

reciprocated friendships. Children were encouraged to nominate friends from within their grade, but were permitted to name a friend outside the school. High school students were also asked to list their opposite-sex friends in a separate section, but these data were not analyzed. See Appendix A for a copy of the measure.

Friendship Closeness. Reciprocated same-sex friendships were calculated according to Bukowski & Hoza's (1989) method, after eliminating nominations from outside the school. Children were classified based on the closest friendship that they participated in. A best friend was defined by a reciprocated first choice friendship nomination (11), that is two children who each listed the other as their very best friend. A good friend was defined as a reciprocated 12 (first-second), 21, 13, 31, 23, 32, 22 or 33 choice nomination. "Other" was defined by all lower levels of reciprocated nominations (ie. 18, 87, 42), and "friendless" was defined as any non-reciprocated friendship choice. In the present study, 48.3% (175) of children had a reciprocated best friendship, 34% (123) of children were involved in a reciprocated good friendship, 8.6% (31) had a lower level reciprocation ('Other': not within top 3), and 9.1% (33) of children had no reciprocated friendships ('Friendless'). Friendship closeness was not significantly related to socio-economic status.

Evidence has shown that a reciprocated friendship nomination measure is a valid friendship measure. Studies have shown that reciprocated friendships are more stable than unreciprocated friendships in both pre-schoolers and

adolescents (Gershman & Hayes, 1983; Bukowski & Newcomb, 1984). Other studies have shown that reciprocal friends evidence higher levels of shared reciprocal knowledge than non-reciprocated friends (Ladd & Emerson, 1984). Finally, ratings of friendship quality (in written & interview format) have been shown to differentiate mutual from non-mutual friends, and stable from unstable friendship choices (Bukowski et al., 1987).

Number of Friends. For each participant, number of friends was calculated by summing the number of reciprocated friendship nominations each child received. The mean number of friendship nominations was 5.3. Reliability and validity data is discussed in the 'friendship closeness' section above. In terms of validity of this measure, one study, (Bukowski et al., 1987), found that there were no differences in self-concept for subjects who had one, two, three, or more mutual friends, when the effects of popularity were covaried out.

Sociometric Status. The recommended method for calculating sociometric status with unlimited positive and negative nominations is Coie, Dodge & Coppotelli's (1982) methodology, (Newcomb et al., 1993). Liked most (LM) and liked least (LL) raw scores were tallied for each subject as the sum of best friends and disliked peer nominations received respectively. These raw scores were standardized within grade, school, and gender, and transformed into social impact, (the relative degree that children are noticed by their peers), and social preference, (the extent to which children are liked or disliked by their peers), scores. Social impact and social preference scores were then

standardized within grade and gender. These scores were used to classify children into five social status groups;

a) Popular: those children who received a social preference score greater than 1.0, a LM standardized score greater than 0, and a LL standardized score of less than 0.

b) Rejected: those children who received a social preference score less than -1.0, a LM standardized score less than 0, and a LL standardized score of greater than 0.

c) Neglected: those children who received a social impact score of less than -1.0, and an absolute LM score of 0.

d) Controversial: Those children who received a social impact score greater than 1.0, and who received LM and LL standardized scores that were each greater than 0.

e) Average: Those children who received a social preference score that was greater than -0.5, and less than 0.5.

Using this standard score method, 11% of children are typically classified as popular, 13% are classified as rejected, 9% are classified as neglected, 7% are classified as controversial, and 60% are classified as average (combined with other), (Newcomb et al., 1993). However, the relative number of children in each group varies from one study to the next, depending on modifications to the sociometric criteria, and the particular sample. In the present sample, using the Coie et al. (1982) methodology outlined above, 15.7% (59) of children were

classified as popular, 14.4% (54) as rejected, 12.5% (47) as neglected, 3.2% (12) as controversial, 14.9% (56) as average, and 37.9% (142) of children did not fit into any of the sociometric status categories (other). Sociometric status was not significantly related to socio-economic status.

Reliability data on sociometric classification is scarce. Using Pearson correlation, Coie et al. (1982), reported 12-week test-retest reliability (on the liked-most and liked-least nominations), ranging from .46 to .88, with a median correlation of .65. The reliabilities were similar across three grade levels, (grades 3, 5 & 8). Available evidence seems to support the validity of the popularity measures. Studies have shown that popular children tend to receive more positive reinforcement and more visual attention from peers than unpopular children, while unpopular children tend to receive more punishment from peers, and are the recipients of more negative acts than popular children (Bukowski & Hoza, 1989).

Attachment Security. Child security of attachment to parent was assessed using the Kerns Security Scale (Kerns, in press). This security scale differs from other scales (e.g. Inventory of Parent and Peer Attachment; Armsden & Greenberg, 1987), in that it assesses security of attachment to a particular parent, rather than a general opinion about parents. Separate questionnaires were used to determine the attachment relationship to each parent. Items on the security scale tap:

1. The degree to which children believe a particular attachment figure is

responsive and available.

(e.g., Some kids find it easy to count on their mom/dad for help, BUT other kids think that it is hard to count on their mom/dad.)

2. Children's tendency to rely on the attachment figure in times of stress.

(e.g., Some kids worry that their mom/dad may not be there when they need her/him, BUT other kids are sure that their mom/dad will be there when they need her/him.)

3. Children's reported ease and interest in communicating with the attachment figure.

(e.g., Some kids do not like telling their mom/dad what they are thinking or feeling, BUT other kids like telling their mom/dad what they are thinking or feeling.)

This measure consisted of fifteen questions which were designed using Harter's (1982) two-stage, forced-choice format, (ie. Some kids feel..... BUT Other kids feel.....). The children were told to choose which statement was most characteristic of them, and then to indicate if it was REALLY true for them or SORT OF true for them. Each statement was scored on a four point scale, with higher scores indicating more secure attachment. Scores were averaged across items so children received a score reflecting security on a continuous dimension. Following Kerns (in press), insecure children were those who scored in the bottom third of the distribution. This criteria was adopted because studies using the Strange Situation have typically found that two-thirds of

children in middle-class samples are securely attached (Park & Waters, 1989.)

Reliability was assessed by Kerns et al. (under review), who found that combined scores on the security scale showed an adequate standardized range (1.6 - 4.0), and internal consistency (Cronbach's alpha = .84). Although Kerns et al.'s (under review) measure has not been validated using infant attachment classifications, both convergent and discriminant validity have been examined. Security of attachment was significantly correlated with self-reported self-esteem, peer acceptance, behavioral conduct, scholastic competence and physical appearance on Harter's Self-Perception Profile (1982), in a sample of 71 middle-school children, providing some evidence for convergent validity. Security scores were not significantly correlated with athletic competence, or GPA, providing some evidence for discriminant validity. Furthermore, the children were asked who they would seek out in two situations likely to elicit secure base behaviour; when they felt sad, and when they felt sick. Results showed that children who sought out their mothers (rather than their fathers, siblings, friends, or nobody), in both situations, were more securely attached to their mothers than children who went to others, or to nobody (Kerns et al., under review). See Appendix A for a copy of the measure.

Parent Attachment Security. In order to further examine the validity of the Kerns Security Scale, and the intergenerational transmission of attachment patterns, parent-child attachment was examined in relation to parents' security of attachment in their romantic relationships, using the Simpson Attachment

Questionnaire (Simpson, 1990). The Simpson attachment style measure requires both partners to rate thirteen sentences, derived from the Hazan & Shaver's (1987) adult attachment vignettes, on 7-point Likert scales, ranging from strongly disagree (1) to strongly agree (7). Items corresponding to each of the three vignettes were aggregated to form continuous attachment indexes for each attachment style (secure, avoidant, anxious-ambivalent). Simpson (1990) found that Cronbach's alpha for the secure attachment index (items a to e) was .51, with higher scores reflecting higher security, for the avoidant attachment style index (items f to i) was .79, with higher scores indicating higher avoidance, and for the anxious attachment style index (items j to m) was .59, with higher scores indicating greater anxiousness.

Simpson (1990) reported that people who scored higher on the secure attachment index indicated that they were involved in relationships characterized by greater interdependence (evidenced greater love, dependency on, self-disclosure with partner), greater commitment (evidenced greater commitment and investment in relationship), greater trust (evidenced greater predictability of, dependability of, and faith in the partner), and greater satisfaction. On the other hand, people who scored higher on the avoidant index reported that they were involved in relationships defined by lesser amounts of interdependence, commitment, trust and satisfaction. Men who scored higher on the anxious index indicated that they were involved in relationships characterized by less trust and satisfaction, while anxious women

reported being involved in relationships with less emotion and trust. Zero-order correlations between the attachment styles and measures to assess interdependence, trust and commitment substantiate these findings, (Simpson, 1990).

Procedure

The project took place in two phases. Consent forms for phase one (sociometrics) were distributed to each class. To encourage response, all children who returned completed consent forms, (whether a parent consented or did not consent for his/her child to participate), were eligible in a draw for a Cineplex-Odeon movie pass. One pass was distributed for each grade. Additional consent forms were distributed for phase two. Again, to encourage response, children who returned their completed forms, whether they participated or not, were eligible for movie passes. Participation in this phase also entailed parents completing questionnaires mailed to their homes (i.e., Simpson Security Measure amongst others). See Appendix B for information letters and consent forms for phases one and two.

During phase one, sociometric and friendship nomination data were collected during one twenty-minute session. Phase two consisted of two sessions for the elementary schools, and one session for the high school. For the elementary schools, during the first session of phase two, the Kerns Security Scale for either mom or dad was administered, along with additional

measures which were not relevant for this particular study. During the second session of phase two, elementary school children completed the second Kerns Security Scale (either mom or dad), again with additional measures not relevant to this study. High school students completed all measures in one session. The order in which children completed the Kerns Security Scale for mom versus for dad varied from school to school. For one elementary school, security to mom was assessed, followed by security to dad. For the second elementary school and the high school, the order of the questionnaires was counterbalanced across classes. This information permitted evaluation of order effects. At the end of phase two, the children were de-briefed on the purpose of the study. See Appendix C for verbatim instructions for the Sociometric nomination measure and for the Kerns Security Scale.

Results

Preliminary Data Analysis

The Kerns Security Scale. Scores for security to mother and for security to father on the Kerns Security Scale (KSS) were each examined for reliability, normality and outliers. Both scales showed high internal consistency (Cronbach's alpha: Mother=.88, Father=.90), and no univariate outliers. Since both scales were moderately negatively skewed, square root transformations were made. (All analyses were conducted on the transformed scores, however,

raw means are reported). Socio-economic status was not significantly related to security of attachment to either parent, and no effects of order of the child security measures were found.

The relation between child's reported security to each parent on the two versions of the KSS was examined using Pearson correlation. Since the two scales were moderately correlated (r (361)=.54, p<.001), security to mother and security to father were examined separately to see how they differed, and in combination, to determine if any additional information could be gained (i.e., if any differences were evident between children who were secure or insecure to both parents, and children who were secure to only one parent).

In order to establish cut-off scores for the secure and insecure attachment categories, security to mother and father (as continuous variables), were examined for sex and age effects using a between-within analysis of variance, with sex of parent as the within-subjects factor. Significant between-subjects main effects were found for age, F(1,357)=14.05, p<.001. Children in elementary school reported higher security of attachment to both their mothers and their fathers than did high school children. A significant sex by parent within-subjects interaction was also found, F(1,357) = 5.49, p<.05. Post-hoc Tukey analysis revealed that boys reported higher security of attachment to their fathers than girls, but did not differ from girls in security of attachment to their mothers. A significant within-subjects main effect was also found for parent, F(1,357)=19.39, p<.001, with children reporting higher attachment

security to their mothers than their fathers (See Table 1 for means and Appendix D for ANOVA summary). Since there was no theoretical or empirical reason to expect security of attachment to differ by gender or by age of child, security scores for each parent were residualized by age and sex, using multiple regression analysis. Security served as the dependent variable, and age and sex as the independent variables, entered on the same step. Residuals were saved, and a cut-off score was derived from the residuals.

Insert Table 1 about here

Cut-off scores were based on the theoretical conception that 2/3 of children are securely attached to their primary attachment figure, and 1/3 of children are insecure (Park & Waters, 1979; Kerns, in press). The residualized cut-off score on the KSS for mother was .059, and .090 on the KSS for father. See Tables 2.1 and 2.2 for frequency of children in each attachment category.

Insert Tables 2.1 & 2.2 about here

Table 1

Mean Kerns Attachment Security Score for Mother and Father for Each Age-Group and Sex

Parent		Mother	Father
Sex			
	Boys	3.30 (.49)	3.24 (.54)
		(n = 183)	(n = 180)
	Girls	3.30 (.56)	3.06 (.62)
		(n = 186)	(n = 185)
Age			
	E.S.*	3.40 (.48)	3.32 (.53)
		(n = 133)	(n = 131)
	H.S.*	3.24 (.57)	3 05 (.64)
		(n = 236)	(n = 234)

*E.S.= Elementary school

*H.S.= High School

Table 2.1

Frequency of Children in Each Child-Parent Attachment Status Category

Parent		Mother	Father
Security Status			
	Secure	254	249
	Insecure	115	116
	Total	369	365

Table 2.2

Frequency of Children in Combined Child-Parent Attachment Status Categories

Parent	Secure Mother	Insecure Mother
Secure Father	202	45
Insecure Father	47	67
Total	249	112

Friendship Closeness in Relation to Child Age and Sex

A three-way hierarchical frequency analysis was performed to develop a loglinear model of the association between friendship closeness and child's age and sex. Child sex and age (elementary vs. high school) were analyzed as predictors of friendship closeness (best, good, other, friendless). A model was identified which included three first-order effects (grade, sex, friendship closeness), and two 2-way interactions; friendship closeness by age, and friendship closeness by sex. The three-way interaction was not significant. All cells had expected frequencies in excess of five, and no outliers were found. The model fit well, with a likelihood ratio of $x^2(4)=1.22$, $p=.8755$. A summary of the model with significance tests (partial likelihood ratio x^2) and loglinear parameter estimates appears in Appendix E.

The significant two-way interaction between friendship closeness and grade reflects that children in high school were more likely to be involved in a reciprocated best friendship than elementary school children (H.S. = 51%, E.S.= 43%), while children in elementary school were more likely than high school children to have no reciprocated friendships (friendless), (H.S.= 5%, E.S.= 14%). In addition, more girls tended to be involved in best friendships than boys, (Girls: 59%, Boys: 38%). See Table 3 for frequencies.

Insert Table 3 about here

Table 3

Frequency of Boys / Girls and Elementary / High School Children in each Friendship Group

		Friendship Group				
		Best	Good	Other	Friendless	Total
Boys	E.S.	22	29	6	14	71
	H.S.	47	47	10	10	111
Girls	E.S.	35	14	5	7	61
	H.S.	71	33	10	5	119

E.S. = Elementary School

H.S. = High School

The Relation Between Friendship Closeness and Sociometric Status

The relationship between the two dependent variables, friendship closeness, (best, good, other, friendless), and sociometric status, (popular, rejected, neglected average), was examined using a 4x4 chi-square analysis. The controversial group was dropped from all analyses due to small cell sizes leading to violations of assumptions. All remaining cells had expected frequencies greater than five. Results showed that friendship closeness was significantly and moderately related to sociometric status, $x^2(9)=45.32$, $p<.001$, Cramer's V=.27, p,.001.

Post-hoc chi-square analyses indicated that children who were involved in a reciprocated best friendship differed significantly in sociometric status from "friendless" children, $x^2(3)=33.17$, $p<.001$, and from children with a lower level reciprocation $x^2(3)=12.44$, $p<.01$. In addition, children with a good friend differed significantly from friendless children, $x^2(3)=22.44$, $p<.001$, and marginally from children with a lower level reciprocation, $x^2(3)=7.08$, $p=.069$, (trend towards significance in the predicted direction). Since children with a best friend did not differ significantly from children with a good friend, $x^2(3)=5.46$, n.s., the two groups were combined for subsequent post-hoc chi-square goodness-of-fit tests.

Post-hoc chi-square goodness-of-fit analyses indicated that children involved in a best/good friendship were more likely to be popular, and less likely to be rejected by their peers, than children who were involved in a lower level

reciprocation, $x^2(1)=4.3$, $p<.05$, $x^2(1)=6.16$, $p<.05$, respectively, and friendless children, $x^2(1)=6.30$, $p<.05$, $x^2(1)=24.89$, $p<.001$, respectively. However, children with a best/good friend were no more likely than children with a lower level reciprocation, or friendless children, to be classified as average, $x^2(1)=.087$, n.s., $x^2(1)=3.53$, n.s, respectively, and were no less likely to be neglected by their peers, $x^2(1)=.312$, n.s., $x^2(1)=.002$, n.s, respectively. Children with no friends were not compared to children with lower level reciprocations due to small cell sizes, violating chi-square assumptions. See Table 4 for frequencies.

Insert Table 4 about here

Security of Attachment and Peer Relations

In order to examine the relationship between friendship closeness and security of attachment to each parent, two four-way hierarchical frequency analyses were performed. Factors included security to parent (secure, insecure), friendship closeness (best, good, other, friendless), and child age and sex. Hierarchical frequency analyses were also conducted in order to examine the relationship between sociometric status and security of attachment to each parent. Factors included security of attachment (secure, insecure), sociometric classification (popular, rejected, neglected and average), and child age and sex.

Table 4

Frequency of Children in Each Friendship Group by Sociometric Status Category

	Sociometric Group				
	Popular	Rejected	Neglected	Average	Total
Friendship Group					
Best	37	12	22	23	94
Good	19	13	11	25	68
Other	2	9	6	6	23
Friendless	1	16	5	2	24
Total	59	50	44	56	209

In both cases, no three-way or four-way associations were significant. Since the primary purpose of the multi-way loglinear frequency analysis was to explore potential age and sex differences in the relationship between child security to each parent and peer relations (Hypotheses 5 & 6), and since no significant three or four-way interactions of security and the peer relations variables with age and sex were found, a simple chi-square procedure was used, collapsing across age and sex.

Friendship Closeness and Security of Attachment

Two 2x4 chi-square analyses were performed to determine the association between friendship closeness (best, good, other, friendless) and child's security of attachment to each parent (secure, insecure). All cells had expected frequencies greater than 5.

Friendship Closeness and Security of Attachment to Mother. A significant interaction was found between friendship closeness and security of attachment to mother, x^2 (3)=11.56, $p<.01$, Cramer's V= .18, $p<.01$. Subsequently, 2x2 chi-square post-hoc tests were conducted to determine the exact nature of these differences (other vs. best, other vs. good, best vs. good, friendless vs. best & friendless vs. good). Significant differences were found between children with a best friend and those with a lower level reciprocation (other), x^2 (1)= 5.96, $p<.01$, **and** between children with a good friend and those with a lower level reciprocation (other), $x^2(1)=11.04$, $p< .001$. Compared to insecure children, secure children were more likely to be involved in a best or a

good friendship, than in a lower level reciprocated friendship. However, secure children did not differ from insecure children in terms of best and good friendships. In addition, no differences were found between children with a best or a good friend and friendless children in reported security to mother. See Table 5.1 for summary of frequencies.

Insert Table 5.1 about here

Friendship Closeness and Security of Attachment to Father. Security of attachment to father was not significantly related to friendship closeness, although results were in the predicted direction, $x^2(3)=5.42$, $p=.14$. Secure children were again more likely than insecure children to be involved in a best, good, or no reciprocated friendship, than in a lower level reciprocated friendship. Table 5.2 provides a summary of frequencies.

Insert Table 5.2 about here

Table 5.1

Frequency of Children in Each Friendship Group by Security of Attachment to Mother

	Friendship Group				
	Best	Good	Other	Friendless	Total
Security Status					
Secure	118(48%)	93(38%)	13(5%)	24(10%)	248(100%)
Insecure	55(51%)	29(27%)	16(15%)	8(7%)	108(100%)
Total	173	122	29	32	356

Table 5.2

Frequency of Children in Each Friendship Group by Security of Attachment to Father

	Friendship Group				
	Best	Good	Other	Friendless	Total
Security Status					
Secure	123(50%)	85(35%)	14(6%)	22(9%)	244(100%)
Insecure	50(46%)	34(31%)	14(13%)	10(9%)	108(100%)
Total	173	119	28	32	356

Friendship Closeness and Security of Attachment to Both Parents. A third 4x3 chi-square analysis was performed to examine the association between friendship closeness and security of attachment to both parents combined (secure to both, secure to one, insecure to both). (The secure-mom/insecure-dad, secure-dad/insecure-mom groups were combined due to small cell sizes). A significant relationship was found between security to parents and friendship closeness, $x^2(6)= 14.17$, $p<.05$, Cramer's $V=.14$, $p<.05$. Post-hoc 2x2 chi-squares indicated that differences were between the "secure to both" and "insecure to both" groups, with the same pattern of results as found for security of attachment to mother and father separately. The combined group (secure to one parent, insecure to the other), did not differ significantly from the other two groups (See Summary Table 5.3 for frequencies).

Insert Table 5.3 about here

Sociometric Status and Security of Attachment

Two 4x2 chi-square analyses were performed to examine the association between sociometric status (popular, rejected, neglected, average) and security of attachment to each parent (secure, insecure). A third 4x3 chi-square was conducted to examine the relationship between sociometric status and security to the parent dyad. The controversial group was not included in the analyses

Table 5.3

Frequency of Children in Each Friendship Group by Security of Attachment

Both Parents

	Friendship Group				
	Best	Good	Other	Friendless	Total
Security Status					
Secure to Both	97	72	9	20	198
Secure/Insecure	43	32	8	6	89
Insecure to Both	31	14	11	5	61
Total	171	118	28	31	348

due to the small sample size in this group, resulting in too many cells with expected frequencies of less than 5.

Security of Attachment to Mother and Sociometric Status. A significant interaction was found between security of attachment to mother and sociometric status, $x^2(3)=8.19$, $p<.05$, Cramer's V=.20, $p<.05$. Post-hoc 2x2 chi-square analyses found a significant difference between the rejected and average groups, $x^2(1)=4.86$, $p<.05$, and the neglected and average groups, $x^2(1)=7.68$, $p<.01$, in their perceived security of attachment to mother. Secure children were more likely than insecure children to be classified as average, than as rejected or as neglected by their peers. None of the other post-hoc chi-squares reached statistical significance. See Table 6.1 for summary of results.

Insert Table 6.1 about here

Security of Attachment to Father and to Both Parents Combined.

Security of attachment to father, $x^2(3)= .13$, n.s., as well as to both parents combined, $x^2(6)= 2.47$, n.s., were not significantly related to sociometric status group. See tables 6.2 and 6.3 for frequencies.

Insert Tables 6.2 & 6.3 about here

Table 6.1

Frequency of Children in Each Sociometric Status Group by Security of Attachment to Mother

	Sociometric Group				
	Popular	Average	Rejected	Neglected	Total
Security Status					
Secure	39 (26%)	45 (30%)	33 (22%)	32 (21%)	149 (100%)
Insecure	19 (27%)	10 (14%)	17 (24%)	24 (34%)	70 (100%)
Total	58	55	50	56	219

Table 6.2

Frequency of Children in Each Sociometric Status Group by Security of Attachment to Father

	Sociometric Group				
	Popular	Average	Rejected	Neglected	Total
Security Status					
Secure	40 (27%)	37 (25%)	38 (26%)	32 (22%)	147 (100%)
Insecure	17 (27%)	17 (27%)	15 (24%)	14 (22%)	63 (100%)
Total	57	54	53	46	210

Table 6.3

Frequency of Children in Each Sociometric Status Group by Security of Attachment to Parents

	Sociometric Group				
	Popular	Average	Rejected	Neglected	Total
Security Status					
Secure-Secure	30	33	29	23	115
Secure-Insecure	16	15	14	12	57
Insecure-Insecure	10	6	10	10	36
Total	56	54	53	45	208

Number of Reciprocated Friendships

Security of Attachment to Mother and Number of Reciprocated Friendships. Three 2x2x2 between-subjects analyses of variance were conducted on number of reciprocated friendships as a function of security of attachment (separately for mother and father, and for both parents combined; 2x2x3), age and sex. Results of the evaluation of assumptions were satisfactory.

A trend for a main effect of security of attachment to mother was found, $F(1,356)= 3.23$, $p=.07$. Children who reported that they were securely attached to their mothers had more reciprocated friendships (2.24) than children who reported that they were insecurely attached to their mothers (1.97). None of the other main effects, or the higher order interactions reached significance. Number of reciprocated friendships was not significantly related to security of attachment to father F (1,352)= 1.53, n.s., nor to security of attachment to both parents combined F (2,344)= 1.50, n.s. See tables 7.1 and 7.2 for means, and Appendix F for ANOVA summaries.

Insert Tables 7.1 & 7.2 about here

Table 7.1

Mean Number of Friends by Security of Attachment to Mother and Father

Parent	Mom	Dad
Security Status		
Secure	2.24 (1.34)	2.19 (1.31)
	(n = 251)	(n = 247)
Insecure	1.97 (1.32)	2.00 (1.38)
	(n = 113)	(n = 113)

Table 7.2

Mean Number of Friends by Security of Attachment to Parent Dyad

Secure-Secure	Secure-Insecure	Insecure-Insecure
2.22 (1.32)	2.11 (1.33)	1.89 (1.37)
(n = 200)	(n = 91)	(n = 65)

Validity of the Kerns Security Scale

Despite statistical significance, associations between security of attachment to each parent and closeness of friendship and sociometric status were relatively weak; therefore, further analyses were conducted to examine the validity of the Kerns Security Scale. The relation of the KSS to mothers' and fathers' reported security in their own romantic relationships (Simpson Attachment Scale, 1990) was examined. This relationship was also examined to illustrate the intergenerational influence of attachment style from parents to their children.

Preliminary Analyses. The scales of the Simpson Attachment Questionnaire (secure, anxious/ambivalent, avoidant) were examined for normality, reliability and univariate outliers, separately for mother and for father. All scales were normally distributed and no univariate outliers were found. For both the mother and father measures, the secure and anxious-ambivalent subscales showed moderate-low internal consistency; Cronbach's alphas = .53 & .50 respectively, for mothers, and Cronbach's alphas = .45 & .38, for fathers. Internal consistency for the avoidant scale was moderate to high; Cronbach's alpha = .76 and .77, for mother and father respectively. One item (item 4) was deleted from the secure scale on both the mother and the father questionnaires due to its weak, negative correlation with the other items r = -.0643.

The secure and the avoidant subscales of the Simpson were significantly negatively correlated for both mother and father, $r(211) = -.65$, $p<.001$ &

r(155)= -.53, p<.001, respectively. The secure and the anxious-ambivalent scales were not significantly correlated, mother: r(211)= -.0997, p= .149, father: r (155)= -.0410, p=.614. The avoidant and anxious-ambivalent scales were positively correlated, again for both mother and father, r(211)= .2913, p<.001, r(155)= .1883, p< .05, respectively. See tables 8.1 & 8.2 for correlations.

Insert Tables 8.1 & 8.2 about here

Parents' Security in Close Relationships and Child's Security to Parent

Four separate one-way between-subjects multivariate analyses of variance were performed to examine the association between mothers' and fathers' own sense of security in their romantic relationships (secure, avoidant and anxious-ambivalent), and children's reported security of attachment to each parent (secure, insecure). In this analysis, parent security served as the dependent variable, and child security served as the independent variable due to levels of measurement. Analyses were run separately for each of the four combinations of child security to mother and father, and mothers' and fathers' own reported security. Pillai's criterion was used. No univariate outliers were found for any of the dependent variables. In addition, the assumptions of normality, homogeneity of variance, and multicollinearity were not violated.

Table 8.1

Intercorrelations of Mother Simpson Attachment Subscales

	Secure	Avoidant	Anxious-Ambivalent
Secure	_____	-.6514	-.0997
Avoidant	_____	_____	.2913

Table 8.2

Intercorrelations of Father Simpson Attachment Subscales

	Secure	Avoidant	Anxious-Ambivalent
Secure	_____	-.5272	-.0410
Avoidant	_____	_____	.1883

Mother's Security in Close Relationships and Child's Security to Mother.

The first multivariate analysis of variance examined the relationship between mothers' reported security in her romantic relationships and child's reported security to mother. A significant multivariate main effect was found for child's reported security to mother, $F(3,203)= 4.11$, $p<.01$. Examination of the univariates revealed a significant relationship between child's security and mother's own security on the secure, $F(1,205)= 7.10$, $p<.01$, and anxious-ambivalent scales, $F(1,205)= 6.89$, $p<.01$, and a trend towards significance for the avoidant scale, $F(1,205)=3.65$, $p<.10$ (See Appendix G; Table G1 for MANOVA summary). Children who were securely attached to their mothers had mothers who reported higher levels of security in their romantic relationships, and lower levels of insecurity (anxious-ambivalence and avoidance), than children who were insecurely attached to their mothers. See Table 9.1 for means.

Insert Table 9.1 about here

Mother's Security in Close Relationships and Child's Security to Father.

The second one-way multivariate analysis of variance examined the relationship between mother's reported security in her romantic relationships and child's reported security of attachment to father. A significant multivariate effect was

Table 9.1

Mean Attachment Security Style of Mother in Relation to Child's Security of Attachment to Mother

	Mother's Security		
	Security	Avoidance	Anx-Ambiv
Child's Security to Mom			
Secure	3.251 (.60)	2.613 (.72)	2.142 (.65)
Insecure	2.991 (.68)	2.838 (.81)	2.412 (.65)

found, $F(3,200)= 5.34$, $p<.001$. Examination of the univariates revealed a significant relationship between child's security to father and mother's anxious-ambivalence, $F(1,202)=15.53$, $p<.001$, and a trend for avoidance, $F(1,202)=3.03$, $p<.10$. (See Appendix G, Table G2 for MANOVA summary table). Children who reported that they were insecurely attached to their fathers, had mothers who were higher on anxious-ambivalence and on avoidance in their own close relationships, than children who were securely attached to their fathers. See Table 9.2 for means.

Insert Table 9.2 about here

Father's Security in Close Relationships and Child's Security to Father.

The third one-way multivariate analysis of variance was used to examine the association between father's security of attachment in his close romantic relationships and child's reported security to father. The multivariate main effect for security of attachment to father was not significant. Father's security in his own relationships was not significantly related to children's reported security of attachment to their father, $F(3,142)= .346$, n.s. See table 9.3 for means and Appendix G, Table G3 for MANOVA summary.

Table 9.2

Mean Attachment Security Style of Mother in Relation to Child's Security of Attachment to Father

	Mother's Security		
	Secure	Avoidant	Anx-Ambiv
Child's Security to Dad			
Secure	3.210 (.63)	2.609 (.71)	2.096 (.60)
Insecure	3.116 (.62)	2.803 (.81)	2.470 (.70)

Insert Table 9.3 about here

Father's Security in Close Relationships and Child's Security to Mother. The fourth one-way multivariate analysis of variance was used to examine the relationship between father's security in his own romantic relationships and child's reported security to mother. No significant multivariate main effect was found, $F(3,146) = .731$, n.s. See Table 9.4 for summary of means and Appendix G, Table G4 for MANOVA summary.

Insert Table 9.4 about here

Table 9.3

Mean Attachment Security Style of Father in Relation to Child's Security of Attachment to Father

	Father's Security		
	Security	Avoidance	Anx-Ambiv
Child's Security to Dad			
Secure	3.209 (.62)	2.809 (.73)	2.378 (.63)
Insecure	3.136 (.60)	2.914 (.76)	2.471 (.68)

Table 9.4

Mean Attachment Security Style of Father in Relation to Child's Security of Attachment to Mother

	Father's Security		
	Secure	Avoidant	Anx-Ambiv
Child's Security to Mom			
Secure	3.175 (.61)	2.834 (.67)	2.375 (.63)
Insecure	3.191 (.54)	2.868 (.92)	2.559 (.68)

Discussion

The main objective of this research was to examine the influence of the parent-child relationship on children's peer relations. More specifically, the primary purpose of this study was to examine the influence of children's reported security of attachment to mother and to father on friendship and sociometric status in middle childhood and early adolescence. Friendship is defined as the experience of having a close, mutually positive dyadic relationship, whereas sociometric status refers to acceptance by members of the peer group. Both friendship and sociometric status are thought to contribute uniquely to children's social development. While children with positive peer relations are unlikely to develop later adjustment problems, early social difficulties with peers place children at risk for a variety of psychological disorders and academic problems. It is therefore important to examine the origins of individual differences in children's peer relations, with specific focus on the parent child-attachment relationship. Although the attachment relationship in infancy has been linked to peer relations in preschool and early childhood, few studies have examined the influence of the concurrent relationship between attachment and peer relations in middle childhood and early adolescence. The present study focused on these age groups.

Attachment Security

Although security was not expected to differ by age or sex, it is interesting to note that in the present study, elementary school children reported

higher levels of security than high school students, and that girls reported lower security of attachment to their fathers, but not to their mothers, than boys. Research with infants has shown that attachment status does not vary as a function of sex. In addition, using different measures of attachment, attachment classification tends to remain relatively stable from 12 months to 6 years of age. Therefore, it is possible that the sex and age differences found in the present study may be accounted for by the attachment measure used, rather than attachment per se. Since the main purpose of the study was to examine the relation between differences in attachment and peer relations, and not to examine each age and sex separately, after exploring the age and sex differences in the measure, security was residualized.

Nonetheless, it is important to examine the possible explanations as to why high school students reported less security of attachment to both parents than elementary school children, and why boys were more securely attached to their fathers than were girls. From the present data, it is unclear whether high school students (early adolescence) tend to under-report the significance of their relationships with their parents, **or** if the nature of the parent-child attachment relationship changes as peers begin to play a more significant role. Steinberg & Silverberg (1986) suggest that during adolescence there is a shift away from parents towards peers, as a means of striving for autonomy. Others have suggested that attachment to parents is independent of attachment of peers, and the importance of each depends on which group the adolescent

considers important for self-evaluation (Berndt, 1979). Our findings seem to support the findings of Steinberg & Silverberg (1986), indicating a decrease in attachment to parents as peers increase in importance. This does not imply that these children are not securely attached to their parents, rather, there seems to be a developmental change in self-reported security from late childhood to early adolescence. Further research is needed to determine if adolescents are unwilling to endorse an appropriate conceptualization of the parent-child relationship (i.e., via self-report), or if the shift in feelings towards more autonomy in adolescence leads to avoidance of parents, causing a decrease in security.

It was not surprising that girls were significantly less securely attached to their fathers than boys. Youniss & Smollar (1985) found that the father-daughter relationship tends to be more constrained and socio-emotionally detached than the father-son relationship. In addition, Hunter & Youniss (1982) reported that males rated their fathers higher on nurturance; although no sex difference was found for nurturance of mother. This suggests that although the nature of the father-daughter/father-son relationship differs, mothers tend to fulfill a similar role for both their sons and their daughters. This interpretation is supported by the findings of the present study.

Security of Attachment and Children's Peer Relations

Attachment and Friendship Closeness. Children's reported security of attachment to their mother was significantly related to friendship closeness,

although the same result was not found for security of attachment to father. Children securely attached to their mothers were more likely to be involved in close friendships ("best" or "good"), than in less close, although reciprocated friendships. These results were somewhat consistent with the predicted hypotheses of the present study. Children who were securely attached to their mother were expected be involved in closer friendships than insecurely attached children. Future research should explore the exact mechanisms, (i.e., internal working models), and other possible mediating factors, linking attachment to mother to children's peer relations.

The stronger influence of attachment to mother than attachment to father on friendship closeness was also expected, and is consistent with Main et al.'s (1985) suggestion that in the construction of the working model, one parent (most likely the primary attachment figure) may be more influential than the other. Since mothers tend to be the preferred attachment figure in Western cultures, (fathers tend to be the preferred playmate; Lamb, 1977; 1978), it was expected that child's security of attachment to mother would have a stronger influence on peer relations than security of attachment to father. On the other hand, MacDonald and Park (1984) suggest that children who are securely attached to their fathers may spend more time engaging in physical play behaviour and in turn, may be more skilled with their friends. However, this does not necessarily imply that security of attachment to father has a direct link to friendship closeness, rather, the attachment \ friendship closeness

relationship may be indirectly linked through children's acquisition of social skills learned in play. Future research should examine the specific aspects of the father-child relationship (other than attachment) which may influence older children's peer relations. It is also possible that the attachment measure used in this study may not be appropriate for fathers. Perhaps attachment to father is conceptualized differently, and hence, a unique attachment measure would be required.

For example, Youngblade et. al. (1993), found that infants classified as securely attached to their fathers using the Attachment Q-sort, interacted more positively with a friend in preschool. However, the same results were not found when infants were classified using the Strange Situation. These researchers suggest that the Strange Situation (which is a highly valid predictor of attachment to mother), and the Attachment Q-sort, assess different facets of the infant-father relationship, and may relate differentially to later relationships. The observation of infants' behavior with their fathers during the Strange Situation is based on the meaning of behaviors derived from validation of the Strange Situation for infants and their mothers. Similarly, other attachment measures (i.e., Kerns Security Scale), may be strongly based on conceptualizations that are unique to the mother-child relationship. Direct observation is required to determine the behavior correlates of the father-child relationship in infancy, in order to develop more suitable measures.

Youngblade et al. (1993), also point out that differences may exist not

only between maternal and paternal attachment, but between primary (more likely mother-child relation) and secondary attachment (more likely father-child relation). The degree to which current measures of attachment can be generalized to secondary attachments must be evaluated. Again, it would be useful to examine security of attachment and children's subsequent adjustment in non-traditional families, where the father is the primary caretaker.

In addition, many of the studies examining differences in the roles of mother and father as caregivers were conducted in the late seventies and early eighties. Although there are biological differences in the roles that mother and father play in raising their young (in terms of investment and caretaking), stylistic differences also exist, which may be a result of socialization. As we move through the nineties, and more mothers are joining the workforce when their children are still young, and as it becomes more acceptable for males to engage in caretaking roles, it would be interesting to see if patterns remain the same.

The finding that secure and insecure children did not differ with regard to number of no reciprocated friendships was unexpected. This may be due to the fact that children without friends overinflate their ratings of their relationship with their mother. (Most of these children were rejected by their peers, and rejected/aggressive children have been shown to overinflate their scores on questionnaires; i.e., they don't perceive themselves as others perceive them, Bukowski, 1991). Again, the same pattern was found for security to father. On

the other hand, perhaps children with no friends compensate by being involved in extremely close relationships with their parents (enmeshed). This is consistent with a previous finding that mothers of children with no friends reported higher maternal acceptance in an interview (Nadeau, 1992). This finding was attributed to the fact that extreme maternal acceptance may reflect enmeshment with the child, which may restrict the child's efforts in peer relationships, and give him/her the impression that other relationships are secondary. Alternatively, some mothers who perceive their children as being in trouble socially, may compensate by being especially attentive to their children's needs (Nadeau, 1992). However, it is also possible that mothers who are involved in enmeshed relationships with their children, restrict their children from pursuing close friendships. The same explanations may result in greater attachment security on the part of such children. Future research should utilize other sources of report about parent-child relationships and parent-child values (re: peer relationships), in order to differentiate these two possible explanations.

Security of Attachment and Sociometric Status

Like friendship closeness, sociometric status was significantly related to security of attachment to mother, but not to father. Closer examination of the data revealed that children who were securely attached to their mothers were more likely to be of average sociometric status, than neglected or rejected by their peers. This is not surprising. However, it is quite surprising that the rejected and neglected children did not differ significantly from popular children

in their attachment status, (however, the pattern was in the predicted direction). Although not significantly different from popular children, average children were slightly higher in security than popular children.

In the preschool years, secure children tend to be more popular with their peers. However, popularity is conceptualized quite differently in childhood and early adolescence. Perhaps, older children who are popular with peers are more socially mature or advanced, and as a result, they are more peer oriented. In addition, perhaps in later childhood and adolescence, as more time is spent interacting with peers, peers take over the some of the security functions that parents provided in earlier childhood. On the other hand, perhaps children with poor parental attachments, compensate by becoming part of a close peer network, providing them with a similar sense of felt security.

Age and Sex Effects

Unexpectedly, no age and sex differences were found for the relationship between security of attachment and the peer relations variables. It was expected that since friendship nominations in late childhood are based on mutual liking, sharing, and the pursuit of common activities, while friendships in early adolescence are characterized by intimacy and loyalty (more resemblant of the parent-child attachment bond) (Price & Ladd, 1986), the parent-child relationship would have a stronger effect on early adolescents' friendships, than friendships in late childhood. Also, intimate friendship relations tend to be more important for early adolescents, while peer acceptance tends to be more

important for younger children (Ladd, 1988). However, results may not have been found in the present sample due to the narrow age range used (9-11 vs. 12-14). The friendship characteristics at ages 10 and 11 may not differ enough from those at ages 13 and 14, which may account for the lack of significant age differences. In addition, the security measure used was designed for children in grade five (Kerns, in press), and therefore, may not be as sensitive for older children.

Friendship closeness, however, differed for children in elementary and high-school. Children in high school were more likely to be involved in closer friendships ("best") than elementary children, while elementary school children were more likely than high school students to have no friendship reciprocations at all. Again, this was consistent with expectations, since in adolescence intimacy begins to play an important role in friendship relations. Intimacy differentiates middle childhood from adolescence more than any other aspect of friendship, leading to "closer" (or more best) friendship relations in adolescence (Hartup, 1993). In middle childhood, children are more concerned with social acceptance, and experiment with tactics for including and excluding others (Ladd, 1988), which may account for the fact that more elementary school children were friendless (not involved in a close one-to-one dyadic relationship), than high school students.

Sex differences were also not found within the attachment/peer relations relationship. Since girls tend to select one or two play partners (Maccoby,

1988), and their friendships tend to be more intimate, (especially in later adolescence) (Bukowski & Kramer, 1986), it was expected that the parent-child attachment relationship would have a stronger impact on girls' friendships than on boys' friendships. Conversely, since boys play in large groups, attachment was expected to have a stronger influence on boys' social status within the peer group, than on girls' social status. Neither of these expectations were apparent. This may to indicate that the attachment relationship has an equal influence on friendship and on peer group acceptance, regardless of sex. In addition, recent literature has suggested that although there may be mean differences between boys and girls on various friendship measures (i.e., boys have more good friends than girls), the processes, or links between friendship and other variables (i.e., attachment), does not seem to differ as a function of gender (Bukowski et al., 1993).

Despite the fact that the attachment/friendship closeness relationship did not differ by sex, sex differences were found for friendship closeness. Girls tended to be involved in best friendships, whereas boys were more likely to be involved in good friendships, (although not significantly so). Again, this finding appears to be consistent with literature suggesting that girls tend to select a few close friends (best friends), (Maccoby, 1988), while boys tend to be involved in larger friendship networks (many good friends), (Benenson, 1990).

Security of Attachment and Number of Friends

Children who reported that they were securely attached to their mothers

had somewhat, though not significantly, more reciprocated friendships than children who reported that they were insecurely attached to their mothers. Number of reciprocated friends was not significantly related to security of attachment to father, nor to security of attachment to both parents combined. In addition, age and sex were not significantly related to number of friends. Empirical evidence examining the relationship between child security and number of friends has been inconsistent (Grossman & Grossman, 1991; Lewis & Feiring, 1989). Findings from the present study do not appear to support a strong link between number of friends and security of attachment. As predicted, closeness of friendship, rather than number of friends appears to be more closely linked to attachment status.

Validity of the Kerns Security Scale; Intergenerational Influence of Attachment

Children who were securely attached to their mothers had mothers who reported higher levels of security in their romantic relationships, and lower levels of insecurity, (anxious-ambivalence and avoidance), than mothers of children who were insecurely attached. This is consistent with theories of intergenerational concordance in attachment security, which suggest that parents' mental representations of their past relationship experiences influence the quality of their parenting behavior and the quality of the attachment relationship with their children (Bowlby, 1973). Very few studies have examined the relation between mother's attachment in her close romantic relationships and children's attachment to mother, although mother's attachment in her family

of origin has been linked to her attachment with romantic partners (Cohn et al., 1992). Findings from the present study suggest that mother's own security style is an important influence on children's security of attachment to mother.

It is interesting to note that children who reported that they were insecurely attached to their fathers, had mothers who were higher on anxious-ambivalence and on avoidance (trend) than children who were securely attached to their fathers. Father's own security in romantic relationships was unrelated to children's reported security of attachment to either father or to mother. This suggests that mother's security may be a more important predictor of children's security than father's security status. Children's reported security to father may represent a generalization from their relationship with mother, rather than reflect the actual father-child relationship. On the other hand, mother's security could directly affect father's relationship with the child.

Friendship Closeness and Sociometric Status

Another interesting finding was the relationship between friendship closeness and sociometric status. Not surprisingly, children with a best or a good friend were more likely than children with a lower level reciprocation and friendless children to be classified as popular. This is consistent with the literature suggesting that children who are popular tend to have greater friendship skills, which enables them to self-disclose and to provide reciprocal emotional support (Newcomb et al., 1993). Nonetheless, children involved in a best/good friendship appeared equally as likely as children with no reciprocated

friendships, and children with lower level reciprocations, to be classified as neglected. Therefore, it appears that neglected children can be involved in close reciprocated friendships.

These findings are consistent with literature suggesting that the behaviour of neglected children does not differ significantly from average children, although neglected children tend to be less socially active and evidence more withdrawal (Newcomb et al., 1993). The implications of this behaviour for neglected children's social development and adjustment is unclear, and does not necessarily indicate social maladjustment (Bierman, 1987). It has been suggested, that neglected children are not as "well-known" by their peers, rather than not as "well-liked." This finding has been attributed to the limited number of nominations, (usually three), allowed for in most sociometric classification procedures which would restrict the social preference (likeability) scores. However, in the present study, unlimited nominations were allowed (up to 8). Findings from this study suggest that some neglected children are involved in best or good reciprocated friendships, while others are not. Therefore, this group may be more complex and diverse than previous research has indicated. It would be interesting to examine the differences in the neglected children who are involved in reciprocated friendships, from those who are not involved in friendships.

The majority of children with no reciprocated friendships (friendless) were rejected (more than any other group), or neglected, by their peers. The

finding that most of these children were rejected by their peers is compatible with literature suggesting that rejected children are characterized by disruptive, aggressive, and unco-operative behaviour, and are non-preferred playmates (Coie & Kupersmidt, 1983). Rejected children's negative reputation may lead to ostracism and isolation from the peer group (Newcomb et al., 1993). Therefore, children with no friends, who are also rejected by their peers, may be at the highest risk for later psychopathology.

Limitations of Study

Caution must be taken when interpreting these results for a variety of reasons. First, all analyses were based on questionnaire data. Such results should be substantiated by observation, which tends to be less subject to response bias. Also, the child attachment measure is in an early stage of development. However, it is one of the only attachment measures used with school-aged children, and it seems to be quite valid and reliable, especially the mother measure. No data were previously published using the father attachment measure. Research on a behavioral measure of attachment in school-aged children (e.g., Hilburn-Cobb, under review), would be useful.

It is unfortunate that loglinear analyses could not be used due to the small sample size. This would have allowed us to get a clearer picture of age and sex differences in the relations between friendship/sociometric status and attachment security. It may also have been beneficial to examine a wider age range in order to accurately compare middle childhood and later adolescence.

In addition, due to the small sample size, the group of children with lower level reciprocated friendships and no friendship reciprocations were very small, leading to decreased power.

In the present study, only two parent families were included. For future research, the differential nature of attachment in two parent and single parent families (due to divorce, separation), especially in families where the primary caregiver is the father, should be examined. Single parent families were excluded from the study since data were not available regarding the exact date of the divorce /separation /death. Since changes in life events can cause shifts in attachment, it was decided that it would be more useful to have a cohesive sample for this study.

Conclusions and Future Directions

Much research is needed to further examine parental influences on children's peer relations. Although there is a relationship between attachment to mother and peer relations, the relation to attachment to father is less clear. In future research, the differential nature of attachment to father and mother on peer relations merits continued examination. Further, it would be quite important to conceptualize attachment to father more clearly and to develop more appropriate measures.

It is also important to examine the exact mechanisms linking attachment to mother and peer relations in older children. Although a significant, (but weak), link has been found, the exact nature of the the cognitive, affective and

behavioral components of the attachment relationship, and their subsequent effects on peer relations, are unclear at this time. Future research should examine internal working models of attachment more closely, perhaps longitudinally, in order to outline the evolution of the attachment model over time.

In addition, it would be important to investigate further different "levels" of friendship closeness. Although children with best and good friends do not appear to be significantly different from each other, children with lower level reciprocated friendships seem to be quite different in terms of both their attachment status and their sociometric status, than any of the the other groups. This is a significant addition to the current friendship literature.

The relationships of children who were not involved in any friendships tend to be quite complex. Although friendless children are highly rejected by their peers, they seem to be securely attached to their mothers. Future research should examine if a secure attachment relationship buffers the effects of having no friends, or if close friendships buffer the effects of insecure attachment. Because peer relations contribute to children's adjustment and sense of self, it is important to examine the mechanisms which contribute to friendship maintenance and development.

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APPENDIX A

Sociometric Measure, Kerns Security Scale, Simpson Attachment Questionnaire

Grade: 3 ___ 4 ___ 5 ___ 6 ___ 7 ___ **School**

October, 1993 (T 1)

Teacher's name: _____

****

Name your **same-sex best friends** in your grade(see list on p.1).

Begin with your very best friend.

(First & last names)

1. _____
2. _____
3. _____
4. _____
5. _____

Please name **same-sex kids** in your grade (see list on p.1) **you don't like to spend time with.**

(First & last name)

1. _____
2. _____
3. _____
4. _____
5. _____

February, 1994
Mom1

Name (First & Last)_____ Grade _____

Teacher_____ School_____ Class No._____

Which Kids I Am Like

Now we're going to ask you some questions about you and your **MOM.** We are interested in what each of you is like, what kind of a person you are like. First let me explain how these questions work. Each question talks about two kinds of kids, and we want to know which kids are most like you. Here is a sample question.

Really True for me	Sort of True for me			Sort of True for me	Really True for me
		Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	

What I want you to decide first is whether you are more like the kids on the left side who would rather play outdoors, or more like the kids on the right side who would rather watch T.V. Don't mark anything yet, but decide which kid is most like you and go to that side of the sentence. Now, decide whether that is sort of true for you, or really true for you, and check that box.

For each sentence you will **only check *one* box,** the one that goes with what is true for you, what you are most like.

****

Now we're going to ask you some questions about you and your **mom.**

Do you have a mom? Yes___ No___
Do you live with your mom? Yes___ No___
Do you have a stepmom? Yes___ No___
Do you live with your stepmom? Yes___ No___

If you have both a mom and a stepmom, choose who you want to tell us about.
Mom_____ Stepmom_____

(If you **don't** have a mom or stepmom please take out some work to do quietly.)

TURN THE PAGE AND ANSWER THE QUESTIONS

ONLY CHECK ONE BOX FOR EACH QUESTION!!

	Really True for me	Sort of True for me			Sort of true for me	Really true for me
1.	☐	☐	Some kids find it easy to trust their mom.	BUT	Other kids are not sure if they can trust their mom.	☐ ☐
2.	☐	☐	Some kids feel like their mom butts in a lot when they are trying to do things	BUT	Other kids feel like their mom lets them do things on their own.	☐ ☐
3.	☐	☐	Some kids find it easy to count on their mom for help	BUT	Other kids think it's hard to count on their mom.	☐ ☐
4.	☐	☐	Some kids think their mom spends enough time with them.	BUT	Other kids think their mom does not spend enough time with them.	☐ ☐
5.	☐	☐	Some kids do not really like telling their mom what they are thinking or feeling.	BUT	Other kids do like telling their mom what they are thinking or feeling.	☐ ☐
6.	☐	☐	Some kids do not really need their mom for much	BUT	Other kids need their mom for a lot of things	☐ ☐
7.	☐	☐	Some kids wish they were closer to their mom.	BUT	Other kids are happy with how close they are to their mom.	☐ ☐

ONLY CHECK ONE BOX FOR EACH QUESTION!!

	Really True for me	Sort of True for me				Sort of True for me	Really True for me
8.	☐	☐	Some kids worry that their mom does not really love them.	BUT	Other kids are <u>really</u> sure that their mom loves them.	☐	☐
9.	☐	☐	Some kids feel like their mom really understands them.	BUT	Other kids feel like their mom does not really understand them.	☐	☐
10.	☐	☐	Some kids are really sure their mom would not leave them.	BUT	Other kids sometimes wonder if their mom might leave them.	☐	☐
11.	☐	☐	Some kids worry that their mom might not be there when they need her.	BUT	Other kids are sure their mom will be there when they need her.	☐	☐
12.	☐	☐	Some kids think their mom does not listen to them.	BUT	Other kids do think their mom listens to them.	☐	☐
13.	☐	☐	Some kids go to their mom when they are upset.	BUT	Other kids do not go to their mom when they are upset.	☐	☐
14.	☐	☐	Some kids wish their mom would help them more with their problems.	BUT	Other kids think their mom helps them enough.	☐	☐
15.	☐	☐	Some kids feel better when their mom is around.	BUT	Other kids do not really feel better when their mom is around.	☐	☐

Here are three ways that kids can feel about their mom. Put an X by the ONE that is most like the way you feel about your mom.

_____ I like to do things by myself rather than ask my mom for help. Sometimes it's hard for me to count on her or tell her what I am thinking or feeling.

_____ I'm really close to my mom. I know my mom always listens when I tell her things. I know she'll be there if I need her.

_____ Sometimes I wish my mom and I were closer. It also sometimes seems like my mom gets in the way when I'm trying to do things.

February, 1994
Dad1

Name (First & Last)_____ Grade _____

Teacher_____ School_____ Class No._____

Which Kids I Am Like

Now we're going to ask you some questions about you and your **DAD.** We are interested in what each of you is like, what kind of a person you are like. First let me explain how these questions work. Each question talks about two kinds of kids, and we want to know which kids are most like you. Here is a sample question.

Really True for me	Sort of True for me			Sort of True for me	Really True for me
		Some kids would rather play outdoors in their spare time	BUT	Other kids would rather watch T.V.	

What I want you to decide first is whether you are more like the kids on the left side who would rather play outdoors, or more like the kids on the right side who would rather watch T.V. Don't mark anything yet, but decide which kid is most like you and go to that side of the sentence. Now, decide whether that is sort of true for you, or really true for you, and check that box.

For each sentence you will **only check one box,** the one that goes with what is true for you, what you are most like.

****

Now we're going to ask you some questions about you and your **dad.**

Do you have a dad?	Yes____	No____
Do you live with your dad?	Yes____	No____
Do you have a stepdad?	Yes____	No____
Do you live with your stepdad?	Yes____	No____

If you have both a dad and a stepdad, choose who you want to tell about.
Dad_____ Stepdad_____

(If you **don't** have a dad or stepdad, please take out some work to do quietly.)

TURN THE PAGE AND ANSWER THE QUESTIONS

ONLY CHECK ONE BOX FOR EACH QUESTION!!

	Really True for me	Sort of True for me			Sort of true for me	Really true for me
1.	☐	☐	Some kids find it easy to trust their dad.	BUT	Other kids are not sure if they can trust their dad.	☐ ☐
2.	☐	☐	Some kids feel like their dad butts in a lot when they are trying to do things	BUT	Other kids feel like their dad lets them do things on their own.	☐ ☐
3.	☐	☐	Some kids find it easy to count on their dad for help	BUT	Other kids think it's hard to count on their dad.	☐ ☐
4.	☐	☐	Some kids think their dad spends enough time with them.	BUT	Other kids think their dad does not spend enough time with them.	☐ ☐
5.	☐	☐	Some kids do not really like telling their dad what they are thinking or feeling.	BUT	Other kids do like telling their dad what they are thinking or feeling.	☐ ☐
6.	☐	☐	Some kids do not really need their dad for much	BUT	Other kids need their dad for a lot of things	☐ ☐
7.	☐	☐	Some kids wish they were closer to their dad.	BUT	Other kids are happy with how close they are to their dad.	☐ ☐

ONLY CHECK ONE BOX FOR EACH QUESTION!!

	Really True for me	Sort of True for me				Sort of True for me	Really True for me
8.	☐	☐	Some kids worry that their dad does not really love them.	BUT	Other kids are <u>really</u> sure that their dad loves them.	☐	☐
9.	☐	☐	Some kids feel like their dad really understands them.	BUT	Other kids feel like their dad does not really understand them.	☐	☐
10.	☐	☐	Some kids are really sure their dad would not leave them.	BUT	Other kids sometimes wonder if their dad might leave them.	☐	☐
11.	☐	☐	Some kids worry that their dad might not be there when they need him.	BUT	Other kids are sure their dad will be there when they need him.	☐	☐
12.	☐	☐	Some kids think their dad does not listen to them.	BUT	Other kids do think their dad listens to them.	☐	☐
13.	☐	☐	Some kids go to their dad when they are upset.	BUT	Other kids do not go to their dad when they are upset.	☐	☐
14.	☐	☐	Some kids wish their dad would help them more with their problems.	BUT	Other kids think their dad helps them enough.	☐	☐
15.	☐	☐	Some kids feel better when their dad is around.	BUT	Other kids do not really feel better when their dad is around.	☐	☐

Here are three ways that kids can feel about their dad. Put an X by the ONE that is <u>most</u> like the way you feel about your dad.

_____ I like to do things by myself rather than ask my dad for help. Sometimes it's hard for me to count on him or tell him what I am thinking or feeling.

_____ I'm really close to my dad. I know my dad always listens when I tell him things. I know he'll be there if I need him.

_____ Sometimes I wish my dad and I were closer. It also sometimes seems like my dad gets in the way when I'm trying to do things.

Close Relationships

Instructions: We would like to know more about how you typically feel towards romantic partners in general. There are no right or wrong answers. Please read each statement and indicate whether you agree or disagree with it. Circle the number that indicates if you strongly disagree, disagree, feel neutral, agree or strongly agree.

1. I find it relatively easy to get close to others.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

2. I am not very comfortable having to depend on other people.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

3. I'm comfortable having others depend on me.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

4. I rarely worry about being abandoned by others.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

5. I don't like people getting too close to me.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

6. I'm somewhat uncomfortable being too close to others.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

7. I find it difficult to trust others completely.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

8. I'm nervous whenever anyone gets too close to me.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

9. Others often want me to be more intimate than I feel comfortable being.

_____1_____2_____3_____4_____5___

Strongly Disagree Neutral Agree Strongly disagree agree

10. Others often are reluctant to get as close as I would like.

_____1_____2_____3_____4_____5__

Strongly Disagree Neutral Agree Strongly disagree agree

11. I often worry that my partner does not really love me.

_____1_____2_____3_____4_____5__

Strongly Disagree Neutral Agree Strongly disagree agree

12. I rarely worry about my partner leaving me.

_____1_____2_____3_____4_____5__

Strongly Disagree Neutral Agree Strongly disagree agree

13. I often want to merge completely with others, and this desire sometimes scares them away.

_____1_____2_____3_____4_____5__

Strongly Disagree Neutral Agree Strongly disagree agree

APPENDIX B

Information Letters and Consent Forms for Phase I and Phase II

Centre For Research in Human Development

Dear Parents:

We are writing to ask permission for your child to participate, at school, in a small part of a project approved by the principal, Mr. _____, and the Sault-Saint-Louis School Commission.

We at the Centre for Research in Human Development have been studying children's social development for over a decade. With support from the Social Sciences and Humanities Research Council of Canada, we are currently concerned with how children's friendships change with age and the factors enabling children to have good relations with friends. The importance of this work is that positive peer relations contribute to the child's sense of well-being and school achievement.

We are working with children in Grades 4 to 6 at _____ School. As a small part of our study, we would like your child to indicate his/her friends and friendship preferences on a list of classmates' names. In order for our research to be meaningful, it is important that all children in the class participate in this task. Most children like thinking about their friends and enjoy the task, which takes 10-20 minutes, and is done in a group with confidential reponses. It will be given twice (at the teacher's convenience), with an interval of one month, in order to assess how constant or changing children's relationships are. All information will remain confidential to the research team.

We hope that you will permit your child to participate in this task. Please have your child return the enclosed form to the teacher indicating your decision. We would like your answer regardless of whether or not you agree to your child's participation. To encourage your child to return the enclosed form, all children returning forms will be eligible for a raffle of gift certificates for Cineplex Odeon movie passes. There will be one prize per class.

If you have any questions or wish further information, please call us at the numbers below.

We appreciate and thank you for your assistance.

Sincerely,

Anna-Beth Doyle, Ph.D.
Professor of Psychology
(848-7538)

Dorothy Markiewicz, Ph.D
Associate Professor of
Applied Social Science and of Psychology
(848-2889)

Centre For Research in Human Development

Consent Form

Child's name: .....

School: .....

Grade: .....

Home Room Teacher's Name: .....

Check one alternative

____ I agree to allow my child to participate in the 20-minute friendship nomination task as part of the research project conducted by Drs. Anna Beth Doyle and Dorothy Markiewicz.

OR

____ I do not agree to the above.

I have been informed that my child is free to discontinue at any time.

Name of Parent or Guardian (Please Print) .....

Signature of Parent or Guardian .....

Date.....

Please return this form to the home room teacher as soon as possible

CENTRE FOR RESEARCH IN HUMAN DEVELOPMENT

Dear Parents,

Thank you for permitting your child to participate in the first part of our study of children's friendships which we are conducting at _____ School. As you recall, your child was asked to list his or her friends.

We are writing now to ask for the participation of your child and yourselves in the second part of the study. This part concerns changes with age in children's friendships, the degree to which children's friendships are similar to, or different from their parents' friendships, and the contribution of the family to children's friendships.

We are asking permission for your child to complete questionnaires at school. The questionnaires ask children to say how true statements about friendships are for the (e.g. My friend helps me when I am having trouble with something) and how true statements are about themselves (e.g.I like the kind of person I am; I like telling my parents what I am thinking and feeling). The questionnaires take about 50 minutes to complete in total. Over 1000 children in North America and Australia have completed similar questionnaires and most enjoy them. The children will answer these questionnaires individually, at times which are convenient for the teacher to excuse small groups from class. Of course no child is ever forced to participate and all answers are confidential.

We are also asking parents to complete similar questionnaires about their friendships, self perceptions, and family functioning. The questionnaires will be mailed to you in January to complete at your convenience, and will take about one hour of your time.

We would like as many mothers and fathers as possible to participate. Little is known about the role of fathers in children's social development; hence fathers

participation is very important. However, if only one parent can participate, your help is still very important. In return for participation, each parent will receive $10 for his/her time. We will be please to send you a summary of the group results of the study when completed.

As you may recall, this project is funded by the Social Sciences and Humanities Research Council of Canada, and is concerned with how children's friendships change with age, and what helps children have good relations with friends. This work is important because friendships foster the child's sense of well-being and school achievement.

We hope that you and your child will consent to participate in this project. It is through the help of parents like yourselves that professionals learn how to assist families in improving children's social development. Please return the enclosed participation form to your child's teacher indicating your decision. We would like to know your decision even if you do not agree to participate. To encourage a reply, all children returning forms will receive a small prize.

If you have questions or wish further information before you decide about participating, we would be most pleased to speak with you about the project. Please indicate a convenient telephone number on the form. Also, please do not hesitate to call any one of us at the numbers below. Thank you once again for your assistance. It is important to have as many mothers and fathers as possible continue with the project.

Sincerely,

Anna-Beth Doyle, Ph.D.
Professor of Psychology
(848-7538)

Dorothy Markiewicz, Ph.D.
Associate Professor of Applied
Social Science & of Psychology
(848-3889)

Consent Form

Child's Name.....

Teacher's Name:.....

School:..... Grade:.....

Check one alternative

____ I agree to my child's and my/our (circle one) participation in the second part of the friendship study by Drs. A.B. Doyle and D. Markiewicz (as described in the letter of March, 1993)

OR

____ I agree to be called to discuss the project.

Parent's Name (please print).....

Phone number.....

OR

____ I do not agree to the above.

If you agree to participate please complete the following:

I have been informed that this project is being conducted by Drs. Anna Beth Doyle and Dorothy Markiewicz and that I/we and/or my child may discontinue participation at any time.

Parent (s) Name (s) (please print).....

Date.....

.....

Mother's Signature (if participating) Fathers Signature (if participating)

Street Address.....

Phone Number.....

Please return this form to the teacher as soon as possible.

High School Student Consent Form

STUDENT PERMISSION FORM

CHILDREN'S FRIENDSHIPS

FEBRUARY 1993

Thank you for your interest in our study. Please read and sign the following statement.

I have been asked to be in a research study that Drs. A.B. Doyle and D. Markiewicz are doing on children's friendships. This study examines the changes with age in children's friendships, the degree to which children's friendships are similar to, or different from their parent's friendships, and the contribution of the family to children's friendships. I know that if I agree to be in the study, I will be asked to fill out a questionnaire that includes questions about myself, my friendships, and my parent's friendships.

I know that I do not have to be in the study, and that even if I start to take part in it, I can quit at any time. Also, I know that my answers will be confidential. That is, I know that no one but Drs. Doyle and Markiewicz, their assistants, and I will know what I say on the questionnaire. I also know that if I do not want to answer a particular question in the questionnaire, I can leave it blank.

My Name is:

(Print) _____

Date _____

(Signature) _____

APPENDIX C

Verbatim Instructions to Children: Sociometrics and Kerns Security Scale

SOCIOMETRIC ASSESSMENT

VERBATIM INSTRUCTIONS TO CHILDREN

Introductory/Explanation Phase: [To be read, so that nothing is forgotten.] Hi, my name is _____, and these are my helpers, _____. We're with the Children's Friendship Project at Concordia University.

Tell me, who won the movie pass in this class? (Congratulate child)

(Name non participants, if any. Ask them to raise their hand and tell them: "We know you're not participating, so please take something to read or work quietly, and don't raise your hand later on when we ask the others to do so.

We are interested in learning what friendships are like for kids. Today, we would like you to tell us about friendships.

"Code of Conduct" Phase:

Before we get started, there are some very important things to tell you.

The first thing is, that this is not a test. There are no right or wrong answers. What we want to know is your opinion and your feelings.

The second thing I want to tell you is, that since we are asking for your opinion, we will keep it private. This means that I will keep what you say today just between you, me and my helpers. I will not show what you write down today to people who are not supposed to know. By that I mean, I won't show your paper to your teacher, your principal, your classmates, or your parents. Only you and I and my helpers will know about it. And because I am going to keep it private, you can feel free to be honest about what you really think.

Also, because it's private, it is important for you to be careful not to look at what other kids are writing down, and not to let other kids know what you have written down. This also means not talking while you're working today, not asking other people what they wrote, and not telling other people what you wrote. If someone asks you, even a friend, it's best just to say, "Its private". We will be coming around while you work just to help you answer the questions and to check that you haven't

left anything out.

The third thing I want to tell you about is the 'No Talking Rule'. Because I have important things to tell you as we work together, that means that from now on you need to listen even more carefully. If you are talking, you can't hear my instructions and you won't know what to do. So, if you have any questions, just raise your hand and -------- or ---------- will come over and help you.

Okay. Those are the three important things I wanted to tell you. I'll repeat them quickly : This is not a test, this is private and no talking-just listening.

Training/Assessment Phase

Now we're ready to start. _____ & _____are going to pass out the questionnaires. Would all the girls raise their hands. (Helper with girls's grade lists starts distributing the questionnaire right side up on the desk.) Would all the boys raise their hands. (Then helper with boys' lists follows the first helper & hands out the Qres to boys). **Wait till I've had a chance to tell you more about them before you start.** Please do not write on your questionnaires until I tell you how to do this. Does everyone have a pencil? (Helpers: distribute, if needed).

If you're all ready, we can start the "No Talking Rule". So, no more talking, (pause) everyone should be very quiet. Just raise your hand later on if you have any questions after I'm finished explaining. (If there are hands at this point, ask them to wait because you are probably going to answer their questions anyway.)

(Helper: Show them a grade list. Leader points to it)

We've prepared a list of the names of all the kids in your grade in this school. ???? It looks like this. Girls, you have a list of all the girls. And boys, you have a list of all the boys in your grade. OK ? This is on the first page of your questionnaire.

I want you to look for your own name on the list and draw a circle around it. [Wait till everyone's ready.] Can you all find your name on the list? That is really important- did everyone circle their own name?

Now I'll explain the second page to you, then you can do it.

(Show second page) There are 3 things to do on the second page.

1) The first thing to do is to write down your own name. That's easy enough, isn't it?

2) In the second task, we want to know about children's friends. Who are you friends with in your grade. So, task # 2 asks you to name your best friends from the grade list that you've been handed. What you'll do then is put your very best friend's name on line 1, put your second best friend on line 2, third best on line 3, fourth best on line four, fifth best on line 5; and then any others who are your best friend. **You can name as many or as few kids as you want. And make sure you always give first and last names.**

3) The last question deals with persons in your grade that you don't like to spend time

with. I don't need to know why. Just write down their their first and last names, that's all. Again, you can name as many or as few names as you want. Also, you don't have to write any names for this question if you don't want to.

Do you have any questions before we start? (Questions about 'my best friend not being in this grade or in this school' or 'my best friend is of the other sex' can be answered by 'that is a good question, what you can do is write her/his name at the bottom of the grade list, and this way we'll know. But pick the names for the 2 questions from the list of names we gave you.')

Is everybody ready? Remember No talking and if you have a question, raise your hand and one of us will go see you. O.K., now tun to page 2 & write your name on your own.

Now go to page 2 and write your name where we ask for it. Remember to put your first and last name. [Wait till everyone's ready.] Is everyone finished?

Now for the second question: Find the name of your very best friend on the grade list and write it on line 1. [Wait till everyone's ready.] Any questions?
Now write the name of your second best friend on line 2. Make sure it's on the list. [Wait till everyone's ready.] Everyone done? Good.
You can begin to work on your own now. Write the names of any other best friends below the first 2 names you wrote. If you need any help, raise your hand and one of us will come over. When you're finished this question go on to do the last one on your own. When you're all finished, turn your papers over and we will collect them. [Collect the questionnaires and check (1) that name is circled on grade list, (2) that the child put her/his complete name, and (3) that all first & <u>last names</u> are there.

SOCIOMETRIC ASSESSMENT

VERBATIM INSTRUCTIONS TO HIGH SCHOOL KIDS

TIME 1

Introductory/Explanation Phase: [To be read, so that nothing is forgotten.]

Hi! My name is _____, and these are my assistants _____. We're with the Friendship Project at Concordia University.

(Check for absentees & write lightly in pencil "abs' next to child's name on list.)

(Name non-participants, if any. Ask them to raise their hand and tell them: "We know you're not participating, so please take something to read or work quietly, and don't raise your hand later on when we ask the others to do so." OR if there are more than 5-6, ask the teacher to take them with her/him. The teachers will be told beforehand.)

The Friendship Project is interested in learning what friendships are like for kids your age. Today, we would like you to tell us about friendships.

"Code of Conduct" Phase:

Before we get started, there are some very important things to tell you.

The first thing is: this is not a test. There are no right or wrong answers. What we want to know is your opinion and your feelings.

The second thing I want to tell you is, that since we are asking for your opinion, we will keep it confidential. This means, for my part, that I won't show your answers to your teacher, your principal, your classmates, or your parents. And because of this, you can feel free to be honest about what you really think.

You also need to help keep it confidential. So, it's very important for you to remember not to look at what the others are writing, and not to let the others see what you are writing. This also means not talking while you're working today, not asking other people what they wrote, and not telling other people what you wrote. If someone asks you, even a friend, it's best just to say, "It's confidential". We will be

coming around while you work just to help you and to check that you haven't left anything out.

Finally, because I have important things to tell you as we work together, it means that you need to listen carefully and not to talk.

Okay. Those are the 3 important things I wanted to tell you : This is not a test, this is confidential and no talking-just listening.

Assessment Phase

Now we're ready to start. _____ & _____are going to pass out the questionnaires. Would all the girls raise their hands. (with girls' grade lists starts distributing the questionnaire right side up on the desk.) **Wait till I've had a chance to tell you more about them before you start.** Please do not write on your questionnaires until I tell you how to do this.

(When assistant is finished with girls' papers) Would all the boys raise their hands.

(Then assistant with boys' lists hands out the Qres to boys).

Does everyone have a pencil? (Assistants: distribute, if needed).

(Assistant: write the teacher's name (if needed) on the blackboard and the course number [all 6 digits, e.g. 116-30] that appears on the class list)

If you're all ready, please no more talking, (pause) everyone should be very quiet.

(If there are hands at this point, ask them to wait because you are probably going to answer their questions anyway.)

(Leader: Show them a grade list.)

Your first page is a list of the names of all the girls or boys in your grade at this school that are participating. Girls, you have a list of all the participating girls. And boys, you have a list of all the boys participating in your grade.

Find your own name on the list and draw circle around it. [Wait till everyone's ready.] All done? (If a child's name is missing ask everyone to write it at the bottom of the first page, and write it on the blackboard.)

(Show second page) Now turn to page 2.

1) The first thing to do is to write down your own name. Do it now. Next, write the name of your (French) teacher in the top left hand corner of the page and the course number. Now stop, and don't write until I tell you to.

2) Next, we want to know about your friendships. Who are your friends in your grade on this list? So, when I tell you to, where it says "name your same sex best friends" (point on the paper), you will write your very best friend's name from the list on page 1 on line 1, then you'll put your second best friend on line 2, third best on line 3, and so on; and use as many lines as you have best friends. **You can name as many or as few kids as you want. Just make sure you always give first and last names, and remember to pick friends from the grade list on page 1.**

But don't write just yet!

3)Look at the last part of the page. That question is about your opposite sex best friends . Write down their their first and last names. Again, you can name as many or as few names as you want. Also, you don't have to write any names for this question if you don't want to. Just remember to name opposite sex friends from the school first.

Do you have any questions before we start? (Questions about 'my best friend not being in this grade or on the list or in this school' or 'my best friend is of the other sex' can be answered **on a one to one basis** by 'that is a good question, what you can do is write her/his name on the first line. But pick the other kids from the grade list.' Questions about 'I don't have friends in this grade or in this school' can be answered by the helper: " if you're starting to be friends with someone in your grade, you can put their names down, but you don't have to put any names if you don't want to.)

OK, we're ready! Remember No talking and if you have a question, raise your hand and one of us will go see you.

A)First, find the name of your very best friend on page 1, put a small "1" next to it, and then write it on the first line. Put the first and last name. [Wait till everyone's ready.] Any questions?

B)Now, find the name of your second best friend on the list, but don't number it, just

write it on the second line. [Wait till everyone's ready.] Everyone done? Good.
C)You can begin to work on your own now. Write the names of any other best friends below the first 2 names you wrote. If you need any help, raise your hand and one of us will come over. When you're finished this question go on to do the last one.

(Assistants: while walking around between the isles, notice if children put many names. If they do tell them, one on one, that your computer won't take more than 8 names per question, so he/she can stop then. Do thank them, though.)

When you're all finished, turn your papers over and we will collect them.

[You and your assistants must collect the questionnaires, not the teacher, since we assured the children that the teacher would not see their answers. As you collect them, check for each one: (1) that the kid's name is circled on grade list, (2) that the child put her/his complete name, and (3) that all first & last names are there. Then thank each one individually after you've check their Qrs.

(When all the questionnaires have been collected:)

Hand out the movie pass (gift certificate) to the Winner: Congratulation!

Thank the children and remind them about their responsibility to keep their answers confidential.

We'll be back in about a month for another short questionnaire. The letter you took home to your parents counts for today and the next time. Soon we'll bring another letter for when we come back the third time. For that third part of the Friendship project, we need both you and one parent or both to participate. We'll mail the questionnaires to your parents, and you'll answer the questionnairers here at school.

Verbatim Instructions for

Kerns Security Scale: Which Kids I Am Like

Elementary School

"Now we're going to ask you some questions about your mom/dad. We are interested in what each of you is like. First let me explain how these questions work. Each question talks about two kinds of kids. We want to know which kids are most like **you.**

Let's try an example together: (see questionnaire)

Example: Some kids would rather play outdoors in their spare time,
but other kids would rather watch T.V.

What I want you to decide is whether you are more like the kids on the left side who would rather play outdoors, or whether you are like the kids on the right side who would rather watch T.V.

Don't mark anything yet, but decide which kid you are most like and put your pencil on that side of the page.

Now decide if that is **REALLY TRUE FOR YOU** or **SORT OF TRUE FOR YOU** and put an X in that box.

REMEMBER: **YOU CAN ONLY CHECK ONE BOX FOR EACH LINE, THE ONE THAT IS MOST LIKE YOU!!**

But before we start, we are going to ask you some general questions.

Please check the appropriate answer.

1. Do you have a mom/dad? YES or NO
2. Do you live with your mom? YES or NO
3. Do you have stepmom/dad? YES or NO
4. Do you live with your stepmom/dad? YES or NO

(If the child says: "BUT I live with my mom/dad and stepmom/dad!" Tell them to check the PERSON who they live with MOST of the time.)

5. If you have both a mom/dad and a stepmom/dad, please check who you want to

tell us about.

Now we are ready to begin. Please turn the page.

GRADE 5 and 6: Let's do the first few together.

(Do the first few aloud until they seem to get the hang of it.)

Then ask: Do you have any questions? O.K. Now try the rest on your own. Go through each question and decide which kid is most like you and then decide if it is **REALLY TRUE** or **SORT OF TRUE** for you. Remember, only check **one** box for each line. We will come around to make sure you are doing it correctly. Raise your hand if you need our help.

You will see that the last page is a little different. Just check the answer that is most like you. We will help you if you need us to.

GRADE 4 : For the grade 4's, you must read each question outloud.

"We will go through each question together. Remember, only check **one** box for each line.

The last page is a little different:

There are three ways that kids can feel about their mom/dad. Put an **X** beside the one that is **most** like the way you feel about your mom/dad. Only choose one answer.

****

If you are doing this questionnaire in Phase 2, Part 1, go to the Friendship Acitivity Questionnaire.

If you are doing this questionnaire in Phase 2 part 2, thank the children for their help and de-brief them on the purpose of the study.

Helpers!!!

Go around and make sure that the children have only checked one box for each question. Try to catch mistakes as early as possible so that they can be corrected on the spot.

APPENDIX D

MANOVA Summary Table: Security to Mother and Father; Age and Sex Effects

Table D

Security to Mother/ Security to Father: Age and Sex Effects

Univariate Homogeneity of Variance Tests

Security to Mom

Bartlett-Box F (3,189502) = 1.72, p = .158.

Security to Dad

Bartlett-Box F (3, 189502) = .066, p = .066

Between Subjects Effects

Source	Sum of Squares	DF	Mean Square	F	p
Age	.94	1	.94	14.05	.000
Sex	.13	1	.13	1.97	.161
Age by sex	.01	1	.01	.19	.667
Within	23.89	357	.07		

Within Subjects Effects

Source	Sums of Squares	DF	Mean Square	F	p
Parent	.39	1	.39	19.39	.000
Age by Parent	.06	1	.06	3.04	.082
Sex by Parent	.11	1	.11	5.49	.020
Age by Sex by Parent	.07	1	.07	3.38	.067
Within	7.14	357	.02		

APPENDIX E

LOGLINEAR Summary Table: Friendship Closeness; Age and Sex Effects

Table E

Table of Partial Association x^2's, Loglinear Parameter Estimates, and Lambdas/Standard Error

Effect	Partial Association Chi-square		Loglinear Parameter Estimate (Lambda)		Lambda/SE	
Age			E.S. / H.S		E.S. / H.S.	
			-0.173	0.173	-2.401	2.401
Sex			Boys / Girls		Boys / Girls	
			0.084	-0.084	1.197	-1.197
Friendship by Grade			E.S.	H.S.	E.S.	H.S.
	10.71*	BEST	-0.190	0.190	-2.070	2.070
	df=3	GOOD	-0.137	0.137	-1.393	1.393
		OTHER	-0.126	0.126	-0.831	0.831
		NONE	0.453	-0.453	3.085	-3.085
Friendship by Sex			BOYS	GIRLS	BOYS	GIRLS
	17.61**	BEST	-0.299	0.299	-3.351	3.351
	df=3	GOOD	0.156	-0.156	1.169	1.169
		OTHER	-0.052	0.052	-0.359	0.350
		NONE	0.195	-0.195	1.337	-1.337

E.S. = Elementary School, H.S. = High School

*p < .01, **p < .001

APPENDIX F

ANOVA Summary Tables; Number of Reciprocated Friends by Security of Attachment

Table F1

ANOVA Summary Table: Number of Reciprocated Friends by Security to Mom, Age & Sex

Univariate Homogeneity of Variance Test

Number of Reciprocated Friends

Bartlett-Box F (7,75894) = 2.21, p = .030.

Source	Sums of Sq.	DF	Mean Square	F	p
Security	5.42	1	5.42	3.23	.073
Age	.74	1	.74	.44	.507
Sex	3.33	1	3.33	1.99	.160
Secure x Age	5.30	1	5.30	3.16	.076
Secure x Sex	.04	1	.04	.02	.884
Age x Sex	2.17	1	2.17	1.29	.256
Sec x Age xSex	1.11	1	1.11	.66	.416
Within	591.71	352	1.68		

Table F2

ANOVA Summary Table: Number of Reciprocated Friends by Security to Dad, Age & Sex

Univariate Homogeneity of Variance Test

Number of Reciprocated Friends

Bartlett-Box F (7,75550) = 2.05, p = .045.

Source	Sums of Sq.	DF	Mean Square	F	p
Security	2.57	1	2.57	1.53	.217
Age	2.45	1	2.45	1.46	.228
Sex	3.62	1	3.62	2.15	.143
Secure x Age	1.06	1	1.06	.63	.429
Secure x Sex	.35	1	.35	.21	.648
Age x Sex	2.81	1	2.81	1.67	.197
Sec x Age x Sex	2.79	1	2.79	1.66	.199
Within	591.71	1	1.68		

Table F3

ANOVA Summary Table: Number of Reciprocated Friends by Security to Parent Dyad, Age & Sex

Univariate Homogeneity of Variance Test

Number of Reciprocated Friends

Bartlett-Box F (11,42410)= 1.40, p = .163

Source	Sums of Sq.	DF	Mean Square	F	p
Security	4.92	2	2.46	1.50	.225
Age	1.21	1	1.21	.74	.391
Sex	4.05	1	4.05	2.47	.117
Secure x Age	5.14	2	2.57	1.56	.211
Secure x Sex	3.80	2	1.90	1.16	.315
Age x Sex	3.10	1	3.10	1.89	.170
Sec x Age x Sex	3.39	2	1.69	1.03	.357
Within	564.71	344	1.64		

APPENDIX G

MANOVA Summary Tables; Parent Attachment Security by Child Attachment Security

Table G1

MANOVA Summary Table: Mother's Security of Attachment Style by Child's Security to Mom

Univariate Homogeneity of Variance Tests

Secure

Bartlett-Box: F (1,63818) = 1.32, p = .251

Avoidance

Bartlett-Box: F (1,63818) = 1.05, p = .306

Anxious-Ambivalence

Bartlett-Box: F (1,63818) = .0083, p = .927

Effect	DF	Error DF	F	Sign. of F
Multivariate				
Security to Mom	3	203	4.11	.005
Univariate				
Mother's Security				
Secure	1	205	7.10	.008
Avoidance	1	205	3.65	.058
Anxious-ambivalence	1	205	6.89	.009

Table G2

MANOVA Summary Table: Mother's Security of Attachment Style by Child's Security to Dad

Univariate Homogeneity of Variance Tests

Secure

Bartlett-Box: F (1,85858) = .061, p = .805

Avoidance

Bartlett-Box: F (1,85858) = 1.54, p = .215

Anxious-Ambivalence

Bartlett-Box: F (1,85858) = 2.33, p = .127

Effect	DF	Error DF	F	Sign. of F
Multivariate				
Security to Dad	3	200	5.34	.001
Univariate				
Mother's Security				
Secure	1	202	1.01	.317
Avoidance	1	202	3.03	.083
Anxious-ambiv.	1	202	15.53	.000

Table G3

MANOVA Summary Table: Father's Security of Attachment Style by Child's Security to Dad

Univariate Homogeneity of Variance Tests

Secure

Bartlett-Box: F (1,27111) = .025, p = .875

Avoidance

Bartlett-Box: F (1,27111) = .058, p = .810

Anxious-Ambivalence

Bartlett-Box: F (1,27111) = .259, p = .611

Effect	DF	Error DF	F	Sign. of F
Multivariate				
Security to Dad	3	142	.346	.792
Univariate				
Father's Security				
Secure	1	144	.387	.535
Avoidance	1	144	.546	.461
Anxious-ambiv.	1	144	.558	.456

Table G4

MANOVA Summary Table: Father's Security of Attachment Style by Child's Security to Mom

Univariate Homogeneity of Variance Tests

Secure

Bartlett-Box: F (1,25973) = .798, p = .372

Avoidance

Bartlett-Box: F (1,25973) = 5.67, p = .017

Anxious-Ambivalence

Bartlett-Box: F (1,25973) = .358, p = .550

Effect	DF	Error DF	F	Sign. of F
Multivariate				
Security to Mom	3	146	.731	.535
Univariate				
Father's Security				
Secure	1	148	.020	.887
Avoidance	1	148	.056	.814
Anxious-ambiv.	1	148	2.18	.142