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CHILDREN'S PERCEIVED QUALITY OF
SIGNIFICANT RELATIONSHIPS AND
SOCIOEMOTIONAL ADJUSTMENT

by

Andrea Maria Dorsch

A Dissertation Submitted to
the Faculty of The Graduate School at
The University of North Carolina at Greensboro
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Approved by


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APPROVAL PAGE

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The present study extends research on interpersonal relations to preadolescence by introducing the Children's Inventory of Significant Relationships (CISR), a self-report measure of children's perceived quality of relations with their primary caregiver, a significant adult, and a significant child. Estimates of internal consistency, split-half reliability, and test-retest reliability were adequate. Factor analyses revealed three factors for each relationship scale: affect, support, and security. Children most frequently identified their mother as the primary caregiver, their father or grandmother as the significant adult, and a friend or a sibling as the significant child. Children who identified a sibling as the significant child reported lower perceived quality of the relationship than did children who identified a friend or a cousin. Some racial differences in the selection of significant others were noted. Children reported relatively consistent levels of perceived quality across the three relationships, which were positively associated with self-esteem and negatively associated with depression, loneliness, and social anxiety. Relations with primary caregiver and significant adult were also positively related to social preference by peers. Children with high vs. low perceived quality of the three relationships reported higher levels of self-esteem and lower levels of depression and social anxiety. In addition, children with positive caregiver and adult relations demonstrated higher levels of social preference and lower levels of loneliness. Children with positive caregiver relations received lower ratings of externalizing problems, and children with positive child relations received lower ratings of aggression. The caregiver relationship emerged as the primary predictor of depression and loneliness, while the adult and child relationships emerged as significant predictors of self-esteem.

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TABLE OF CONTENTS

	Page
APPROVAL PAGE	ii
ACKNOWLEDGEMENTS	iii
CHAPTER	
I. INTRODUCTION	1
Review of the Literature	1
Objectives	10
II. METHOD	12
Subjects	12
Procedure	12
Measures	13
III. RESULTS	19
Psychometric Properties	19
Factor Analyses	20
Identification of Significant Others	22
Demographic Characteristics	24
Perceived Quality Across Significant Relationships.	24
Correlation Analyses.	25
Group Differences in Socioemotional Adjustment	26
Relationships as Predictors of Adjustment	28
IV. DISCUSSION	30
BIBLIOGRAPHY	39
APPENDIX A. ETHICAL CONSIDERATIONS	45
APPENDIX B. CONSENT FORMS	46
Parent Letter	47
Scripted Assurance of Participant Rights (Child).	48
APPENDIX C. DEMOGRAPHIC INFORMATION SHEET	49
APPENDIX D. MEASURES	50
Sociometric Questionnaire	51
Children's Inventory of Significant Relationships (CISR).	52
Children's Depression Inventory (CDI)	55
Loneliness and Social Dissatisfaction Scale	57
Social Anxiety Scale for Children (SASC)	60
Perceived Competence Scale for Children	61
Child Behavior Checklist (CBCL)	64
Teacher's Report Form (TRF)	66

APPENDIX E. TABLES	68
TABLE 1 Factor Loadings for Items on the Primary Caregiver Scale	69
TABLE 2 Factor Loadings for Items on the Significant Adult Scale	70
TABLE 3 Factor Loadings for Items on the Significant Child Scale	71
TABLE 4 Intercorrelations Among Primary Caregiver, Significant Adult, and Significant Child Factors	72
TABLE 5 Correlations Between Primary Caregiver Factors and Indicators of Socioemotional Adjustment	73
TABLE 6 Correlations Between Significant Adult Factors and Indicators of Socioemotional Adjustment	74
TABLE 7 Correlations Between Significant Child Factors and Indicators of Socioemotional Adjustment	75
TABLE 8 Individuals Identified as Significant Others	76
TABLE 9 Correlations Between CISR Scale Scores and Indicators of Socioemotional Adjustment	77
TABLE 10 Intercorrelations among Measures of Internalizing and Externalizing Behavior Problems	78
TABLE 11 Mean Scores on Measures of Socioemotional Adjustment for Children with Low and High Perceived Quality of Relationship with Primary Caregiver	79
TABLE 12 Mean Scores on Measures of Socioemotional Adjustment for Children with Low and High Perceived Quality of Relationship with Significant Adult	80
TABLE 13 Mean Scores on Measures of Socioemotional Adjustment for Children with Low and High Perceived Quality of Relationship with Significant Child	81
TABLE 14 Regression Estimates for CISR Scales and Indicators of Socioemotional Adjustment	82

CHAPTER I
INTRODUCTION

Review of the Literature

The recognition of the importance of interpersonal relations for healthy socioemotional development has led researchers to study both intra- and extrafamilial systems, with a particular emphasis on the mother-child attachment, sibling relations, and peer friendships.

"Attachment" refers to an enduring affectional tie or bond that one individual forms with another individual as a result of frequent interactions (Bowlby, 1969). The first attachment relationship experienced by an individual is that with his/her primary caregiver in infancy and consists of both behavioral and affective/cognitive components. Behavioral aspects include attachment behaviors on the part of the child which serve to insure proximity and to maintain contact between the child and the attachment figure. These behaviors have been the primary focus of research by Ainsworth and her colleagues (e.g., Ainsworth, Blehar, Waters, and Wall, 1978), who have observed children's behavioral responses to separation and reunion with their primary caregiver and identified three different attachment classifications: avoidant, secure, and resistant. Avoidant infants ignore their mother, fail to show distress when she leaves the room, and fail to engage her when she returns. Securely attached infants engage their mother, show distress when she leaves the room but adjust relatively quickly, and greet her happily upon reunion. Resistant infants exhibit excessive clinging and whining while their mother is in the room, show excessive distress when she leaves the room, and demonstrate an inability to be calmed or soothed when she returns. The avoidant and resistant classifications make up the insecure attachment group and are contrasted with the secure attachment group.

The affective/cognitive aspects of the attachment relationship involve the child's perceived security in the relationship. This includes expectations about the caregiver's availability and responsiveness to the child, the caregiver's ability to provide comfort and assist in affect regulation, and the caregiver's capacity to achieve the balance between providing instrumental help and promoting autonomy and exploration, as well as an assessment of the quality of affect associated with child-caregiver interactions (Elicker, Englund, & Sroufe, 1992).

The behavioral and affective/cognitive aspects of the attachment relationship are assumed to have long-lasting effects on the development of subsequent relationships and on the development of psychopathology. The idea of continuity in personality development dates to Freud (1905, 1940), who believed that the mother was the prototype for every other interpersonal relationship, and that "a child's affection for his parents is no doubt the most important infantile trace" (1905, p. 228). Drawing on psychoanalytic theory, Bowlby (1969, 1973) developed the concept of the "internal working model," which refers to the child's internalization, or mental representation, of the self and the caregiver in the attachment relationship. It is through this internal working model that early relationship experiences "affect the way in which individuals process interpersonal information and thereby influence the nature of relationships established beyond the family of origin" (Belsky & Nezworski, 1988, p. 11). A person who has formed a secure attachment with a primary caregiver "is likely to possess a representational model of the attachment figure as being available, responsive, and helpful and a complementary model of himself as at least a potentially lovable and valuable person" (Bowlby, 1980, p. 2). A history of availability and responsiveness of the caregiver allows the child to develop positive social expectations, the capacity for reciprocity in interpersonal relationships, and a sense of self-worth and efficacy (Elicker et al.,

1992). On the other hand, a history of insecurity of attachment, which is associated with a model of the caregiver as being unavailable and unresponsive and a complementary model of the self as unlovable and unworthy of care may give rise to "many forms of emotional distress and personality disturbance, including anxiety, anger, depression, and emotional detachment" (Bowlby, 1977, p. 201).

Empirical research has supported the hypotheses of temporal stability of attachment classifications, consistency of attachment classifications across relationships, and an association of attachment relationships to socioemotional functioning. Attachment classifications have been found to be stable from the ages of 12 to 22 months, with 98% of infants retaining their original attachment classifications (Ainsworth et al., 1978). Attachment classifications in infancy have also been found to correlate highly and positively with reunion behaviors at age six (Main, Kaplan, & Cassidy, 1985).

In addition to temporal stability, a meta-analytic study has revealed consistency in attachment classifications across significant others (mothers and fathers) for avoidant, secure, and resistant infants (Fox, Kimmerly, & Shafer, 1991). In addition, Sroufe and his colleagues (Elicker et al., 1992; Erickson, Sroufe, & Egeland, 1985; LaFreniere & Sroufe, 1985) have observed continuity from mother-child attachments in infancy to peer relationships in later childhood. Securely attached infants were more likely to be rated as attentive, cooperative, and sociable at age 2, to be rated as socially competent with peers at age 3, to demonstrate good impulse control, compliance, independence, and empathy for peers at ages 4 and 5, and to display high levels of social skills, interpersonal understanding, and friendship formations in middle childhood than insecurely attached infants. Children with histories of insecure attachment were more likely to be victimized by peers in preschool and to continue to seek out those doing the victimizing (Troy & Sroufe, 1987). Parallels between parent-child and sibling relations

have also been found; children whose relationships with their parents are characterized by high levels of warmth report less hostility, less rivalry, and more affection toward their siblings (Stocker & McHale, 1992).

Consistent with Bowlby's assumption that attachment to the primary caregiver is related to subsequent psychopathology, an association between attachment in infancy and behavioral and emotional problems in later childhood and adolescence has been found. For example, preschoolers with insecure parent-child attachment histories have been found to demonstrate more externalizing behavior problems than preschoolers with secure attachment histories (Speltz, Greenberg, & DeKlyen, 1990). In addition, researchers have found a relationship between self-reports of attachment and concurrent socioemotional functioning. For example, Armsden, McCauley, Greenberg, Burke, & Mitchell (1990) found that depressed adolescents self-reported significantly less secure parent attachment than nondepressed psychiatric and nonpsychiatric controls and less secure peer attachment than nonpsychiatric controls. Armsden & Greenberg (1987) found that highly securely attached adolescents reported less symptomatic responses to stressful life events. Furthermore, researchers have found that adolescents' quality of attachment to parents and peers is positively related to self-esteem (Greenberg, Siegel, & Leitch, 1983) and negatively related to separation anxiety (Armsden et al., 1990).

Experiences with siblings are also expected to play a significant role in children's socioemotional development, particularly during the period of middle childhood. While sibling relations were traditionally viewed as being mediated through parent-child relations, parent-child and sibling interactions are now perceived as exercising mutual influences on one another (Hartup, 1979). Thus, sibling relations may function autonomously from and as part of the larger family system. Sibling relations are differentiated from other interpersonal relations

by their high level of ambivalence. They are more likely to be stressful and volatile and characterized by rivalry and conflict than any other interpersonal relationships. On the other hand, they involve positive aspects which contribute to socioemotional development, including emotional closeness, supportive caretaking, direct instruction, and facilitative modeling (Pfouts, 1976). While early childhood is marked by a high degree of rivalry, middle childhood is typically characterized by resolution of rivalry through deidentification, the process whereby siblings come to differentiate themselves from one another (Schachter, Gilutz, Shore, & Adler, 1978). At this developmental stage, siblings are able to develop prosocial skills and effective conflict resolution skills and to experience mutual help-giving and dependency within their interactions with one another. Thus, siblings may serve as attachment figures for their siblings, either as a complement or a supplement to the primary caregiver-child attachment relationship (Ainsworth, 1989). Research supports the assumption of independent contributions of sibling relations to social development in that sibling caretaking has been found to predict social development in middle childhood even after parental caretaking has been taken into account (Bryant, 1982).

Friendships with peers, like attachments to caregivers and siblings, contribute significantly to the socioemotional development of the child. Friendships involve the establishment of egalitarian and reciprocal relationships, the experience of conflict and negotiation, the appreciation of other viewpoints, intentions, and feelings, and the exchange of mutual affection and help-giving, which may lead to social competence (Youniss, 1980). Through the establishment of reliable alliances, companionship, consensual validation of interests, hopes, and fears, friendships are believed to enhance self-worth, to promote interpersonal sensitivity, and to serve as prototypes for later relationships (Sullivan, 1953). Research has provided evidence to

support the hypothesized relationship between friendships and social competence and psychological adjustment. For instance, toddlers and preschoolers with stable friendships have been found to develop more complex and sophisticated forms of social interaction and play, while children who lost their friends due to family moves or other transitions have been found to demonstrate lower levels of social skills and less acceptance by peers (Howes, 1983). Furthermore, the presence and maintenance of old friends among classmates and the formation of new friendships predict positive school adjustment from preschool to kindergarten (Howes, 1983) and more successful adjustment following the transition to junior high school (Berndt, 1987). Thus, Ladd, Profilet, & Hart (1992) conclude that friends may serve as attachment figures for one another.

As with attachment behaviors, social behaviors with peers appear to be quite stable. In a longitudinal study, Ladd, Price, & Hart (1990) found stability in individual differences in cooperative and rough play across one year of preschool. In addition, levels of cooperative play were positively related to positive nominations and peer impact scores, while rough play was negatively related to positive nominations and social preference scores and positively related to negative nominations and social impact scores. Furthermore, children, regardless of their own social status, began to prefer to interact with the popular, more socially skilled children as the year progressed. These results are consistent with the findings within the attachment literature that children with secure attachment histories are more likely to form friendships, and that all children are more likely to select other children with secure attachment histories when forming friendships (Elicker et al., 1992). Thus, attachments to primary caregivers, to siblings, and to friends represent important components in the psychological adjustment of individuals across development.

Due to a growing interest in a life-span approach to the study of interpersonal relations and their impact on socioemotional functioning, researchers have recently begun to extend attachment research beyond infancy to the toddler years (e.g., Bretherton, Ridgeway, & Cassidy, 1990; Crittenden, 1992), to early childhood (e.g., Main, Kaplan, & Cassidy, 1985), to adolescence (e.g., Armsden & Greenberg, 1987), and to adulthood (e.g., Main, Kaplan, & Cassidy, 1985). Several different methodologies have been employed, including story completion tasks, separation-reunion procedures, children's family drawings, children's responses to a family photograph, and attachment interviews and questionnaires. Despite this growing interest in lifespan research, the period of middle childhood, or preadolescence, has been neglected. Also, despite the contentions that other attachment relationships besides the mother-child attachment are important for socioemotional development and that the child's primary caregiver is not necessarily the child's mother (Ainsworth, 1989), researchers have often neglected to assess other significant relationships. Ainsworth (1989) and Crittenden (1990) identify the need to develop assessment procedures for preadolescents and to explore other attachment relationships, such as those with fathers, friends, siblings, and other relatives. Because preadolescent children are able to communicate about the conscious aspects of their internal working models, including the affective/cognitive aspects of their attachment relationships (Pottharst, 1990), researchers may rely on self-reports rather than on observational assessments of attachment behaviors at this developmental stage. Researchers have traditionally selected the particular attachment relationships under study; however, due to the changing picture of the nuclear family and due to developmental changes in significant relationships, it may be more useful for subjects rather than researchers to identify their attachment figures.

In terms of social development, preadolescence is a period of active development characterized by growth in social understanding, interpersonal problem-solving, and transformations of the self as a result of an expanding social network (Bryant, 1982), which may include a broad array of significant others, including parents, siblings, other relatives, neighbors, teachers, and peers, with varying degrees of significance attached to each of these interpersonal relationships (Furman & Buhrmester, 1992). Preadolescence is a time of transition between early childhood when parent-child, sibling, and other intrafamilial relations are highly significant and adolescence when extrafamilial peer relations, same-sex friendships, and heterosexual relationships become more significant in terms of support, instrumental help, affection, and companionship (Blos, 1967; Sullivan, 1953). At this stage, children begin to spend more time in peer group activities away from home (Hartup, 1984). Interactions and social comparisons with peers begin to rival experiences with parents as the basis for self-definition and self-esteem (Markus & Nurius, 1984).

In a study of developmental changes in relationship networks, Furman & Buhrmester (1992) found that fourth graders rated their mothers and fathers as the most frequent providers of support, while seventh graders rated their parents and same-sex friends as equally important, and tenth graders rated their same-sex friends as most important in terms of support. In addition, fourth graders rated relationships with siblings and other relatives as more significant than did seventh and tenth graders. Thus, social development from preadolescence to adolescence appears to involve a decrease in the reliance on intrafamilial relations and an increase in the dependence on extrafamilial relations for support, suggesting some developmental changes in attachment figures. Given these developmental changes in the relative salience of various attachment figures, one may speculate that different attachment relationships may serve as primary predictors of

particular developmental outcomes. The notion of a developmental progression in attachment relationships further underscores the need to assess other significant relationships besides the mother-child attachment and to have children identify those relationships they deem most significant in their lives.

Based on attachment theory, four domains of functioning-- internalizing problems, externalizing problems, social competence, and self-esteem--emerge as particularly relevant indicators of socioemotional adjustment. Not only do internalizing and externalizing problems represent the two broad dimensions of dysfunction that have been identified within the domain of child psychopathology, they also represent the negative affective and behavioral consequences of insecure attachments identified by Bowlby (1977). Internalizing problems include depression, withdrawal (emotional detachment), anxiety, and somatic complaints, while externalizing problems include aggressive and delinquent behavior. In this study, internalizing problems are operationalized as primary caregiver and teacher reports of internalizing problems and self-reports of depression, loneliness, and social anxiety. Externalizing problems are operationalized as primary caregiver and teacher reports of externalizing problems and peer ratings of aggression. Given the relationship between early attachment relationships and subsequent social skills (Elicker et al., 1992; Erickson et al., 1985; LaFreniere & Sroufe, 1985), social competence with peers serves as a third indicator of socioemotional adjustment. Social competence is operationalized as high social preference by peers and low victimization by peers. Finally, due to the proposed association between attachment security and self-efficacy and self-worth (Bowlby, 1969, 1973; Elicker et al., 1992), self-esteem represents the fourth indicator of socioemotional adjustment and is operationalized as perceived cognitive, social, and physical competence and perceived general self-worth.

Objectives

1. A primary objective of the present study was to extend research on interpersonal relations to preadolescence by developing the Children's Inventory of Significant Relationships (CISR): a self-report measure of children's perceptions of the behavioral and affective/cognitive aspects of relationships with three significant others: 1) the primary caregiver, 2) a significant adult, and 3) a significant child. This included obtaining estimates of the psychometric properties of internal consistency and test-retest reliability and conducting factor analyses for the three scales of the CISR.
2. A second goal involved extending attachment research beyond the mother-child relationship. Because different individuals may serve as attachment figures for different children, between-subject variations in the selection of significant others were predicted across the three significant individuals. Since previous research has suggested that preadolescence serves as a transition from intra- to extrafamilial relations, it was predicted that the youngest group of children would be more likely to select a sibling than an extrafamilial peer as the significant child, while the oldest group of children would be more likely to select a friend than a sibling.
3. Another goal of this study was to explore the association of children's perceptions across different significant relationships. Based on the assumption that security of attachment with the primary caregiver is associated with expectations which guide behavior and affective/cognitive experiences in other relationships, children may be expected to have comparable internal working models of contemporaneous relationships. Thus, it was predicted that children's perceived quality of relations would be comparable across the three significant others.
4. A fourth goal of this study was to examine the association of children's perceptions of their significant relationships to indicators of socioemotional functioning, as assessed by multiple informants and

multiple methods. Positive associations were predicted between perceived relationship quality and social preference and self-esteem, while negative associations were predicted between perceived relationship quality and internalizing problems, externalizing problems, and social victimization. Furthermore, it was hypothesized that children with high perceived quality of significant relationships would demonstrate lower levels of internalizing and externalizing behavior problems, higher levels of social competence (high social preference and low victimization), and higher levels of self-esteem than children with low perceived quality of significant relationships.

5. A final goal was to determine whether particular significant relationships are predictive of particular types of socioemotional adjustment. Because the relationship with the primary caregiver may still be considered the most significant attachment relationship at this age, it was hypothesized that the primary caregiver relationship would be the primary predictor of socioemotional adjustment. Due to the increasing importance of other intra- and extrafamilial relationships in preadolescence, it was hypothesized that the significant adult and the significant child relationships would provide significant and independent contributions to the prediction of adjustment, and that they might emerge as the primary predictors of some of the indicators of adjustment.

CHAPTER II

METHOD

Subjects

Subjects were 131 third, fourth, and fifth graders who were selected based on sociometric screening in four racially integrated elementary schools in a Southeastern city. Subjects ranged in age from 8 years-9 months to 12 years-10 months ($M = 10$ years-5 months). The sample consisted of 55 girls and 76 boys. The racial composition of the sample was representative of that of the four city schools, with 60% of subjects being African American and 40% being European American. Demographic data obtained from the subjects' primary caregivers indicated that the majority of mothers (87.9%) and fathers (84.8%) were high school graduates. Many of the subjects' parents were married (63.1%), while a substantial minority of mothers had never been married (18.9%) or were separated, divorced, or widowed (18%). There was variation in the number of siblings (range = 0 to 5), with the majority of subjects having one or two siblings (70.9%). All social classes were represented in the sample. Using the Hollingshead (1975) four factor index of social status, 36.1% of subjects' parents were classified as unskilled or semiskilled workers, 45.2% as skilled craftsmen or minor professionals, and 18.7% as major professionals.

Procedure

Upon receiving parental consent, group sociometric screenings were conducted in the four city schools. Subjects were informed of confidentiality and were administered the sociometric questionnaire in their classroom (see APPENDIX D for all measures). Subjects were recruited by phone following the sociometric screening and were

interviewed individually in the laboratory by the author and/or another graduate assistant. Parents completed consent forms for themselves and their children (see APPENDIX B). After being informed of their participant rights (see APPENDIX B), the child subjects were asked to complete several questionnaires: the newly developed Children's Inventory of Significant Relationships (CISR), the Children's Depression Inventory (CDI), the Loneliness and Social Dissatisfaction Scale, the Social Anxiety Scale for Children (SASC), and the Perceived Competence Scale for Children. Due to the young age and variable reading ability of subjects, all items were read aloud by the experimenter. Children were also administered the Vocabulary subtest of the Wechsler Intelligence Scale for Children-Third Edition (WISC-III) to provide an indicator of intellectual functioning. The primary caregivers of the child subjects were asked to complete the Child Behavior Checklist (CBCL) and a brief Demographic Information Sheet (see APPENDIX C). The Teacher's Report Forms (TRF) were mailed to the subjects' teachers. Child subjects received several prizes and coupons, parents received \$5.00 for participation, and teachers received \$2.00 per completed form.

Measures

Sociometric Questionnaire.

Children completed a four-item sociometric questionnaire which asked them to name the three people in their grade whom they like the most, the three people in their grade whom they like the least, the three people in their grade who start fights, and the three people in their grade who get picked on and teased a lot. Following the procedure outlined by Coie, Dodge, & Coppotelli (1982), nominations were totalled and transformed to standard scores for each child in each grade per school. The standardized liked-least score was subtracted from the standardized liked-most score to produce the social preference score. Nominations for children who "start fights" were standardized within

each grade to yield the aggression score. Nominations for children who "get picked on and teased a lot" were standardized within each grade to yield the victimization score.

The Children's Inventory of Significant Relationships.

The Children's Inventory of Significant Relationships (CISR), developed by the author, is a self-report measure of children's perceived quality of interpersonal relations with three significant others: 1) the primary caregiver, 2) a significant adult, and 3) a significant child. The following directions were provided for identifying these three significant others.

1. Who lives in your house? Of those people, who takes care of you the most?
2. Name the one other grown-up next to _____ (the person named in number 1) who is the most important in your life. This can be your mother, father, aunt, uncle, grandmother, grandfather, teacher, neighbor, coach, minister, or anyone else who is important to you. Remember, choose the one other grown-up who is the most important in your life.
3. Name the one kid who is the most important in your life. This can be your brother, sister, cousin, friend, a kid at school, a kid in your neighborhood, or anyone else who is important to you. Remember, choose the one kid who is the most important in your life.

To be identified as a significant adult, the individual had to be at least 18 years of age. Thus, an adult sibling or cousin could be identified as a significant adult. To be identified as a significant child, the individual had to be less than 18 years of age but old enough to maintain a significant relationship (i.e., beyond infancy). No other limitations were imposed on the selection of significant others.

The CISR was designed to assess several dimensions of the child's perceived quality of his/her attachment relationships, including perceptions of the behavioral aspects of the relationship and the affective/cognitive aspects of the internal working model which have been identified by attachment theorists (Bowlby, 1969, 1973; Elicker, Englund, & Sroufe, 1992). Items were designed to assess children's perceived sense of security within the relationship, availability and responsiveness of each partner, degree of acceptance/rejection, instrumental support, support for autonomy, mutual trust, respect, affection, quality of affect, affect regulation, and level of emotional closeness/detachment. Because attachment in preadolescence may be thought of as a more reciprocal dyadic relationship than in earlier childhood, the CISR includes statements regarding perceptions of the behavior of both the significant other and of the self within the relationship (e.g., "This person helps me" and "I help this person") as well as of the affective/cognitive experiences of both individuals (e.g., "This person trusts me" and "I trust this person").

Children were asked to rate statements about their own and their significant other's experiences in the relationship on a 5-point Likert scale: Never True, Hardly Ever True, Sometimes True, True Most of the Time, and Always True. The original inventory contained 54 items on each scale. Following a pilot study with third through eighth graders who rated items according to ease of understanding and face validity, the number of items was reduced to 42. Through the course of the study, problems with comprehension were noted on three items; these items were subsequently removed from the final analyses, yielding a total of 39 items per significant relationship. A few of the items on the CISR overlap in content with the Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987), which is designed for adolescents. Items were scored on a scale of 1 to 5, with 1 representing the lowest level and 5 representing the highest level of perceived quality.

The Children's Depression Inventory.

The Children's Depression Inventory (CDI) was developed by Kovacs (1985) as a downward extension of the Beck Depression Inventory and includes 27 items, each of which consists of three statements about a particular depressive symptom. One statement reflects minimal or no severity, one moderate, and one severe. The score for each item ranges from 0 to 2, while the total score ranges from 0 to 54, with higher scores representing more severe depression. Kovacs (1985) reports high internal consistency (coefficient alphas ranging from 0.70 to 0.86) and adequate test-retest reliability (correlations ranging from 0.38 to 0.87), with higher reliabilities reported for emotionally disturbed children. Concurrent validity of the CDI is indicated by high positive correlations with anxiety, hopelessness, withdrawal, and depressive distortions, and by negative correlations with self-esteem.

Loneliness and Social Dissatisfaction Scale.

The Loneliness and Social Dissatisfaction Scale (Asher, Hymel, & Renshaw, 1984) is a 24-item self-report measure, with 16 items assessing four different areas--children's feelings of loneliness, children's appraisal of their current peer relationships, children's perceptions of the degree to which their relationship needs are being met, and children's perceptions of their own social competence--and with 8 items serving as "filler" items. All items are rated on a five-point Likert scale. Total scores range from 16 to 80, with higher scores indicating a greater degree of loneliness and social dissatisfaction. Asher et al. (1984) report excellent internal consistency (coefficient alpha of 0.90), and Asher, Parkhurst, Hymel, & Williams (1990) report adequate test-retest reliability (correlation of 0.55 between initial administration and one-year retest). Convergent validity is demonstrated in that sociometric status is negatively correlated with loneliness and social dissatisfaction scores (Asher et al., 1984).

Social Anxiety Scale for Children.

The Social Anxiety Scale for Children (SASC; LaGreca, Dandes, Wick, Shaw, & Stone, 1988) is a 10-item self-report measure with 2 subscales: 1) fear of negative evaluation and 2) social avoidance and distress. Items are rated on a 3-point Likert scale: never true, sometimes true, or always true. Total scores range from 0 to 20 with higher scores indicating a greater degree of social anxiety. Estimates of internal consistency (overall coefficient alpha of 0.76) and test-retest reliability (correlation of 0.67) are adequate (LaGreca et al., 1988).

The Perceived Competence Scale for Children.

The Perceived Competence Scale for Children (Harter, 1982) is a 36-item self-report measure of perceived competence in 3 domains--cognitive, social, and physical--and of general self-worth. A structured alternative format is used: children are presented with contrasting statements and decide which statement is more true for them and then to what degree it is true for them ("sort of true" or "really true"). Subscale intercorrelations range from 0.42 to 0.58, internal consistency estimates for the subscales range from 0.73 to 0.86, and test-retest reliabilities range from 0.70 to 0.87 (Harter, 1982).

Child Behavior Checklist (CBCL).

The Child Behavior Checklist (CBCL; Achenbach, 1991a) includes 112 items assessing specific internalizing behavior problems (withdrawal, depression/anxiety, and somatic complaints), externalizing behavior problems (delinquent behavior, aggressive behavior), and other behavior problems (social problems, thought problems, and attention problems). Each item is rated along a 3-point scale regarding how well it describes the child's behavior. For this study, only the broad band externalizing and internalizing scores were used. Norms are available for boys and girls ages 6-18. Test-retest reliabilities are satisfactory, ranging from 0.89 for 1-week intervals to 0.71 for 2-year intervals (Achenbach,

1991a). The CBCL has been found to effectively differentiate clinic from normal children, as well as children within different diagnostic subgroups.

Teacher's Report Form (TRF).

The Teacher's Report Form (TRF) is the teacher version of the Child Behavior Checklist (Achenbach, 1991b) and includes 112 items assessing specific behavior problems which occur at school. Some of these items overlap in content with the CBCL. Each item is rated along a 3-point scale regarding how well it describes a student's behavior. Again, only the broad band externalizing and internalizing scores were used in this study. Norms are available for boys and girls ages 6-18. Test-retest reliabilities are satisfactory, ranging from 0.90 for 2-week intervals to 0.75 and 0.66 for 2- and 4-month intervals, respectively (Achenbach, 1991b). The TRF has been found to effectively differentiate clinically referred boys from non-referred boys. Also, total behavior scores on the TRF have been found to correlate positively with observational assessments of problem behaviors and negatively with on-task behaviors.

CHAPTER III

RESULTS

Psychometric Properties

Internal consistency of the Children's Inventory of Significant Relationships (CISR) was determined by calculating Cronbach coefficient alphas. The following estimates were obtained: 0.90 for the primary caregiver scale, 0.93 for the significant adult scale, and 0.95 for the significant child scale. In addition, split-half reliability estimates were determined by calculating correlations between the even- and odd-numbered items on each scale. The following correlations were obtained: $r = 0.79$ ($p < .0005$) for the primary caregiver scale, $r = 0.83$ ($p < .0005$) for the significant adult scale, and $r = 0.86$ ($p < .0005$) for the significant child scale. Thus, the three scales were considered to be relatively unidimensional and highly internally consistent. Therefore, no further items were deleted from the scales.

Test-retest reliability estimates were determined by re-administering the CISR to a subsample of 30 subjects at least one month following the initial administration. These retests were completed in the subjects' homes rather than the laboratory, as this was more convenient for the parents. Test-retest reliabilities were adequate, ranging from 0.64 ($p < .0005$) on the primary caregiver scale to 0.82 ($p < .0005$) on the significant adult scale and 0.92 ($p < .0005$) on the significant child scale. Only one child in this sample had a change in living situation, moving from his grandmother's house back to his mother's house. He had noted his grandmother as his primary caregiver and two other household members as his significant others in the initial administration. It is noteworthy that this child presented his relations with members of his former household in a more negative light

on the second administration. His mean percent agreement score between the test and retest was 47%, which is dramatically lower than the overall mean percent agreement score of 79% for the remaining 29 subjects.

Factor Analyses

Separate factor analyses were performed on the three CISR scales. Due to the high internal consistencies within each scale, an oblique (Promax) rotation was used. Based on the analysis of the scree plots, three factors emerged for each of the three CISR scales, yielding a total of nine factors. Eigenvalues exceeded 1 for all factors. Items with factor loadings greater than 0.30 were retained (see Tables 1, 2, and 3). On the primary caregiver scale, the first factor had factor loadings ranging from 0.36 to 0.70 and included 14 items related to quality of affect, affection, affect regulation, and emotional detachment. The second factor had factor loadings ranging from 0.32 to 0.72 and contained 13 items related to instrumental support, support for autonomy, and availability and responsiveness. The third factor had factor loadings ranging from 0.43 to 0.76 and included 10 items related to perceived security, respect, and acceptance/rejection. Only two items did not load on any of the three primary caregiver factors and, thus, were excluded from further analyses with these factors. On the significant adult scale, the first factor contained factor loadings ranging from 0.45 to 0.69 and included 15 items related to perceived security, mutual trust, respect, acceptance/rejection, and emotional closeness/detachment. The second factor had factor loadings ranging from 0.37 to 0.82 and contained 14 items related to quality of affect and affect regulation. The third factor had factor loadings ranging from 0.33 to 0.84 and included 9 items related to instrumental support and support for autonomy. Only one item did not load on any of the three significant adult factors and was, thus, excluded from further analyses. On the significant child scale, the first factor had factor

loadings ranging from 0.33 to 0.86 and included 13 items related to instrumental support, support for autonomy, and responsiveness. The second factor contained factor loadings ranging from 0.40 to 0.89 and included 14 items related to quality of affect, affect regulation, and emotional detachment. The third factor had factor loadings ranging from 0.40 to 0.65 and included 11 items related to perceived security, respect, and affection. Only one item did not load on any of the three significant child factors and was, thus, excluded from further analyses.

Internal consistency of the factors was determined by calculating Cronbach coefficient alphas. The following estimates were obtained: 0.79, 0.79, and 0.70 for the three factors on the primary caregiver scale, 0.84, 0.81, and 0.72 for the three factors on the significant adult scale, and 0.89, 0.82, and 0.79 for the three factors on the significant child scale, respectively. Coefficient alphas for individual items ranged from 0.64 to 0.89. Due to the high internal consistency across items within factors, no other items were deleted. Correlation analyses revealed high intercorrelations--correlations with associated p -values of less than .005--among the nine different factors on the three CISR scales (see Table 4), suggesting a lack of independence among factors and providing further support for the finding of high internal consistency among items on the CISR. Due to this high degree of relatedness among factors, individual factors will only be used in the following correlation analyses but not in subsequent statistical analyses.

Exploratory correlation analyses were performed to assess the relationship between the nine CISR factors and the measures of socioemotional functioning (see Tables 5, 6, and 7). All factors on the primary caregiver scale were found to correlate significantly and negatively with depression, loneliness, and social anxiety, while some individual variation in the magnitude of correlations was noted on other adjustment measures. For peer aggression ratings, only Factor 1

(Affect) was significantly and negatively related to aggression. Factor 2 (Support) was the only factor significantly and positively associated with social preference by peers. Both Affect and Support were significantly and positively related to children's self-esteem. Again, all factors on the significant adult scale correlated significantly and negatively with depression and loneliness. However, only Factors 2 (Affect) and 3 (Support) correlated significantly and negatively with social anxiety. Factors 1 (Security) and 3 (Support) correlated significantly and positively with social preference ratings, as well as with self-esteem. On the significant child scale, significant negative correlations were found between all factors and depression and social anxiety, between Factors 1 (Support) and 2 (Affect) and loneliness, and between Factor 1 (Support) and peer aggression ratings. As on the primary caregiver scale, Support and Affect were significantly and positively related to self-esteem.

Identification of Significant Others

Children identified a fairly broad range of individuals as their significant others. The majority of children identified their mother as their primary caregiver; however, children also identified their grandmother, father, grandfather, aunt, and brother as primary caregivers (see Table 8 for exact percentages). The significant adult category generated the broadest array of individuals with father being the most frequently identified significant adult, followed by grandmother, mother, aunt, grandfather, teacher/mentor, uncle, sibling, cousin, and neighbor. Furthermore, in approximately half of the cases in which mother was identified as the primary caregiver, father was identified as the significant adult. In the significant child category, friend was the most frequently identified individual, followed closely by sibling and cousin.

To test the hypothesis of age differences in the relative salience of relationships with siblings and extrafamilial peers during

preadolescence, the 15 youngest children with siblings were compared to the 15 oldest children with siblings on significant child nominations. No differences in significant child nominations were found between the youngest and the oldest groups of children, $\chi^2 (2, N = 30) = 0.00$, n.s. In both the youngest and the oldest groups, one-third (33.3%) of children selected their sibling, while approximately one-half (46.7%) selected their friend as the significant child.

Some statistically significant racial differences in the particular types of individuals identified as significant others were found. African American children were more likely to identify their grandmother as the primary caregiver (15.4%) than were European American children (3.8%), $\chi^2 (1, N = 131) = 4.45$, $p < .05$, while European American children were more likely to identify a parent (mother or father) as the primary caregiver (96.2% vs. 79.5% for African American children), $\chi^2 (1, N = 131) = 7.45$, $p < .01$. In terms of significant adult nominations, African American children were more likely to identify an aunt (14.1% vs. 1.9% for European American children), $\chi^2 (1, N = 131) = 5.68$, $p < .05$, or a grandmother (30.8% vs. 15.1% for European American children), $\chi^2 (1, N = 131) = 4.21$, $p < .05$. On the other hand, African American children were less likely to identify their father as the significant adult (26.9%) than were European American children (58.5%), $\chi^2 (1, N = 131) = 13.13$, $p < .005$. Furthermore, African American children were more likely to identify an extended family member (grandparent, cousin, aunt, or uncle) as the significant adult (53.3%) than were European American children (25.5%), $\chi^2 (1, N = 126) = 9.65$, $p < .005$. In terms of significant child nominations, African American children were less likely to identify a friend (26.9% vs. 58.5% for European American children), $\chi^2 (1, N = 131) = 13.13$, $p < .005$ and more likely to nominate a sibling (46.2% vs. 28.3% for European American children), $\chi^2 (1, N = 131) = 4.05$, $p < .05$ or a cousin (26.9% vs. 13.2% for European American children), $\chi^2 (1, N = 131)$

= 5.21, $p < .05$). Because significant adult nominations may be related to family composition, African and European American children were compared with respect to their mothers' marital status. A much larger proportion of African American children (57.1%) lived with a single mother than did European American children (10.4%).

Demographic Characteristics

Analysis of variance (ANOVA) procedures revealed no statistically significant differences in CISR total scale scores based on school, grade, gender, race, or parents' marital status. Furthermore, the three CISR scales failed to correlate with the WISC-III Vocabulary subtest score ($M = 9.27$, $SD = 3.82$), the age of the child, the level of mother's and father's education, or the family's social status, as indicated by the Hollingshead (1975) four factor index. The only statistically significant association between a demographic characteristic and a CISR score was a negative correlation between the number of siblings ($M = 1.59$, $SD = 1.10$) and the total score on the significant child scale ($M = 176.91$, $SD = 18.17$), $r = -0.22$, $p < .05$. There was no significant association between the number of siblings and the particular individuals nominated as the significant child. However, there were differences between scores on the significant child scale based on the particular individuals identified, $F(2, 128) = 6.04$, $p < .005$. Post hoc comparisons revealed that children who identified a sibling had lower scores for the perceived quality of this relationship ($M = 170.26$, $SD = 19.00$) than did children who identified a friend ($M = 181.35$, $SD = 18.21$), $t(101) = 4.55$, $p < .001$, or a cousin ($M = 180.79$, $SD = 12.59$), $t(77) = 3.62$, $p < .001$ (two-tailed t tests).

Perceived Quality Across Significant Relationships

Total scores on the three scales of the CISR correlated highly and positively with one another: $r = 0.63$ ($p < .0005$) for the primary caregiver ($M = 178.27$, $SD = 12.68$) and the significant adult scales ($M = 182.19$, $SD = 12.17$); $r = 0.54$ ($p < .0005$) for the significant adult and

the significant child scales ($M = 176.91$, $SD = 18.17$); and $r = 0.45$ ($p < .0005$) for the primary caregiver and the significant child scales.

Correlation Analyses

Correlation analyses were conducted to examine the association of children's perceptions of their significant relationships to indicators of socioemotional functioning. Due to the high internal consistencies within the CISR scales and factors, item scores were summed to yield one total score for each CISR scale and were correlated with indicators of adjustment (see Table 9). Findings are fairly consistent with findings reported earlier on the association of CISR factors and socioemotional adjustment. All three CISR scale scores correlated significantly and negatively with self-reports of depression, loneliness, and social anxiety and significantly and positively with self-esteem. Only the primary caregiver and significant adult scales were significantly and positively related to social preference ratings by peers.

No significant relationships between CISR scales and primary caregiver (CBCL) and teacher (TRF) reports of internalizing and externalizing problems nor between CISR scales and peer ratings of aggression and victimization were found. Thus, correlational analyses between peer ratings, self-reports, and primary caregiver and teacher reports of socioemotional functioning were performed to determine the relationships among these adjustment variables. Correlations between primary caregiver (CBCL) and teacher (TRF) reports of externalizing behavior problems correlated significantly and positively with peer ratings of aggression. However, all correlations but one between primary caregiver and teacher reports of internalizing problems and self-reports of depression, loneliness, and social anxiety were very low (see Table 10).

To further assess the relationship between the CISR scales and the four different sets of adjustment variables, canonical correlations were performed. Non-significant canonical correlation coefficients were

obtained between the set of CISR scales and the sets of externalizing, $r = 0.32$, $F = 1.46$, n.s., internalizing, $r = 0.46$, $F = 1.07$, n.s. and social competence variables, $r = 0.22$, $F = 1.35$, n.s. Due to the very low associations of self- and outsider-reports of internalizing difficulties, a set of self-report internalizing variables was formed and correlated with the set of CISR scales. The first canonical correlation was significant, $r = 0.52$, $F = 3.73$, $p < .0005$, and suggested that children who report negative relations with caregiver and significant adult are more likely to experience depression and loneliness. The second canonical correlation indicated a trend for children who report positive significant child relationships to experience low levels of social anxiety, but this correlation was non-significant, $r = 0.28$, $F = 1.62$, n.s. The canonical correlation between the set of CISR scales and self-esteem was significant, $r = 0.43$, $F = 6.43$, $p < .001$, and suggested that children with positive perceptions of all three significant relationships demonstrate high self-esteem.

Group Differences in Socioemotional Adjustment

To address the hypothesis of group differences in socioemotional adjustment, scores were again summed for each scale. Children whose scores were within the bottom quartile were classified as having low perceived quality of relationships, and children whose scores were within the top quartile were classified as having high perceived quality. One-tailed t -tests were performed to test group differences in the four domains of socioemotional adjustment: externalizing problems, internalizing problems, social competence, and self-esteem (see Tables 11, 12, and 13).

Within the externalizing domain, children with high perceived quality of significant child relations were rated as less aggressive by peers than were children with low perceived quality, $t = -2.24$, $p < .05$. However, no differences in aggression ratings were found for children with high vs. low perceived quality of relations with primary caregiver,

$t = -1.26$, n.s., or significant adult, $t = -1.50$, n.s. Children with high perceived quality of relations with their primary caregiver received lower externalizing behavior problem scores on the CBCL than did children with low perceived quality, $t = -1.75$, $p < .05$. However, no differences in primary caregiver reports of externalizing problems were found for children with high vs. low perceived quality of significant adult, $t = -1.38$, n.s., or significant child relations, $t = -1.13$, n.s. No differences in teacher (TRF) reports of externalizing problems for high vs. low quality groups were found for the primary caregiver, $t = -0.88$, n.s., significant adult, $t = -0.12$, n.s., or significant child relationship, $t = 0.76$, n.s.

Within the internalizing domain, lower levels of depression were self-reported by children with high vs. low perceived quality of significant relations with their primary caregiver, $t = -2.91$, $p < .01$, with a significant adult, $t = -3.00$, $p < .005$, and with a significant child, $t = -2.60$, $p < .01$. Lower levels of social anxiety were self-reported by children with high vs. low perceived quality of primary caregiver relationship, $t = -2.40$, $p < .05$, significant adult relationship, $t = -1.86$, $p < .05$, and significant child relationship, $t = -2.98$, $p < .005$. Lower levels of loneliness were self-reported by children with high vs. low perceived quality of primary caregiver relationship, $t = -2.90$, $p < .005$, and significant adult relationship, $t = -3.58$, $p < .0005$, but not significant child relationship, $t = -1.62$, n.s. No differences were found on CBCL internalizing scores for high vs. low perceived quality of primary caregiver relationship, $t = -0.51$, n.s., significant adult relationship, $t = -1.64$, n.s., or significant child relationship, $t = 0.93$, n.s. Similarly, no differences were found on TRF internalizing scores for children with high vs. low perceived quality of caregiver relationship, $t = 0.29$, n.s., adult relationship, $t = -0.46$, n.s., or child relationship, $t = 0.21$, n.s.

Within the domain of social competence, children with high perceived quality of primary caregiver and significant adult relations received higher peer ratings of social preference, $t = 2.15$, $p < .05$, and $t = 2.10$, $p < .05$, respectively, while children who reported high vs. low perceived quality of significant child relations demonstrated no differences in social preference ratings, $t = 0.60$, n.s. No significant group differences in peer ratings of victimization were found for primary caregiver, $t = -1.33$, n.s., significant adult, $t = -1.33$, n.s., or significant child relationships, $t = -0.75$, n.s.

Higher levels of self-esteem were reported by children with high vs. low perceived quality of relations with primary caregiver, $t = 3.24$, $p < .005$, significant adult, $t = 3.69$, $p < .0005$, and significant child, $t = 2.51$, $p < .01$.

Relationships as Predictors of Adjustment

To address the hypothesis that particular relationships contribute independently to the prediction of socioemotional adjustment, multiple regression analyses were performed. Because the primary caregiver relationship is assumed to be the primary contributor to adjustment, this relationship was entered first in the model followed by the significant adult and significant child relationships. Table 14 provides partial R^2 coefficients for each relationship as it contributes independently to the prediction of adjustment after taking into account the previously entered relationship(s), as well as the total model R^2 coefficients.

Relationships were significant predictors for the following adjustment measures: depression, $F = 3.07$, $p < .05$, loneliness, $F = 2.28$, $p < .10$, and self-esteem, $F = 3.12$, $p < .05$. For depression and loneliness, the primary caregiver relationship emerged as the most significant predictor, explaining 11% and 8% of the variance in depression and loneliness, respectively. For self-esteem, the significant adult and significant child relationships emerged as

significant predictors, explaining 6% of the variance each. The remaining measures of adjustment were not predicted by relationships.

CHAPTER IV
DISCUSSION

The Children's Inventory of Significant Relationships (CISR) appears to be a useful research tool for the study of children's perceptions of interpersonal relationships with significant others. In this study, the CISR demonstrated adequate internal consistency, split-half reliability, and test-retest reliability. The case example of one subject's decrease in the perceived quality of relations following a move points to the CISR's sensitivity to real changes in perceptions of significant relationships. While the specifics surrounding this case are unknown, it is speculated that this move constituted a significant event which damaged the child's positive perceptions of his attachment relationships (Vaughn, Egeland, Waters, & Sroufe, 1979).

Exploratory factor analyses revealed three factors for each of the three CISR scales: affect, support, and security. While some individual variation in the particular items which loaded on these factors was noted across the CISR scales, there was a great deal of similarity in the factor structure across the three significant others. In addition, a high degree of relatedness among the nine factors was observed, suggesting that the various behavioral and affective/cognitive dimensions of attachment relationships are strongly related both within and across relationships.

Although the interdependence of factors suggests that the CISR scales be considered unidimensional, exploratory factor analyses were conducted to assess the association between the factors and indicators of socioemotional adjustment. While significant and negative correlations were found between all but two factors and the internalizing problems of depression, loneliness, and social anxiety,

correlations between factors and other adjustment measures suggested some individual variation in these relationships. The only factors which were significantly and negatively related to peer aggression ratings were affect in the primary caregiver relationship and support in the significant child relationship. Support within the primary caregiver and support and security within the significant adult relationship were the only factors which were significantly and positively related to social preference. Finally, affect and support within the primary caregiver relationship and security and support within the significant child relationship were significantly and positively related to children's self-esteem. These exploratory analyses suggest, that while there appears to be a high degree of interrelatedness among different aspects of different attachment relationships, there also appears to be some variation in the association of these different aspects of the internal working model to particular indicators of socioemotional adjustment. It is possible that very specific factors within particular attachment relationships are the primary predictors of psychological outcome. This remains to be explored in future research following the validation of the factor structures obtained in this study and utilizing a longitudinal design with a larger sample.

Consistent with predictions, children identified a broad range of individuals on all three scales of the CISR. Consistent with previous findings that mother was most likely to be ranked as the most significant family member (Hendry, Roberts, Glendinning, & Coleman, 1992), mother was the most frequent nomination for primary caregiver. However, both grandmother and father represented a sizable minority of primary caregivers, supporting the view that there are individual differences in family structure. Consistent with the assumption that preadolescents rely on both intra- and extrafamilial relations for support, children identified immediate family members, other relatives,

neighborhood friends, school friends, and teachers as significant others on the significant adult and significant child scales of the CISR. Interestingly, close to half of the significant child nominations were of siblings and close to half were of friends, supporting the view that preadolescence is a time of transition from intra- to extrafamilial relations and a time when sibling relations and friendships are equivalent and important sources of peer support and companionship (Furman & Buhrmester, 1992).

However, results failed to confirm the hypotheses of age differences in significant child nominations within this sample. Rather, the youngest and oldest children in the sample demonstrated equivalent numbers of sibling and friend nominations. This may be a result of the restricted age range of subjects within this sample. It is possible that all children between the ages of 8 and 12 are "in transition" with respect to the relative salience of relationships with siblings vs. peers. Thus, it would be necessary to assess significant child nominations before and after this developmental period to explore changes in the significance of relationships with other children.

In addition, as with any other developmental phenomena, there may be individual variation in the relative salience of different child relationships, which is related to child characteristics such as maturation and social skills; to family characteristics such as family structure, presence of siblings in the home, and parental encouragement of extrafamilial relations; and to cultural factors such as reliance on the extended family. In fact, the results of this study suggest racial differences. African American children were more likely to identify a sibling or a cousin as the significant child, while European American children were more likely to identify a friend. Furthermore, African American children were more likely to identify an extended family member as their primary caregiver and as the significant adult, while European American children were more likely to identify a parent. These racial

differences are attributed in part to the relative strength of sibling ties and the importance placed on contact and support with relatives beyond the nuclear family by African American families and the opposing tendency of European American families to value extrafamilial friendships and to exist as units separate from the extended family (Aschenbrenner, 1978). The racial difference in significant adult nominations may also be attributed in part to differences in family composition in this sample. African American children were much more likely than European American children to live in single-parent homes in which their father was absent. This is consistent with the finding that 56% of African American families were headed by women in 1990 (Hacker, 1992). Thus, African American children may have less contact with their fathers and may not perceive their relationships with their fathers as highly significant. These findings of racial differences underscore the need to explore racial and cultural differences in family structure and in children's networks of relationships. In addition, future research may contribute to the understanding of the developmental progression in the relative salience of relationships with other children by extending the age range of subjects, by utilizing a longitudinal design following children from early childhood to adolescence, and by considering the influence of other factors such as child and family characteristics.

The three scales of the CISR correlated highly and positively with one another, confirming the hypothesis that children perceive fairly comparable levels of quality of relationship across significant others. This consistency in internal working models across relationships in preadolescence is congruent with the finding of consistency in attachment classifications across parents in infancy (Fox, Kimmerly, & Shafer, 1991) and consistency in levels of self-reported satisfaction/dissatisfaction with relationships with parents and peers in adolescence (Hojat, Borenstein, & Shapurian, 1990). In addition, it supports Rutter's (1988) hypothesis of contemporaneous relationship effects--that

the presence of even one positive relationship increases the likelihood of other contemporaneous positive relationships.

Consistent with research hypotheses, correlation analyses revealed an association between perceived quality of significant relationships and some indicators of socioemotional adjustment. The association between relationship quality and adjustment was strongest for self-reports of internalizing problems and of self-esteem and weakest for primary caregiver and teacher reports of internalizing and externalizing problems and peer reports of victimization, suggesting that perceived quality of attachment relationships in preadolescence may involve greater consequences for internal feeling states, attitudes, and beliefs than for the overt behavior problems and behaviors with peers which have been tied to attachment history in early childhood.

Comparisons of preadolescent children who self-reported high perceived quality of significant relationships with children who reported low perceived quality revealed some differences on indicators of socioemotional functioning, partially confirming the hypothesis that children with high perceived quality would demonstrate better socioemotional adjustment than children with low perceived quality of significant relationships. Significant differences were found between the high and low quality groups across the three significant relationships on self-reports of depression, social anxiety, and self-esteem, with children with high perceived quality reporting lower levels of depression and social anxiety and higher levels of self-esteem. Significant group differences were also found on loneliness and social preference, but only for the primary caregiver and significant adult relationships; children with high quality of caregiver and significant adult relationships self-reported lower levels of loneliness and received higher ratings of social preference by peers. In addition, children with high perceived quality of primary caregiver relationship received lower CBCL externalizing scores, suggesting that when children

perceive their relations with their caregivers as positive, their caregivers are less likely to note aggressive and delinquent behavior on the part of the child than when children perceive those relations as negative. Furthermore, children with high quality of significant child relationships received lower ratings of aggression than children with low quality of relationships, suggesting that children who perceive their relations with other children as being positive are less likely to be rated as aggressive in their interactions with other children. No other group differences were found on the CBCL, the TRF, or peer victimization ratings.

These results with preadolescents corroborate previous findings of an association between security of attachment relationships in infancy and social competence in later childhood (Elicker et al., 1992), and between adolescent reports of attachment to parents and peers and depression and separation anxiety (Armsden et al., 1990), as well as to self-esteem (Greenberg et al., 1983).

The lack of an association between CISR scales and victimization is not surprising given the exploratory nature of this peer sociometric classification. Preliminary analyses using the peer victimization score have also failed to support the hypothesized relationship between peer victimization and hyperactivating strategies (strategies consistent with a resistant attachment classification) in middle childhood (Hodges, Finnegan, & Perry, 1994).

The lack of an association between perceived relationship quality and primary caregiver and teacher reports of internalizing problems and teacher reports of externalizing behavior problems is somewhat surprising, however. Correlational analyses suggest that primary caregiver and teacher reports of internalizing problems do not correlate with children's self-reports of internalizing symptoms. This may be due to a lack of sensitivity on the part of others to more internal forms of psychological distress and/or due to differences in the measurement

instruments: the CBCL and the TRF assess behaviors which suggest internalizing symptomatology, while the child measures assess affective and cognitive components in addition to behavioral components of internalizing problems. The failure to find group differences in TRF externalizing scores and aggression ratings is a little more puzzling. As mentioned earlier, it is suggested that children's perceived quality of relationships in preadolescence may be more closely tied to their internal affective and cognitive experiences than to their overt behaviors. This is consistent with the assumption that children's internal working models are better indicators of their attachment relationships at this stage of development than their attachment behaviors, which serve as the primary focus of assessment in early childhood (Ainsworth, 1989). An alternative explanation for the greater magnitude of associations between perceived relationship quality and these particular measures is the presence of a self-report bias, i.e. the tendency of children to respond to questionnaires in a similar fashion, either in accordance with a current mood state or a particular personality style.

Based on the results of the factor analyses, correlation analyses, and t -tests, one would predict that relationships would serve as significant independent predictors of socioemotional functioning. A few adjustment measures--depression, loneliness, and self-esteem--were predicted by particular relationships. Consistent with the hypothesis that the caregiver relationship would function as the primary predictor of adjustment in preadolescence, the primary caregiver relationship explained the largest amount of variance in depression and loneliness. Consistent with assumptions that other relationships are becoming important predictors of adjustment in preadolescence, the significant adult and significant child relationships served as equivalent and independent contributors to the prediction of self-esteem. However, a limited amount of variance in adjustment measures was accounted for by

relationships, suggesting that there is a large amount of shared variance between the CISR and the adjustment measures. Thus, it is recommended that future research include instruments for the assessment of adjustment which are not tapping into the same affective/cognitive dimensions as the CISR in addition to or as a substitute for the self-report measures used in this study. For example, objective and projective personality tests might be used as indicators of psychological adjustment.

Several other suggestions are provided for future research using the CISR. Due to the high internal consistency and apparent unidimensionality of all three scales of the CISR, a condensed version, in which similar items are deleted, may be employed in future research. Also, items related to acceptance, devotion, interest, and compatibility may be added (e.g., "This person understands me," "This person has time for me," "This person is interested in what I do," and "This person and I get along well with each other"). The three deleted items may be replaced by the following items: "When I feel lonely, this person makes me feel like I belong," "When I am sad, this person makes me feel better," and "When I am scared, this person makes me feel safe." To determine whether children are responding in a socially desirable way to these relatively face valid items, additional items may be designed to assess social desirability, or a lie scale may be included.

Because the quality of relations with the significant child differed depending on the nomination, with sibling relations characterized as more negative than peer relations or relations with a cousin, future researchers may wish to include two significant child scales, one for a sibling and one for another peer. In addition to asking children to identify significant relationships, they may also be asked to rank these relationships in order of significance and to identify why each particular relationship is significant, providing useful information about the characteristics and qualities children

value in their significant relationships. It may be useful to determine whether egalitarian relationships, as may be the case in peer relations, or more asymmetrical relationships, as may be the case in parent-child relations, are more significant during preadolescence.

In addition, it is suggested that research be conducted with a broader age-span of subjects; pilot testing indicated that the CISR may be used with third to eighth graders. It is possible that the CISR be extended to research with adolescents and even adults. Finally, it is recommended that longitudinal research be conducted with the CISR to assess the consistency in the significance attached to particular relationships, as well as the consistency in the perceived quality of those relationships. In addition to examining developmental differences in responding to the CISR, researchers are encouraged to look at the impact of normative and nonnormative life events on children's perceptions of significant relationships.

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APPENDIX A
ETHICAL CONSIDERATIONS

This research was subject to the approval of the Human Subjects Review Committee at the University of North Carolina at Greensboro. To safeguard the rights of participants, the following procedures were adopted. 1) Confidentiality: All data were identified by number only with a master list of names and numbers available only to the principal researchers. 2) Informed consent: All participants were fully informed about the procedure prior to their participation. Parents were asked to give written consent for themselves and for their children after reading a letter describing the study. Children were asked to give written consent after they were orally informed of their participant rights. 3) Freedom to decline: All participants were informed that they were free to stop participating at any time for any reason. 4) Physical or emotional effects: This study involved minimal risk of physical or emotional harm. No participant became visibly upset during the procedure or revealed information suggesting serious emotional disturbance.

APPENDIX B
CONSENT FORMS

College of Arts and Sciences

THE
UNIVERSITY
OF
NORTH
CAROLINA
AT
GREENSBORO

Department of Psychology

296 Edman Building, UNCG
Greensboro, NC 27412-5001
(919) 334-5013

Dear Parent:

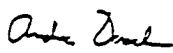
We are doctoral graduate students at the University of North Carolina at Greensboro (UNCG). We are presently working on a research project, and I would like to ask if you and your child would help us in this study.

The focus of this study is to better understand how children get along with other kids. Your child would be asked to do several things. S/he would play a game with another child who they do not know. Your child would also be asked to discuss a topic on which they do not share the same opinion as another child. In addition, s/he would be asked to complete several questionnaires. The questionnaires would ask your child his/her opinion about the child with whom they are playing, as well as ask about their relationship with their parents and their life experiences. All information given by your child will be strictly confidential, and it is being used solely for research purposes. You would be asked to complete several questionnaires about your child. You and your child may cease participating in this study at any time, and your child will be informed of this at the beginning of the study.

It will take approximately 3 hours to complete this study. Because we are asking pairs of children to participate, it is necessary that this occur at the UNCG psychology department. We would appreciate you bringing your child to campus at a convenient time, and you will be paid \$5.00 for your time. Transportation can also be provided by UNCG psychology graduate students. Your child will be given toys and McDonalds coupons for his/her time. Your child's participation in this study is voluntary, and I would appreciate your consideration of this matter. We would be glad to answer any questions you may have, and meet with you beforehand if you like.


Thank you for your consideration of this matter.

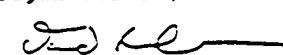
Sincerely,


Andrea Dorsch, MA


Logan Gordon, MA


Don Klumb, MA


Susan P. Keane, PhD
Faculty advisor


David Rabiner, PhD
Faculty advisor

SCRIPTED ASSURANCE OF PARTICIPANT RIGHTS (CHILD)

Before we start, I just want to let you know that if you have any questions at any time, please ask. I want you to know that you are really helping us by being in this study, but that you do not have to be in this study. If you feel uncomfortable at any time or would like to stop for any reason, please let me know. Do you understand that?

The other thing that I need to let you know is that whatever you say to me today is confidential. That means that it is between you and me. I won't tell your answers to anyone in your family or at your school. Do you have any questions?

APPENDIX C
DEMOGRAPHIC INFORMATION SHEET

Child's Age:

Child's Date of Birth:

Child's Sex:

Child's Ethnic Group or Race:

Child's School:

Child's Grade in School Year 92/93:

Number of Child's Siblings:

Age and Sex of Child's Siblings:

Mother's Age:

Mother's Type of Work:

Mother's Highest Level of Education:

Father's Age:

Father's Type of Work:

Father's Highest Level of Education:

Who lives in your home?

If include husband/boyfriend,
Is he the child's natural father?

Yes No

Are you the birth mother of child?

Yes No

Marital Status of Mother (circle one):

Never Married Married Separated Divorced Widowed

Family Income (circle one):

0	- 4,999	15,000 - 19,999	30,000 - 39,999
5,000	- 9,999	20,000 - 24,999	40,000 - 49,000
10,000	- 14,999	25,000 - 29,999	50,000 +

APPENDIX D
MEASURES

SOCIOMETRIC QUESTIONNAIRE

1. Who are the three people in your grade that you like the most?

2. Who are the three people in your grade that you like the least?

3. Who are the three people in your grade that start fights?

4. Who are the three people in your grade that get picked on and teased a lot?

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pages 52-67

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APPENDIX E
TABLES

TABLE 1

Factor Loadings of Items on the Primary Caregiver Scale

Factor 1 = Affect

4. This person feels sad when they are with me.	0.63
7. I get so scared when I'm with this person, I feel like my body shakes all over.	0.38
11. I trust this person.	0.67
13. This person feels uncomfortable when they are with me.	0.70
16. I feel scared when I am with this person.	0.50
18. I get so angry with this person, I feel like I might lose control over my behavior.	0.41
21. I hurt this person's feelings.	0.36
22. I feel sad when I am with this person.	0.55
25. This person says things like "I hate you" to me.	0.43
28. I hit or hurt this person.	0.70
29. I ignore this person.	0.65
30. This person feels lonely when they are with me.	0.46
34. I say things like "I hate you" to this person.	0.68
38. I feel uncomfortable when I am with this person.	0.65

Factor 2 = Support

1. I help this person when they have a problem.	0.66
2. This person allows me privacy.	0.32
6. I help this person when they are upset.	0.72
8. I help this person when I know they need it.	0.69
10. This person helps me when I am upset.	0.59
12. I feel happy when I am with this person.	0.41
14. I care about this person.	0.44
15. This person pays attention to me.	0.48
17. This person helps me when I need it.	0.64
19. This person feels happy when they are with me.	0.37
20. This person accepts me the way I am.	0.53
32. This person lets me make some of my own choices.	0.46
39. This person helps me when I have a problem.	0.70

Factor 3 = Security

5. I get so uncomfortable around this person that I feel like running away.	0.46
9. I feel lonely when I am with this person.	0.60
23. This person treats me like a baby.	0.55
24. I feel angry when I am with this person.	0.45
26. This person hits me or hurts me.	0.71
27. This person hurts my feelings.	0.60
31. I accept this person the way they are.	0.43
33. This person feels angry when they are with me.	0.76
35. I get so sad when I am with this person, I feel like I might start crying.	0.71
37. This person feels scared when they are with me.	0.64

TABLE 2

Factor Loadings of Items on the Significant Adult Scale

Factor 1 = Security

3. This person cares about me.	0.59
11. I trust this person.	0.54
12. I feel happy when I am with this person.	0.64
14. I care about this person.	0.83
19. This person feels happy when they are with me.	0.49
20. This person accepts me the way I am.	0.55
24. I feel angry when I am with this person.	0.45
25. This person says things like "I hate you" to me.	0.69
26. This person hits me or hurts me.	0.67
27. This person hurts my feelings.	0.47
28. I hit or hurt this person.	0.68
29. I ignore this person.	0.51
31. I accept this person the way they are.	0.47
34. I say things like "I hate you" to this person.	0.64
36. This person trusts me.	

Factor 2 = Affect

4. This person feels sad when they are with me.	0.49
5. I get so uncomfortable around this person that I feel like running away.	0.49
7. I get so scared when I'm with this person, I feel like my body shakes all over.	0.50
9. I feel lonely when I am with this person.	0.46
13. This person feels uncomfortable when they are with me.	0.39
16. I feel scared when I am with this person.	0.71
18. I get so angry with this person, I feel like I might lose control over my behavior.	0.42
21. I hurt this person's feelings.	0.60
22. I feel sad when I am with this person.	0.67
23. This person treats me like a baby.	0.37
30. This person feels lonely when they are with me.	0.40
35. I get so sad when I am with this person, I feel like I might start crying.	0.82
37. This person feels scared when they are with me.	0.78
38. I feel uncomfortable when I am with this person.	0.58

Factor 3 = Support

1. I help this person when they have a problem.	0.76
2. This person allows me privacy.	0.33
6. I help this person when they are upset.	0.77
8. I help this person when I know they need it.	0.84
10. This person helps me when I am upset.	0.85
15. This person pays attention to me.	0.43
17. This person helps me when I need it.	0.81
32. This person lets me make some of my own choices.	0.35
39. This person helps me when I have a problem.	0.81

TABLE 3

Factor Loadings of Items on the Significant Child Scale

Factor 1 = Support

1. I help this person when they have a problem.	0.67
2. This person allows me privacy.	0.40
6. I help this person when they are upset.	0.81
8. I help this person when I know they need it.	0.64
10. This person helps me when I am upset.	0.77
11. I trust this person.	0.48
15. This person pays attention to me.	0.55
17. This person helps me when I need it.	0.86
19. This person feels happy when they are with me.	0.43
21. I hurt this person's feelings.	0.68
26. This person hits me or hurts me.	0.33
34. I say things like "I hate you" to this person.	0.60
39. This person helps me when I have a problem.	0.73

Factor 2 = Affect

5. I get so uncomfortable around this person that I feel like running away.	0.45
7. I get so scared when I'm with this person, I feel like my body shakes all over.	0.71
9. I feel lonely when I am with this person.	0.54
18. I get so angry with this person, I feel like I might lose control over my behavior.	0.45
22. I feel sad when I am with this person.	0.71
24. I feel angry when I am with this person.	0.47
27. This person hurts my feelings.	0.66
28. I hit or hurt this person.	0.63
29. I ignore this person.	0.40
31. I accept this person the way they are.	0.59
33. This person feels angry when they are with me.	0.56
35. I get so sad when I am with this person, I feel like I might start crying.	0.89
37. This person feels scared when they are with me.	0.85
38. I feel uncomfortable when I am with this person.	0.75

Factor 3 = Security

3. This person cares about me.	0.48
4. This person feels sad when they are with me.	0.56
12. I feel happy when I am with this person.	0.49
13. This person feels uncomfortable when they are with me.	0.62
14. I care about this person.	0.48
16. I feel scared when I am with this person.	0.65
20. This person accepts me the way I am.	0.58
23. This person treats me like a baby.	0.45
25. This person says things like "I hate you" to me.	0.42
30. This person feels lonely when they are with me.	0.57
36. This person trusts me.	0.40

TABLE 4

Intercorrelations Among Primary Caregiver, Significant Adult, and Significant Child Factors

	PCF1	PCF2	PCF3	SAF1	SAF2	SAF3	SCF1	SCF2	SCF3
PCF1		0.72	0.52	0.51	0.50	0.47	0.41	0.40	0.34
PCF2			0.58	0.56	0.53	0.65	0.48	0.38	0.37
PCF3				0.45	0.50	0.35	0.30	0.28	0.28
SAF1					0.77	0.70	0.44	0.36	0.44
SAF2						0.69	0.49	0.47	0.48
SAF3							0.55	0.44	0.45
SCF1								0.79	0.85
SCF2									0.83
SCF3									

Note. All correlations are significant at $p < .005$.

TABLE 5

Correlations Between Primary Caregiver Factors and Indicators of
Socioemotional Adjustment

	Factor 1: Affect	Factor 2: Support	Factor 3: Security
Externalizing			
Aggression	-0.18 *	-0.14	0.00
CBCL externalizing	-0.12	-0.14	-0.08
TRF externalizing	-0.10	-0.19	-0.10
Internalizing			
Depression	-0.30 ****	-0.29 ****	-0.28 ***
Loneliness	-0.33 ***	-0.35 ****	-0.28 **
Social Anxiety	-0.24 *	-0.25 *	-0.27 *
CBCL internalizing	-0.03	-0.01	-0.09
TRF internalizing	0.09	-0.05	-0.06
Social competence			
Social preference	0.09	0.22 *	0.07
Victimization	-0.08	-0.12	-0.13
Self-esteem			
Perceived competence	0.34 ***	0.31 ***	0.19

* $p < .05$

** $p < .01$

*** $p < .005$

**** $p < .001$

TABLE 6

Correlations Between Significant Adult Factors and Indicators of
Socioemotional Adjustment

	Factor 1: Security	Factor 2: Affect	Factor 3: Support
Externalizing			
Aggression	-0.12	-0.08	-0.11
CBCL externalizing	-0.17	-0.02	-0.10
TRF externalizing	-0.08	-0.01	-0.10
Internalizing			
Depression	-0.25 ****	-0.22 *	-0.32 ****
Loneliness	-0.30 ***	-0.32 ***	-0.37 ****
Social Anxiety	-0.15	-0.29 **	-0.22 *
CBCL internalizing	-0.08	-0.05	-0.15
TRF internalizing	-0.09	-0.10	-0.07
Social competence			
Social preference	0.17 *	0.09	0.20 *
Victimization	-0.03	-0.02	-0.03
Self-esteem			
Perceived competence	0.30 ***	0.20	0.37 ****

* $p < .05$

** $p < .01$

*** $p < .005$

**** $p < .001$

TABLE 7

Correlations Between Significant Child Factors and Indicators of
Socioemotional Adjustment

	Factor 1: Support	Factor 2: Affect	Factor 3: Security
Externalizing			
Aggression	-0.18 *	-0.09	-0.11
CBCL externalizing	0.08	0.16	0.01
TRF externalizing	0.03	0.17	0.05
Internalizing			
Depression	-0.24 **	-0.19 *	-0.21 *
Loneliness	-0.26 *	-0.23 *	-0.21
Social Anxiety	-0.33 ***	-0.34 ***	-0.28 **
CBCL internalizing	0.05	0.11	0.05
TRF internalizing	-0.03	0.14	0.03
Social competence			
Social preference	0.06	0.01	0.04
Victimization	-0.03	-0.04	-0.07
Self-esteem			
Perceived competence	0.29 **	0.22 *	0.19

* $p < .05$

** $p < .01$

*** $p < .005$

**** $p < .001$

TABLE 8

Individuals Identified as Significant Others by Race

Significant other	Percentages		
	Overall	African American	European American
Primary caregiver			
Mother	77.1	71.8	84.9
Grandmother	10.7	15.4	3.8 *
Father	9.2	7.7	11.3
Grandfather	1.5	2.6	0.0
Aunt	0.8	1.3	0.0
Sibling	0.8	1.3	0.0
Significant adult			
Father	39.7	26.9	58.5 **
Grandmother	24.4	30.8	15.1 *
Mother	13.7	15.4	11.3 *
Aunt	9.2	14.1	1.9
Grandfather	3.8	2.6	5.7
Teacher	3.1	2.6	3.8
Uncle	2.3	2.6	1.9
Sibling	2.3	2.6	1.9
Cousin	0.8	1.3	0.0
Neighbor	0.8	1.3	0.0
Significant child			
Friend	39.7	26.9	58.5 **
Sibling	38.9	46.2	28.3 *
Cousin	21.4	26.9	13.2 *

* Percentages are different for racial groups at $p < .05$.

** Percentages are different for racial groups at $p < .005$.

TABLE 9

Correlations Between CISR Scale Scores and Indicators of
Socioemotional Adjustment

	Primary caregiver	Significant adult	Significant child
Externalizing			
Aggression	-0.13	-0.15	-0.16
CBCL externalizing	-0.15	-0.14	0.06
TRF externalizing	-0.16	-0.12	0.03
Internalizing			
Depression	-0.36 ****	-0.35 ****	-0.28 ***
Loneliness	-0.38 ****	-0.39 ****	-0.25 *
Social Anxiety	-0.31 ***	-0.27 *	-0.36 ****
CBCL internalizing	-0.06	-0.12	0.05
TRF internalizing	-0.01	-0.12	0.04
Social competence			
Social preference	0.17 *	0.21 *	0.08
Victimization	-0.13	-0.04	-0.03
Self-esteem			
Perceived competence	0.33 ***	0.39 ****	0.29 **

* $p < .05$

** $p < .01$

*** $p < .005$

**** $p < .001$

TABLE 10

Intercorrelations among Measures of Internalizing and Externalizing
Behavior Problems

	Depression	Loneliness	Social Anxiety	Aggression
CBCL internalizing	.07	.05	.10	---
TRF internalizing	.16	.26*	.09	---
CBCL externalizing	---	---	---	.31**
TRF externalizing	---	---	---	.59***

* $p < .05$

** $p < .005$

*** $p < .0005$

TABLE 11

Mean Scores on Measures of Socioemotional Adjustment for Children with Low and High Perceived Quality of Relationship with Primary Caregiver

Measures of socioemotional adjustment	Perceived relationship quality	
	Low	High
Externalizing		
Peer aggression ratings	0.71 (1.23)	0.37 (1.12)
CBCL externalizing problems	54.27 (8.87)	49.97 (10.20) *
TRF externalizing problems	58.67 (11.80)	55.67 (13.76)
Internalizing		
Depression	8.80 (7.33)	4.29 (5.90) **
Loneliness	34.08 (10.92)	25.39 (10.70) ***
Social Anxiety	9.15 (3.41)	6.60 (4.16) *
CBCL internalizing problems	50.80 (11.06)	49.36 (11.17)
TRF internalizing problems	52.96 (11.40)	53.77 (9.86)
Social competence		
Peer social preference ratings	-0.30 (0.97)	0.24 (1.13) *
Peer victimization ratings	0.38 (1.30)	0.01 (1.09)
Self-esteem		
Perceived competence	105.50 (15.02)	119.65 (16.46) ***

* $p < .05$ ** $p < .01$ *** $p < .005$

Note. Standard deviations are in parentheses.

TABLE 12

Mean Scores on Measures of Socioemotional Adjustment for Children with Low and High Perceived Quality of Relationship with Significant Adult

Measures of socioemotional adjustment	Perceived relationship quality	
	Low	High
Externalizing		
Peer aggression ratings	0.57 (1.26)	0.17 (1.04)
CBCL externalizing problems	54.41 (8.82)	51.12 (9.41)
TRF externalizing problems	55.85 (12.21)	55.43 (13.14)
Internalizing		
Depression	8.14 (6.37)	4.03 (5.45) ***
Loneliness	34.56 (9.97)	24.04 (10.60) ****
Social Anxiety	9.04 (3.61)	6.91 (4.26) *
CBCL internalizing problems	52.85 (9.33)	48.68 (10.29)
TRF internalizing problems	52.69 (11.78)	51.37 (9.79)
Social competence		
Peer social preference ratings	-0.35 (1.07)	0.22 (1.25) *
Peer victimization ratings	0.33 (1.52)	-0.07 (0.94)
Self-esteem		
Perceived competence	105.12 (14.02)	120.92 (15.90) ****

* $p < .05$ ** $p < .01$ *** $p < .005$ **** $p < .0001$

Note. Standard deviations are in parentheses.

TABLE 13

Mean Scores on Measures of Socioemotional Adjustment for Children with
Low and High Perceived Quality of Relationship with Significant Child

Measures of socioemotional adjustment	Perceived relationship quality	
	Low	High
Externalizing		
Peer aggression ratings	0.78 (1.30)	0.15 (1.02) *
CBCL externalizing problems	50.33 (9.08)	53.03 (9.51)
TRF externalizing problems	54.38 (11.23)	56.77 (11.99)
Internalizing		
Depression	8.11 (6.38)	4.76 (4.31) **
Loneliness	33.44 (11.20)	27.75 (12.26)
Social Anxiety	9.62 (3.59)	6.28 (3.75) ***
CBCL internalizing problems	49.63 (12.89)	52.39 (10.25)
TRF internalizing problems	50.03 (11.63)	50.69 (11.12)
Social competence		
Peer social preference ratings	-0.19 (0.99)	-0.03 (1.17)
Peer victimization ratings	0.14 (0.76)	0.00 (0.84)
Self-esteem		
Perceived competence	106.15 (14.99)	117.60 (15.75) **

* $p < .05$

** $p < .01$

*** $p < .005$

Note. Standard deviations are in parentheses.

TABLE 14

Regression Estimates for CISR Scales and Indicators of Socioemotional Adjustment

	Partial R ²			Model R ²
	Primary caregiver	Significant adult	Significant child	
Aggression	.0000	.0336	.0167	.0503
CBCL externalizing	.0315	.0211	.0235	.0761
TRF externalizing	.0199	.0138	.0163	.0500
Depression	.1073	.0355	.0130	.1558
Loneliness	.0759	.0379	.0067	.1205
Social anxiety	.0362	.0019	.0246	.0627
CBCL internalizing	.0004	.0106	.0156	.0266
TRF internalizing	.0000	.0431	.0083	.0514
Social preference	.0196	.0740	.0058	.0994
Victimization	.0234	.0101	.0069	.0404
Self-esteem	.0371	.0588	.0617	.1576