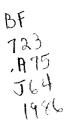THESIS

THE RELATIONSHIP OF EGO-RESILIENCY TO

A REPRESENTATIONAL MEASURE OF ATTACHMENT

Submitted by

Laurel Johnson
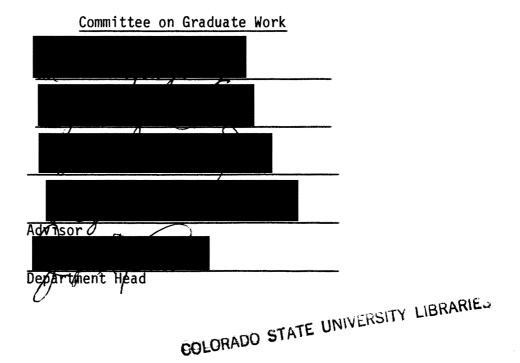
Department of Human Development

and Family Studies

COLORADO STATE UNIVERSITY

September 22, 1986

WE HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER OUR

SUPERVISION BY_____LAUREL JOHNSON_____ ENTITLED

___THE RELATIONSHIP OF EGO-RESILIENCY TO A REPRESENTATIONAL___

___MEASURE OF ATTACHMENT___

BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF

___MASTER OF SCIENCE___

Committee on Graduate Work

Advisor

Department Head

ABSTRACT

THE RELATIONSHIP OF EGO-RESILIENCY TO

A REPRESENTATIONAL MEASURE OF ATTACHMENT

Research has shown that a secure attachment in infancy is related

to high ego-resiliency ratings in preschool (Sroufe, 1983). In this

study I asked the question whether a concurrent representational

measure of attachment security was similarly related to preschoolers

ego-resiliency ratings. Toward this end, children's responses to

story beginnings designed to elicit attachment issues were compared to

ego-resiliency ratings by parents. Thirty children ranging in age

from 3.5 to 5.5 years of age, and their parents were recruited from

local preschools. The measure of attachment quality was based on the

degree of parental supportiveness and non-supportiveness enacted by

the children using small family figures. The ego-resiliency scores

were obtained through the California Child Q-Sort (Block, 1978) given

to both parents. It was hypothesized that children who depicted the

story parents in highly supportive roles would have a high ego-

resiliency rating, and that low-supportiveness scores derived from the

story responses would correlate with low ego-resiliency ratings.

Whereas the basic hypothesis of this study was not supported,

some of the results were interesting. The high frequency of

appropriate responses indicated that the story beginnings did elicit

relevant thoughts about attachment issues, although it is not clear whether the story responses reflect children's actual attachment experiences. A gender by age analysis of variance was performed on the story and ego-resiliency scores. Although age effects were not significant, gender effects did reach significance, with girls scoring higher in supportiveness and lower on ego-resiliency than boys. This could be due to idiosyncracies of the sample or the possibility that girls are socialized to respond in a more nurturing and less independent fashion than boys. It is suggested that this study be replicated using a revised version of the story task and with teacher ratings of ego-resiliency.

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ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

The theoretical perspective for this study was derived from John Bowlby's attachment theory (1969, 1973, 1980). Until recently attachment research has focused primarily on infancy and toddlerhood. This study follows Sroufe (1983), Main, Kaplan, and Cassidy (1985), and Marvin (1977) by extending the study of attachment into the preschool years. The method for examining attachment in preschoolers was a story completion task designed to elicit children's reflections on particular attachment issues.

Much of the early work on attachment was prompted by findings reported by Mary Ainsworth and her associates (Ainsworth, Blehar, Waters, & Wall, 1978). This research shows that individual differences in the quality of infant-mother attachment are related to maternal sensitivity to infant signals during the first year of life. Connell (1976), Waters (1978), and Ainsworth et al. (1978) demonstrated that individual differences in infant-parent attachment assessed in a standardized procedure (the Strange Situation) at one year of age remained relatively stable at least up to 18 months.

There is presently a growing interest in extending the study of attachment into the preschool years and beyond. Sroufe (1983) investigated relationships of early attachment to social competence in preschoolers. His research was based on Bowlby's notion that the

quality of infant-mother attachment may affect later personal and interpersonal functioning in children.

In a study of kindergarten children, Main, Kaplan, and Cassidy (1985) demonstrated that attachment can be reliably assessed on the representational rather than the behavioral level. Following Bowlby's work (1969, 1973, 1980), they suggested that individuals form, through their own attachment experiences, an "internal working model" or representation of experiences with their caregivers. The study examined the structure of internal working models in 6-year-olds who had been classified as secure or insecure in infancy using the Ainsworth Strange Situation.

Further research on attachment in preschoolers was conducted by Marvin (1977). He examined how attachment relates to social cognitive development by focusing on three questions. First, can social relationships be defined and understood in terms of the communicative acts that structure those relationships? Second, can changes in the relationship between two or more individuals be described and understood in terms of changes in the communicative skills of the individuals, and in terms of the conceptual structures that underlie those skills? Third, is it possible to specify the equilibrial state that one or both individuals attempt to maintain in a goal-corrected partnership? The term goal-corrected partnership, in this context, refers to a phase of attachment in which the child and primary care-giver can make jointly negotiated plans to meet the child's need for security and safety (Bowlby, 1969). In a subsequent study, Marvin and Greenberg (1982) were able to show that the ability to make a joint

agreement about separation was related to reunion behavior as well as to more advanced social cognitive development.

Research Statement

The present study was conducted to investigate the notion that preschool children are cognitively capable of expressing their own attachment experiences on a representational level. For this purpose, five age-appropriate stories were developed in order to elicit discussion of attachment issues. The children's responses were then correlated with parental ratings of child ego-resiliency.

I hypothesized that children described by their parents (through the California Child Q-Sort) as having a high degree of ego-resiliency would score higher on an indicator of secure attachment derived from the story completion tasks used in this study. Similarly, I predicted that children whose parents described them as having a low ego-resiliency would score lower on secure attachment as assessed from the story completion tasks. This hypothesis was based on Sroufe's (1983) finding that secure attachment in infancy is related to ego-resiliency during the preschool years.

Sroufe (1983) described ego-resilient children as having more self-reliance, curiosity, and flexibility than ego-brittle children. Bowlby (1969, 1973, 1980) and Ainsworth, Blehar, Waters, and Wall (1978) described securely attached children in very similar terms. They propose that the curiosity and self-reliance of secure children stem from experiences with supportive parents who are psychologically available in the face of stress and provide a secure base for exploration.

This investigation will help to extend knowledge on attachment in preschool age children by showing how they respond to story tasks. It holds important practical implication for those interested in education and/or clinical assessment of preschoolers.

CHAPTER II

LITERATURE REVIEW

In the last 20 years researchers have gained extensive understanding concerning the development of infant-parent attachment. However, there has been little research on preschool and school-age children. This review will briefly cover the history of attachment theory, then look at some of the work that extends the attachment construct into the older age range, and lastly discuss the proposed research.

History of Attachment

Attachment theory was developed primarily by John Bowlby (1969, 1973, 1980) out of his desire to explain the harmful psychological effects of hospitalization and institutionalization on young children. The attachment construct is based on ethological and psychoanalytical thinking. It focuses on: a) why separation causes anxiety; b) the similarities of adult and childhood mourning; and c) defensive processes.

Drawing on ethology, Bowlby (1969) suggested that attachment to a specific caregiver protects the helpless young of any species from predators or exposure to the elements. He therefore suggested that infants' biological predisposition to maintain proximity to specific adult caregivers gives them a survival advantage.

Bowlby is very careful to specify that attachment is not just another word for "social bond", or for parent-child interaction in general. In other words, attachment does not include all aspects of parent-child interaction such as play. A child will seek out a specific attachment figure when under stress. If a child feels secure, he or she may seek out a playmate who may or not be the primary caregiver.

Bowlby saw attachment behavior as regulated by a goal-corrected behavioral system designed to maintain or obtain proximity, contact, and/or interaction with an attachment figure. The psychological goal of attachment behavior is to attain or maintain a sense of security.

It is important to clarify at this point the distinction between dependency and attachment. Dependency is seen as a personality trait, which serves no biological function, while attachment behaviors are biological in origin and serve to protect the attached individual from physical and psychological harm. In fact, Bowlby suggests that attachment behavior rivals feeding and mating behavior in terms of its importance for species survival.

According to Bowlby (1969), the relative safety or danger of a situation and an attachment figure's availability and responsiveness are not completely reappraised in each new situation. Through constant interactions with their environment, children form increasingly complex internal working models of the world and of the significant persons in it (Bowlby, 1969, 1973, 1980). These internal working models are what children use to evaluate situations and guide their behavior. An example of this would be when a child's experience has led him or her to construct a working model of the

attachment figure as a person likely to provide support when needed. In this case constant monitoring of the attachment figure's whereabouts may be less necessary as the child knows he or she may rely upon this person.

The conception of internal working model has many similarities to Piaget's (1954) theory of representation. For an internal working model to be of use, a child must constantly assimilate and reorganize incoming information about the environment. As the child's affective cognitive abilities increase the internal working model also grows in complexity and sophistication. Therefore, even though behaviors controlled by the attachment system may change over the course of development, the basic organization of the system remains the same. As cognitive abilities increase, the child becomes better able to assess incoming information from the environment, as well as from the attachment figure. For example, language development allows for improved coping skills, because the child may now form and execute a plan in collaboration with the attachment figure. As a result the older child's attachment behaviors become much more subtle, unless stress is severe.

Although Bowlby states that infants are genetically predisposed toward becoming attached, it is not predetermined to whom they will become attached. Attachment is not present at birth, and learning is a necessary component. The work of Ainsworth & Bell (1969), Bowlby (1969), and Schaffer and Emerson (1964) suggests that the human infant cannot form an attachment before a certain degree of cognitive development has occurred. Likewise, the infant cannot become attached

without experiencing a number of interactions with the attachment figure.

According to Bowlby's (1969) theory, attachment progresses through several phases, beginning with a "pre-attachment" period which occurs during the first four weeks of life. At birth the infants' behaviors include those that promote proximity and/or contact with the mother or primary caregiver. These behaviors fall into two categories: a) attracting the adult, by smiling or crying; b) promoting proximity with the adult, by sucking, grasping, and following with the eyes. Although these behaviors serve to promote proximity to the caregiver, during this phase they are indiscriminately directed to others, so the infant is not yet genuinely attached to one figure.

Phase II or "attachment in the making" refers to the development of focused behaviors toward a specific attachment figure. For example, now a child may cry to gain the attention of a specific person. It has been generally agreed (Ainsworth & Bell, 1969; Bowlby, 1969; Schaffer & Emerson, 1964) that this occurs early during the second half of the first year of life.

Soon after discriminating behavior becomes well established the next phase of "clear-cut" attachment occurs. This takes place as locomotion is achieved by the infant. It is also during this phase that the infant enters Piaget's fourth stage of the development of the object concept and develops the cognitive capacity to conceive of absent objects. At this point the infant can begin to cognitively represent the absent attachment figure. Thus, the infant is now capable of attempting behaviors that include a particular target or

"set goal." For example, an infant can search for the absent mother and can respond to mother's return by active approach, signaling, smiling, or vocalizing. These behaviors alone or in combination, may achieve the set goal of proximity or contact with the attachment figure. The flexibility of the behavioral organization during this phase prompted Bowlby to use control systems notions as a basis for his theory.

The final phase, that of "goal-corrected" partnership begins sometime between 12 to 24 months. Before this phase the coordination of the infant's plans and set goals with the mother's behaviors was primarily a physical matter. With children's growing ability at perspective-taking, they may begin to infer something about mother's intentions. Children now may go beyond accommodation of their own behavior to that of the parents, and may start to initiate attempts to influence parental behavior in very sophisticated ways.

Primary Research on Attachment with Younger Children

Before proceeding to consider studies of attachment in older children, I will briefly review Ainsworth's (Ainsworth & Bell, 1969; Ainsworth et al., 1978) work with infants. Ainsworth's findings have served as a foundation for research with older children.

Ainsworth's best known work on attachment comes from the Baltimore Study (1978). This study, based on monthly observations of mother and infant in the home, documented that maternal sensitivity to the infant's signals during feeding, face-to-face play, physical contact and distress episodes during the first three months were predictive of the quality of the relationship during the fourth

quarter of the first year. Maternal responsiveness to infants' crying during the first quarter correlated with decreased crying later on. By the fourth quarter, infants whose mothers had reacted in a prompt and appropriate manner to their crying early on, cried less. The mother's sensitivity to infant signals during feeding, play, and episodes of close bodily contact during the first three months also showed a relationship to the infant's behavior at 12 months in a naturalistic laboratory setting known as the Strange Situation.

The Strange Situation consists of a standard series of eight episodes. Infants are placed in an unfamiliar playroom and given an opportunity to explore toys, and/or interact with an unfamiliar adult in the presence or absence of the mother. It is interesting that Ainsworth originally designed this situation in order to assess the effect of maternal absence on infant exploration (Ainsworth & Wittig, 1969), but ultimately found the infant's behavior during reunion with the mother to be much more interesting.

Ainsworth, Bell, and Stayton (1971, 1972) were able to determine three patterns of reunion behavior in the Strange Situation. Some infants (group B) behaved as expected. They approached the mother and sought physical contact with her if they had been distressed by the separation, or they greeted her and sought interaction if they had not become distressed. However, another group of infants (group A) avoided the mother upon reunion, and still another group (group C) showed anger and resistant behavior upon the mother's return.

Ainsworth's attention was drawn to the avoidant (group A) and resistant (group C) reunion patterns in the Strange Situation because they were similar to reunion patterns of children who had experienced

longer, traumatic separations (Robertson, 1953). Comparisons of children with different reunion patterns in the Strange Situation showed that each group differed in terms of infant-mother interactions observed in the home during the first year of life, to which I referred earlier.

Analysis of the home observations showed that avoidance of the mother upon her return in the Strange Situation was predictable from the mother's insensitivity to infant signals during the first three months of life, as well as from the mother's expressed verbal and behavioral dislike of physical contact with the infant during the first quarter (Ainsworth et al., 1978). This attitude remained constant over the first year (Main & Weston, 1982).

Main, Tomasini, and Tolan (1979) additionally found that infants who avoided the mother upon her return in the Strange Situation showed unpredictable episodes of aggression towards her at home. These authors also reported that mothers of infants who had been classified as avoidant lacked emotional expression, even in highly emotional (i.e., aggressive) situations with their infants.

From these findings Ainsworth has suggested that avoidant (group A) and resistant (group C) infants have attachments that are not functioning at an optimal level. Although avoidant behavior may reflect the infant's adaptation to the behavior of its primary attachment figure, it may later prevent the infant from developing optimal interactions with other partners.

Research Predicting Later Behavior From Attachment Histories

Sroufe's (1983) work on infant care-giver attachment and patterns of adaptation in the preschool setting is an interesting application of Ainsworth's (1978) findings. Sroufe headed the Minnesota Preschool Project which included a total of 40 children, selected on the basis of their attachment history. The main objective of this study was to trace individual patterns of adaptation of competent and incompetent children over a period of several years. This project allowed an opportunity to document the way in which secure attachment relationships and anxious attachment relationships in infancy are carried forward into the preschool years.

Waters (1978) first showed that stability existed in Ainsworth's attachment patterns from 12 to 18 months. Then Matas, Arend, and Sroufe (1978) showed that 24-month-old toddlers who had been secure in their attachments as infants showed more autonomous functioning than toddlers who were anxiously attached. In a problem solving situation, which was designed to go beyond each child's capacity to cope, toddlers who had been classified as secure in infancy approached the problem situation with more enthusiasm and positive affect. These children were also more persistent, and were more competent and capable in eliciting maternal assistance than the toddlers who were classified as anxiously attached children (A and C) in infancy. In other words, Sroufe was able to distinguish secure from anxiously attached children by their behavioral organization, and the efficient use of the mother when necessary. The above research validates Bowlby's claim that individuation and self-reliance is influenced by the quality of early mother-infant interaction.

Two succeeding studies (Arend, Gove, & Sroufe, 1979; Waters, Wippman, & Sroufe, 1979) demonstrated correlations of attachment at 15 to 18 months with a broad range of measures of preschool and kindergarten children's functioning. These showed that attachment patterns that had developed out of early mother-infant interaction, were related to behaviors when the child was apart from the mother. Children who were securely attached as infants were later described (by teachers and observer Q-sorts) as more socially competent and ego-resilient than children who had been anxiously attached infants. Ego-resiliency refers to such socially desirable characteristics as flexibility, self-reliance, involvement, and assertiveness.

At this point it is important to address a central postulate underlying Sroufe's work, namely that continuity in development takes the form of coherence across transformations. Sroufe suggests that even though prediction of behavior poses many problems, the various patterns of adaptation shown by children who were classified as avoidant in infancy represent meaningful developmental outcomes. Based on these earlier findings Sroufe expected the avoidant children to show some combination of the following patterns: a) hostile and/or antisocial; b) socially and emotionally isolated, withdrawing in the face of stress; and c) Disconnected, psychotic-like. Sroufe suggested that these patterns follow from a defensive posture developed within a relationship with a rejecting, emotionally unavailable caregiver. On the other hand, he expected resistant children to show one of the following two patterns: a) impulsive, overtly anxious or tense, easily over-stimulated and low frustration tolerance; b) passive, weak, infantile, adult oriented,

and fragile. Sroufe hypothesized that these patterns were the product
of over-involved or ambivalent and/or inconsistent relationships.

It is important to remember that Sroufe's predictions were based
on assessments of attachment using Ainsworth's Strange Situation at 12
and 18 months. From these observed differences of the manner in which
the infants dealt with stress of brief separation in the laboratory,
marked differences in adaptation were predicted three years later.
For example, 9 of 11 infants classified as Group A (avoidant) were
rated as having low ego-resiliency while none of the 16 Group B
(secure) infants were low on this measure. In addition, the group A
children were higher on dependency and negative peer behavior, and
lower on empathy and peer acceptance. They tended to be hostile,
disconnected, and/or emotionally insulated as Sroufe had predicted.

Thus, Sroufe's project provides a powerful link between early
attachment assessments and later behavior. Sroufe's Minnesota Pre-
school Project (1983) yielded much information on the understanding of
individual differences, and also prompted subsequent research
including the present study.

Research on Attachment With Older Children

Although there has been less research on attachment (in contrast
to correlates of attachment) beyond infancy, it is an area of growing
interest. Main, Kaplan, and Cassidy (1985) conducted a research
project focusing on how representational processes relate to
attachment in older children. Thus, their research moved away from
looking primarily at behavioral components of attachment. They
suggest that secure, insecure-avoidant, and insecure-ambivalent

attachments can best be understood as terms referring to various types of internal working models of the relationship.

Main et al. used a definition of internal working model that was derived from Bowlby (1969, 1973, 1980) and Bretherton (1985). An internal working model is a mental representation of an aspect of the world, others, self, or relationships to others that is of special relevance to the individual (Bretherton, 1985). The term internal working model reflects a dynamic, active, representational process, as opposed to static images or passive introjection of love objects. Because internal working models represent active dynamic constructions it is possible for them to be restructured. But, as mentioned earlier, this is difficult because the model resists dramatic change (Bowlby, 1969).

Main et al.'s study had several aims: a) to test for stability in reunion behavior over a 5-year period, b) to examine individual differences in overall functioning due to early security of attachment, and c) to compare early individual differences in security of infant-parent attachment to coherence of speech and behavior in childhood and adulthood. By examining these variables Main et al. hoped to show that mental processes vary as distinctively as do behavioral processes as a function of differing internal working models of relationships.

Forty-four families participated in the study. Each of these families had previously taken part in the Berkeley Social Development Project, from which attachment classifications at 12 or 18 months were obtained for each child. When the children were 6 years old, the families were visited at home to acquire information on family changes

and child rearing practices. Approximately one week following the home visit the family came to the laboratory for a 2-hour session. This session involved videotaping both child and parent behavior in a playroom, as well as an interesting separation technique. The family was asked to pose for a picture, then asked to watch a film of a 2-year-old undergoing a 10-day separation from parents, "Thomas' Ten Days in Fostercare" (Robertson & Robertson, 1972). Following this, the parents left the room to complete the Berkeley Adult Attachment interview which lasted about one hour.

During the parents absence, the children were given the Klagsbrun-Bowlby (1976) separation anxiety interview, adopted from Hansburg (1972). This interview consists of a series of questions regarding six pictures of parent-child separations, ranging from a kiss-goodnight to parents leaving for a two-week vacation. Following this interview, each child was shown the photograph of self and family that was taken earlier. Then the children played in a sandbox with an experimenter present until the parents returned in about another 30 minutes.

From this interesting procedure Main et al. found that secure attachment relationships in infancy seemed to allow an active emotional and mental integration of the environment. The secure 6-year-old seemed to have flexibility regarding affect, memory, and plans. This appears to be the case whether one is examining conversation with the parent after reunion, or discussions about imagined situations that pertain to attachment. For insecure children, various types of restrictions seem to maintain different organizations of information and attention. For example, insecure

6-year-olds showed restriction in topics of conversation with their parents, and also showed discomfort when discussing emotions.

Mental aspects of security in adults were examined as well, with some intriguing results. Generally, the secure adults conveyed a certain ease when integrating both positive and negative aspects of experience and affect. The parents of secure infants in the study seemed to have previously considered and worked through unpleasant as well as pleasant attachment experiences, and to have integrated those experiences into their internal working model, while insecure adults did not seem to integrate or deal with their attachment experiences. Parents of insecure children had difficulties in coherently discussing their attachment experiences.

It is of interest to note that even though some adults experienced unpleasant attachment episodes in childhood, they nonetheless had secure children when they were able to discuss their attachment experiences in a fluent manner. Main speculates that this may have been due to the ability gained with the onset of formal operations to "step outside" of one's own situation and imagine other systems which they did not experience. Many of the adults who did seem to undergo this shift in their internal working models recalled a period of rebellion during adolescence.

Marvin (1977) also studied attachment in older children with a focus on its relationship to cognitive development. Specifically, he was interested in changes in the attachment relationship based on developing cognitive perspective-taking skills. Drawing on comparative studies with nonhuman primates, Marvin hypothesized that the same functional relationships hold in the case of human attachment

relationships. Marvin suggested three major phases in the child's relationship with his or her mother between birth and school age. During each of these phases the relationship is organized in a way that compliments the lack of certain behavioral skills in the child. As these behavioral skills develop, a change will occur in the relationship between mother and child. Each of these changes should result in an increased integration between the attachment behavior of mother and child.

Marvin (1977) observed a sample of 2-, 3-, and 4-year-old children and their mothers in the Strange Situation and in a number of perspective-taking tasks. Three ideas served as the basis for his research: a) social relationships can be defined and understood in terms of the communicative acts that structure those relationships; b) ontogenetic changes in the relationship between two or more individuals can be discussed and understood in terms of changes in the communicative skills of the individuals, and in terms of the conceptual structures that underlie those skills; and c) by observing the conditions that activate and terminate an individual's communicative and other behavioral acts within a relationship, one is able to specify the equilibrium that one or both individuals are attempting to maintain in a goal-directed manner via one another (Marvin, 1977).

Marvin found support for all three of his hypotheses regarding the occurrence of qualitative changes in attachment between children and their mothers. The results showed that most 4-year-olds attempted to construct joint plans with their mothers regarding separation and subsequent reunion, and their responses to separation and reunion

varied according to whether a joint plan was reached. If a plan did
exist, the child was happy and more secure during the separation and
responded to the mother's return in a sociable and relaxed manner.
But if a mutual plan had not been constructed, the child was upset
during the separation and responded to the mother's return by behaving
in an angry, controlling manner. Most of the 4-year-olds also
performed in a non-egocentric fashion on a variety of perspective-
taking tasks. By contrast, the 2- or 3-year-old children tended to
respond egocentrically to the perspective-taking tasks and to display
many of the same reunion patterns as those identified by Ainsworth
(1978).

Marvin's research raises many other issues concerning attachment
and cognitive development. For example, his work showed that during
the later preschool years children develop a new relationship with
their mothers that is based on balance, or integration of internal
perspectives. Another area of interest was prompted by the notion
that if children are able to work in a goal-directed way toward some
end, or are able to conceive of some relationship between self and
social and/or physical environment, then they must have some
identifiable cognitive structure or scheme for that relationship.
Marvin and Greenberg (1982) have also done an exciting study that
incorporates the ability to think abstractly about one's attachment
experiences.

Based on Marvin's (1977) research, Marvin and Greenberg (1982)
hypothesized that children must objectively understand the
independence of participants' points of view in order to negotiate
common goals and plans with others. They must also understand that

others' behavior is controlled by others' plans, rather than by the children's own plans. Marvin and Greenberg claimed that this would lead the partners to seek information from each other indicating that their plans or goals are in unison.

They recorded attachment interactions during a laboratory session that involved a brief separation. The children's conceptions of their mothers were investigated by direct questioning during one of the separations. The results of this study showed that children as young as 4 years of age were able to make objective conceptual judgments about others that are not available to direct perception. Marvin and Greenberg found that 4-year-olds were beginning to develop objective conceptions of the causal relationship between the mother's perspective and her behavior and to realize that they could reason about this relationship in a logical, reversible manner, even when the conclusion was contrary to their own desires.

The correlation between phase of attachment and scores on the separation questions suggests that the growing ability to reason objectively about the causal basis of the mother's behavior is related to both developmental changes in the child's reaction to a brief separation, and to changes in how the mother and child monitor proximity between them. Children who answered the separation questions correctly also made an effort to construct a plan with their mother concerning her departure. If the attempt was successful, the children were relaxed and interacted easily upon reunion. But if the attempt failed, the children were distressed and controlling upon the reunion.

From their research Marvin and Greenberg concluded that the children who answered the questions incorrectly did not organize their behavior on the basis of mutually constructed plans. These children were inclined either to protest, give no response, or talk about the separation without reaching agreement or disagreement. When the mother returned, these children behaved sociably toward her and/or sought or avoided her proximity. In other words, these children behaved in a fashion similar to 1- and 2-year-olds in the same situation.

The research that has been presented in this review forms a foundation for the present study. Sroufe's work in particular prompted me to investigate the possible correlation between parents' descriptions of their children's ego-resiliency (based on the California Child Q-set; Block, 1978) and their own child's performance on story completion tasks concerning attachment issues. However, unlike Sroufe (but like Main et al., 1985) I used a representational measure of attachment. My technique required the child to reflect upon story situations concerned with attachment issues. In Main et al.'s study 6-year-olds were asked to comment on a set of pictures. I have adapted this method to younger children by asking them to complete stories acted out with small family figures. By including a wide age range (3 to 5 years) I was also able to look at the variables of age and cognitive ability. Like Marvin (1977) and Marvin and Greenberg (1982) I could look at age differences in how the children complete the tasks.

In sum, I undertook this project to extend research on attachment in preschool children by developing a potential assessment of pre-

schoolers' ability to reflect on their own attachment relationships.
To validate the representational measure of attachment, I correlated
it with parental ratings of the child's ego-resiliency.

CHAPTER III

METHOD

Subjects

Fifteen male and 15 female children ranging in age from 45 to 62 months were recruited from local preschools. There were three age groups: 45 to 50 months ($\underline{M}$ = 47.5), 51 to 56 months ($\underline{M}$ = 53.0); and 57 to 62 months ($\underline{M}$ = 59.8). Each group consisted of 5 males and 5 females.

Through the child's preschool, the parents received a letter explaining the research project, as well as a consent form requesting their cooperation (for copy of parental consent see Appendix I). Both of the parents and their child were asked to take part in the study. Eighty percent of the parents invited agreed to participate.

Procedure

<u>Story Completion (Children)</u>: In a separate room of the child's preschool he or she was seated at a small table across from the experimenter. Initially each child was given a 5 minute warm-up period during which the experimenter encouraged him or her to engage in free play with family dolls used in the story tasks. The experimenter then asked the child if the figures looked like a family, and to give them names. Following this, the experimenter started a

warm-up story about a birthday party. The family figures were placed around the table and the experimenter began to sing Happy Birthday and encouraged the child to sing as well. After singing, the child was asked to blow out the candles on the toy cake. This warm-up procedure was effective in that it engaged the child with a task similar to that used for the actual research and familiarized the child with the family dolls.

Following the warm-up story the experimenter presented five story completion tasks in a standard order. After each presentation the child was asked to "now use the family to show me and tell me what happens next." Prompts were kept to a minimum, and were used to elicit information while not leading the child. For example, if the child gave no response the experimenter would then repeat, "now use the family to show me and tell me what happens next." If the child gave a minimal response the experimenter would prompt "Is that all"? or "What else"?

In story I ("Spilled Juice") the family was seated around the table eating dinner (mother, father and two children of the same sex as the subject). The experimenter then made the child figure accidentally spill his or her juice.

In story II ("Hurt Knee") the experimenter arranged some green felt (to represent grass) and a sponge (cut to represent a rock). The family was in a park and one child figure ran off to climb the rock. The child figure fell and cried about a hurt knee.

In story III ("Lion") the experimenter arranged a small wire cage with a toy lion inside. The experimenter told the child that the

family was at the zoo and made the child figure run up to the lion. At this point the experimenter made the lion roar at the child figure.

In story IV ("Departure") the experimenter set the family together in an imaginary house. Parked next to the house was a toy car. The experimenter explained that the parents were going on an overnight trip and the children were to stay with their grandmother.

For story V ("Reunion") the grandmother figure told the child figure that the parents were returning from their overnight trip. Then the experimenter made the parents reappear.

Q-sort (Parents): Both parents were asked to complete the California Child Q-set (CCQ) developed by Block (1978). An interviewer went to their home and administered the Q-set separately to each parent. The interviewer read the Q-sort instructions to both parents, and answered any questions on procedures. Then each parent was asked to sort his or her set of CCQ items independently; however, questions to clarify the meaning and interpretation of particular Q-set items were encouraged and discussed. It took approximately 30 to 60 minutes to complete the Q-sort (for full instructions refer to Appendix III).

The California Child Q-set is an instrument designed to obtain comprehensive personality descriptions of children in a form that allows quantitative comparison and analysis. The CCQ is comprised of a set of 100 personality-descriptive variables. The procedure is derived from Stephenson's (1953) scaling technique known as the Q-sort method; the items in the CCQ are an age-appropriate modification of the California Q-set (Block, 1978). Although the Q-sort method yields information that may be analyzed for a variety of

purposes this study will concentrate on ego-resiliency (see Appendix III).

The parent arranged the items in the CCQ into separate piles according to their psychological salience or relevance for the child being described. Each item in the CCQ set was judged in relation to the other items according to the criterion of psychological salience for the particular child being evaluated. The Q-Sort yields a score for each of the 100 CCQ items, the score for an item being the pile number (9 to 1) to which it has been assigned by the parent in assessing their child. Each child's item scores are then correlated with a criterion-sort for ego-resiliency published by Block (1980). The resulting correlations are regarded as indexing the child's ego-resiliency.

CCQ characterizations are generally performed by teachers, therapists or other trained observers, although recently they have been used successfully with parents (Bem & Funder, 1978). It is important that the person completing the Q-set know the child being assessed for a long period of time and in a variety of settings.

Block and Block (1980) have demonstrated that using the composite Q-sort formulations based on more than one observer, yields highly reliable and impressively valid indices of psychological functioning.

Data Reduction

Story Completion Task

The five story beginnings were designed to elicit attachment issues in discipline, pain, fear, separation, and reunion situations.

The beginning of each story was told in the same manner, with the subjects' responses being videotaped. The videotapes were then transcribed to obtain an accurate record of the responses.

The stories were scored for the degree of parental supportiveness and non-supportiveness implicit in the child's response. The definition of supportiveness for this research was taken from Sroufe (1979, p. 837). He states that supportiveness is the care- giver's role in helping to maintain organized behavior in the face of new and/or stressful situations with the result of decreasing tension and increasing security.

Four point scales for supportiveness and non-supportiveness were developed by looking at the video tapes of 10 subjects (0 = none, 1 = moderate, 2 = high, 3 = extreme). Points were given by viewing the video-tape in conjunction with transcripts both being equally weighted. Half points could be given when the child's response warranted it, for example, when the voice intonation was especially warm or positioning of the family figures was very expressive.

Separate rating criteria were developed for each story (see Appendix IV). For example, in the "Spilled Juice" story, reparation (e.g., cleaning up) was considered supportive, whereas spanking was considered highly non-supportive. In the "Hurt Knee" story, hugging and putting on a bandaid were considered very supportive while abandonment was considered highly non-supportive. Next, in the "Lion Story" proximity seeking (parent to child or child to parent) was scored as supportive and reproach as non-supportive. In the last two stories, "Departure" and "Reunion" leave-taking before separation and use of the grandmother as caregiver during separation were considered

supportive. Ignoring the parental departure was considered as indicative of a non-supportive relationship. Finally, greeting and affection upon reunion was considered highly supportive, while avoidance or reproach upon reunion were considered non-supportive. For each child scores for supportiveness and non-supportiveness were added across the five stories to obtain the total score.

Two independent raters scored the first 10 subjects using these scales. Inter-rater agreement obtained for these subjects was 80%. For only two stories was inter-rater disagreement greater than half a point. These differences were conferenced. For the other stories, scores were averaged to obtain the final scores for supportiveness and non-supportiveness. Then the remaining 20 subjects were scored by the same two independent raters using the same procedure.

CHAPTER IV

RESULTS

Story Completions

Descriptive Findings

Table 1 shows the children's responses to the story beginnings, giving absolute frequencies for each type of response. For each story there was one supportive response that outweighed the others and was always relevant to the story. Non-supportive responses were much rarer. For example, in the "Spilled Juice" story the typical supportive response was to clean it up. The most common non-supportive response was for the child figure to be spanked. In the "Hurt Knee" story the typical supportive response was for the parents to get a band-aid. Only one child in this story gave a non-supportive response which was to abandon the child. For the "Lion Story" the typical supportive response was to reassure the child while a non-supportive response was for the parents to reproach the child. In the "Departure Story" the most typical supportive response was saying good-bye, followed by the grandma caring for the children. Here again, there was only one non-supportive response in which the parents reproached the child. In the final story, "Reunion", the most typical supportive response was greeting followed by happiness about the return. Here too only one non-supportive response was noted where the child said he was naughty, and that the parents should punish him.

Overall, there were so few non-supportive responses that they were disregarded in the statistical analysis.

Table 1

Responses to Story Beginnings

Child's Responses	Number of Subjects
Story I "Spilled Juice"	
Supportive Responses	23
Cleaning up	17
Cleaning up, get more juice	6
Non-Supportive Responses	23
Reproach	5
Parents get mad	5
Child sent to room	6
Parents give spanking	7
Other Responses	
No resolution or irrelevant	3
Story II "Hurt Knee"	
Supportive Responses	23
Get Band aid	12
Carry Home	5
Reassure	6
Non-Supportive	1
Abandonment	1

Other

    No resolution or irrelevant   6

Story III "Lion Story"

Supportive Response	23
Reassurance/proximity	19
Concern/gentle warning	4
Non-Supportive Responses	2
Punishment	1
Reproach	1
Other	
No resolution or irrelevant	6

Story IV "Departure"

Supportive Responses	29
Say goodbye (missing parents)	17
Grandma cares for children	10
Kisses/physical affection	2
Non-Supportive Responses	1
Reproach	1
Other	
No resolution or irrelevant	7

Story V "Reunion"

Supportive Responses	23
Greeting	13

Glad to be back/kissing children	8
Kisses/physical affection	2
Non-supportive Responses	1
Child said he was naughty	1
Other	
No resolution or irrelevant	1

Analysis of Variance

A gender (2) by age (3) analysis of variance was performed on the supportiveness ratings. Age effects were not significant, while gender effects did reach significance. The girls had higher supportiveness scores than the boys ($\underline{M}$ = 5.7 (SD 1.7), versus $\underline{M}$ = 3.9 (SD 2.3), $\underline{F}$ (1, 24) = 6.0, $\underline{p}$ <.02 .

Ego-resiliency

Analysis of Variance

A gender by age ANOVA on the averaged parental ratings of ego-resiliency was performed that yielded no effects for age but significant effects for gender, with the girls scoring lower. The mean for boys was $\underline{M}$ = .51 (.08), whereas the mean for girls was $\underline{M}$ = .37, (1.7) $\underline{F}$ 1, 24 = 8.2 $\underline{p}$ < .009. The gender difference was also observed for separate mother/father ratings of ego-resiliency. Maternal ratings were $\underline{M}$ = .33 for girls, $\underline{M}$ =.46 for boys, paternal ratings for girls were $\underline{M}$ = .41 and for boys $\underline{M}$ = .56. The correlation between mother and father ratings was $\underline{r}$ = .35, $\underline{p}$ < .03.

Correlations between Ego-resiliency and Supportiveness

In order to control for gender differences, gender was partialed out of the correlations between supportiveness and ego-resiliency ratings. The correlation between averaged parental ego-resiliency scores and supportiveness scores from the story tasks, controlling for gender, was not significant [$r(27) = -.07$]. Findings were similar when partial correlations were performed between the separate maternal and paternal ego-resiliency ratings and supportiveness, $r(27) = -.08$ and .02 respectively.

Discussion

Although this study did not support the overall hypothesis that parental supportiveness from the story completions should be related to ego-resiliency, some of the results were interesting. For example, the high frequency of appropriate supportive responses for each story indicated that the stories do elicit thoughts about attachment issues. The fact that most children responded in a fashion that was appropriate for the story demonstrated that they were engaged in the task and understood it well. It is not clear from the findings, however, that the story responses reflect the children's actual attachment experiences.

It was not surprising that no age differences in parental supportiveness and ego-resiliency scores were found as security of attachment was shown to be stable from 1 to 6 years (Main, Kaplan & Cassidy, 1985). Ego-resiliency has also been shown to be a stable trait (Block & Block, 1978).

The gender differences were also interesting. Girls scored much higher on supportiveness on the story task than boys. This gender difference may be due to idiosyncracies of this particular sample. An alternative explanation is that girls are socialized to respond in a more nurturing and/or caring fashion than boys. In their 1974 review, Maccoby & Jacklin reported that girls tend to receive more parental warmth than boys (see also J. H. Block, 1978). Along with this, it is interesting to note that girls scored lower than boys on ego-resiliency as rated by their parents. It is possible that for the parents in this sample, interpretation of the items in the Q-sort varied for boys and girls. Three studies (Block 1979; Golden & Birns, 1975; Rothbart, 1976) have shown that parents communicate higher expectations and more demands for independent task performance to boys. On the other hand, there was no mention of gender differences in past research with this Q-sort (Block & Block, 1979). The ego-resiliency gender difference therefore remains puzzling.

There are always a number of different ways in which a study may be designed and executed. Because the findings from this study were inconclusive as far as the major hypothesis was concerned, I would like to review some alternative procedures. For instance, it is possible that the story beginnings may have elicited a normative response rather than individual differences based on experience. If so, more stressful story beginnings might have caused the child to draw more from their personal experience rather than responding merely in an appropriate manner. Also, a longer warm-up period might have been helpful in making the children more comfortable with the experimenter, thereby facilitating responses reflective of the

children's own experiences. In regard to the ego-resiliency ratings, it would be interesting to use teachers, as well as parents, for the Q-sort ratings. Parents alone may not be as able as teachers to provide an overall description of the child's ego-resiliency because they see the child in fewer social situations with other children and therefore have less opportunity to make comparisons with other children than their teachers. The parents may also have based their responses on social desirability. It would therefore be helpful to use at least two non-parent raters who are able to observe the child on a daily basis, in order to obtain a more accurate picture of the child's functioning.

Overall, this study did yield useful information for other researchers in this area by providing data on the types of responses children will give to attachment story tasks. I hope that other investigators will build on this work. As research continues in this area, and as the story technique is refined, it may become useful to child clinicians as a way to draw information from individual children as well as for researchers interested in representational aspects of attachment.

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APPENDIX I

PARENT CONSENT AND LETTER OF INVITATION

DEPARTMENT OF HUMAN DEVELOPMENT AND FAMILY STUDIES

COLORADO STATE UNIVERSITY

CONSENT FORM FOR PARTICIPATION IN RESEARCH PROJECT

Project Title: The Relationship of Q-sort Scores to Story Completion
                 Tasks in Preschool Children.

Principal Investigator(s): Dr. Inge Bretherton
                            Laurel Barrows

Objectives/Purposes of Project: To determine how children express
                                  themselves through use of story
                                  completions.

Procedures/Methods to be Used: I will present the child with several
doll figures and props (car, furniture, etc.). I will then initiate a
story and ask the child to complete it using the wooden figures and
props. Five different stories will be presented to the child (ie.
Family is in the park, child climbs a high rock and falls). The total
session will take about 20 minutes and will be conducted in a
laboratory room across from the preschool center.

The parents will be asked to participate in a home interview.

The principal investigator agrees: (1) that no one will be forced to
participate in this project against his/her will; (2) to protect the
privacy, personal rights, and dignity of the participant.

This project has been approved by the Department of Human Development
and Family Studies and by the Committee on Human Research of Colorado
State University.

Signatures: _____   Date:_____
                  Principal Investigator

            _____   Date:_____
            Coordinator, Early Childhood Laboratories

            _____   Date:_____

I consent or authorize _____ to become a subject for the
research project outlined above. The nature and general purpose of
the project has been satisfactorily explained to me and I am satisfied
that proper precautions are to be observed.

*Signature: _____   Date:_____

*Parent or Guardian must sign for a minor child.
(See other side where the possibility of physical injury might apply.)

If a subject is injured in the course of the research investigation and he/she contends that Colorado State University or an employee thereof is at fault for the injury, the subject must file a claim within 90 days of the date of the injury with the State Attorney General and the State Board of Agriculture. The University carries liability Insurance to compensate subjects for such injuries. Details on this procedure to obtain this compensation are available through the Office of Legal Counsel, (303) 491-5284. The University cannot otherwise compensate subjects for their injuries, and subjects must depend on their own health and disability insurance for compensation for injuries sustained in the course of the research investigation which are not the fault of Colorado State University or its employees. For any questions, contact the Office of the Committee on Human Research, Colorado State University, (303) 491-7162.

cSU

Dear Parent,

As a graduate student in the Department of Human Development and Family Studies at Colorado State University I am currently engaged in research for my master's thesis. I am conducting a study of young children's self-concept using a story completion technique.

Your child will be asked to accompany me to a research room, across the hall from the center where the session will be video taped for later coding. I will present your child with doll figures and various props such as a car, furniture, kitchen utensils, etc. I will then initiate a story and ask your child to complete it. There will be five stories and the total session will take about twenty minutes. Most children of this age find story telling an interesting activity.

Your participation in this project would involve a research assistant coming to your home, at your convenience. Both parents will be asked to use a deck of cards with statements about children's behavior to describe their own child. Parents will do this at the same time, but without consulting each other. This generally takes an hour during which the researcher can answer your questions and play some games with your child.

While the tasks involved are simple, the results will be useful and very interesting, therefore I hope you will decide to participate.

If you agree to participate please keep this letter, complete the consent form on the next page, and return it to your child's teacher. If you have any questions feel free to leave a message with Jackie or Agnes at 491-5558 and I will return your call as soon as possible.

Thank you for your attention.

Sincerely,

Laurel J. Barrows
Master's Candidate

Dr. Inge Bretherton
Faculty Advisor

APPENDIX II

STORY COMPLETION PROTOCOL

APPENDIX II

STORY COMPLETION PROTOCOL

The experimenter will initiate a story using wooden figures which represent a family, along with several props. The child will then be asked to complete the story using the figures and props. Five stories will be presented in the following order. (After each of the stories the experimenter will say to the child: " Now use the family to show me what would happen next."

I. "Spilled Juice" Story: The experimenter sets the family figures and props for this scene on the table (table, toy utensils). E: "Here is our family and they are getting ready to eat lunch. How about if you would set them around the table anywhere you would like them to sit. Now let me start a story and you can finish it. This is our family and they are eating dinner 'yum, yum'. How about making these figures eat. Now (child figure) is in a big hurry and reaches across the table and knocks the juice all over the floor. Now use our family to show me and tell me what happens next."

II. "Hurt Knee" Story: The experimenter sets out family and props for this scene (green felt grass, sponge rock). E: "Now I'm going to start the story and you can finish it, okay? Now, this is the grass and this is a rock and here's our family in a park and (child figure) sees a high rock and goes running off to climb it higher and higher he goes and boom he falls down and hurts his knee.

'Boo hoo I hurt my knee.' Now use the family to show me and tell me what happens next."

III. "Lion" Story: The experimenter sets out figures and props for this scene (wooden figures, cage, toy lion). E: "Here's our family and they're at the zoo. Here's the lion and (child figure) is looking around at all the other animals and he sees the lion and goes running up to the lion's cage. 'Roar.' Now use our family and show me and tell me what happens next."

IV. "Departure" Story: The experimenter sets out figures and props for this scene. (Wooden figures, felt for grass, toy car). E: "This is the lawn and this is their car and this is their imaginary house. They are in their house and it looks like mother and father are getting ready for an overnight trip and they say to (child figure), 'We're getting ready for our overnight trip now. See you in the morning. Grandma will stay with you.' Now use the family to show me and tell me what happens next."

V. "Reunion" Story: (Same figures and props as for Departure Scene). E: "How about if we turn them back this way and you know what? It's the next morning and Grandma says, 'Look, look, here come your Mommy and Daddy back from their overnight trip.' Now use the family to show me and tell me what happens next."

APPENDIX III

Q-SORT

The California Child Q-set

The California Child Q-set

Jeanne H. Block and Jack Block
University of California, Berkeley

1. Prefers non-verbal methods of communication.

2. Is considerate and thoughtful of other children.

3. Is warm and responsive.

4. Gets along well with other children.

5. Is admired and sought out by other children.

6. Is helpful and cooperative.

7. Seeks physical contact with others (touching, hugging, holding, or being held).

8. Tends to keep thoughts, feelings, or products to self.

9. Develops genuine and close relationships.

10. Has transient interpersonal relationships; is fickle.

11. Attempts to transfer blame to others.

12. Reverts to more immature behavior when under stress (e.g., whines, sucks thumb, has tantrums, etc.). (When placed very low, implies pseudo-mature behavior under stress.)

13. Characteristically pushes and tries to stretch limits; sees what s/he can get away with.

14. Is eager to please.

15. Shows concern for moral issues, e.g., reciprocity, fairness, and the welfare of others.
(N.B. For children, this item shows developmental trends. At early ages this item would be placed low for most children; it would be expected to rise in salience over time.)

16. Tends to be pleased with and proud of his/her products and accomplishments.

The California Child Q-set

17. Girls: Behaves in a feminine style and manner.
    Boys: Behaves in a masculine style and manner.
    (N.B. The cultural and subcultural standard should be applied.)

18. Expresses negative feelings toward peers directly and openly.
    (N.B. Frequency or amount of negative feeling is not at issue;
    this item is concerned with directness of expression.)

19. Is open and straightforward. (When placed low, implies
    sneakiness or deceit.)

20. Tries to take advantage of others.

21. Tries to be the center of attention (e.g., by showing off,
    demonstrating accomplishments, volunteering, etc.).

22. Tries to manipulate others by ingratiation (e.g., by charm,
    coyness, or seductiveness).

23. Is fearful and anxious.

24. Tends to brood and ruminate or worry.

25. Uses and responds to reason.

26. Is physically active.

27. Is visibly deviant from peers in appearance, size, or physical
    condition (e.g., markedly tall or short, under- or overweight,
    physically handicapped).

28. Is vital, energetic, lively.

29. Is protective of others.

30. Tends to arouse liking and acceptance in adults.

31. Shows a recognition of the feelings of others; is empathic.
    (N.B. For children this item shows developmental trends. At
    early ages this item would be placed low for most children; it
    would be expected to rise in salience over time.)

32. Tends to give, lend, and share.
    (When placed very low, implies retentiveness.)

33. Cries easily.

34. Is restless and fidgety.

35. Is inhibited and constricted.

The California Child Q-set

36. Is resourceful in initiating activities.

37. Likes to compete; tests and compares self against others.

38. Has unusual thought processes; thinks and perceives in uncommon ways. (N.B. Quality of thinking is not evaluated; see items 96 for quality rating.)

39. Tends to become rigidly repetitive or immobilized when under stress.

40. Is curious and exploring, eager to learn, open to new experiences.

41. Is persistent in activities; does not give up easily. (When placed very high, implies perseveration.)

42. Is an interesting, arresting child.

43. Can recoup or recover after stressful experiences.

44. When in conflict or disagreement with other; tends to yield and give in.

45. Tends to withdraw and disengage when under stress.

46. Tends to go to pieces under stress, becomes rattled and disorganized.

47. Has high standards of performance for self.

48. Seeks reassurance from others about his/her worth or adequacy.

49. Shows specific mannerisms or behavioral rituals (e.g., taps fingers, has tics, bites nails, bites lips, thumb-sucking, stuttering, etc.)

50. Has bodily symptoms as a function of tension and conflict (e.g., headaches, stomach aches, nausea, etc.).

51. Is agile and well coordinated.

52. Is physically cautious.

53. Tends to be indecisive and vacillating.

54. Has rapid shifts in mood; is emotionally labile.

55. Is afraid of being deprived; is concerned about getting enough (e.g., with respect to affection, food, toys, etc.)

The California Child Q-set

56. Is jealous and envious of others.

57. Tends to dramatize or exaggerate mishaps.

58. Is emotionally expressive (facially, gesturally, or verbally).

59. Is neat and orderly in dress and behavior.
(When placed very high, implies fussiness and overconcern).

60. Becomes anxious when the environment is unpredictable or poorly structured.

61. Tends to be judgmental of the behavior of others.

62. Is obedient and compliant.

63. Has a rapid personal tempo; reacts and moves quickly.
(N.B. Brightness is not necessarily implied; only speed of response is at issue.)

64. Is calm and relaxed, easy-going.

65. Is unable to delay gratification; cannot wait for satisfactions.
(When placed low, implies needless or excessive delay.)

66. Is attentive and able to concentrate.

67. Is planful; thinks ahead.

68. Appears to have high intellectual capacity (whether or not expressed in achievement).

69. Is verbally fluent; can express ideas well in language.

70. Daydreams; tends to get lost in reverie.

71. Looks to adults for help and direction.

72. Has a readiness to feel guilty; puts blame on self (whether verbalized or not). (N.B. For children this item shows developmental trends. At early age this item would be placed low for most children; it would be expected to rise in salience over time.)

73. Responds to humor.

74. Becomes strongly involved in what s/he does.

75. Is cheerful.
(When placed low, implies unhappiness, despondency.)

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76. Can be trusted; is dependable.

77. Appears to feel unworthy; thinks of self as "bad".

78. Is easily offended; sensitive to ridicule or criticism.

79. Tends to be suspicious and distrustful of others.

80. Teases other children (including siblings).

81. Can acknowledge unpleasant experiences and admit to own negative feelings. (N.B. For children this item shows developmental trends. At early ages this item would be placed low for most children; it would be expected to rise in salience over time.)

82. Is self-assertive.

83. Seeks to be independent and autonomous.

84. Is a talkative child.
(N.B. No reference to verbal quality or fluency is intended; only the amount of talk is at issue.)

85. Is aggressive (physically or verbally).

86. Likes to be by him/herself, enjoys solitary activities.

87. Tends to imitate and take over the characteristic manners and behaviors of those admired.

88. Is self-reliant, confident; trusts own judgment.

89. Is competent, skillful.

90. Is stubborn.

91. Is inappropriate in emotive behavior (reactions are excessive, insufficient, or out of context).

92. Is physically attractive, good-looking.

93. Behaves in a dominating manner with others.

94. Tends to be sulky or whiny.

95. Overreacts to minor frustrations; is easily irritated and/or angered.

96. Is creative in perception, thought, work, or play (a judgment of creative quality, rather than intelligence per se, is intended).

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97. Has an active fantasy life.

98. Is shy and reserved; makes social contacts slowly.

99. Is reflective; thinks and deliberates before speaking or acting.

100. Is easily victimized by other children; tends to be treated as a scapegoat.

Orientation provided to the personality assessor

The following orientation is provided to each assessor:

The California Child Q-set (CCQ) is a language instrument designed for the purpose of developing comprehensive, psychodynamic personality descriptions using a standard language so that quantitative comparisons and analyses become feasible. It uses a procedure for describing persons, known as Q-sorting, that is different from ordinary rating methods. The general procedure, which will be described in detail below, is to distribute cards, each of which contains one of the 100 items comprising the Q-set, into 9 categories ranging from those most descriptive of a particular child to those least descriptive of that child. The guiding question in completing a Q-sort description is: "Which cards are most characteristic or salient with respect to the child and which cards are most uncharacteristic or negatively salient with reference to the child? The Q-sort method is oriented toward the individual, describing the most distinguishing characteristics of the particular child. It is not a normative procedure where the task is to judge a child in comparison with other children. Rather, in Q-sorting, the judge is asked to think only of the child to be described and to make decisions and

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evaluations about the information (CCQ-items) that would be important for others to know in understanding that child. The items judged <u>most distinguishing</u>, <u>as most important to know</u> about a child are placed at the extremes -- as most or as least descriptive.

The personality items in the CCQ-set have been carefully selected and refined to permit a comprehensive and configured portrait of the personality of the child.

You will note that some Q-sort items refer to personality qualities that may not yet be developed or ascertainable in the child because of his or her age. In most such cases, these items have been specially noted. For example, items dealing with empathy, concern with moral issues, guilt, differentiation of emotional response are all items expected to be placed generally low for three or four year old children but would rise in salience with age. Because of different individual rates of maturity, some children will show some of these emerging behaviors when other children do not. For such children, these items would be placed more extremely.

<u>General Principles of Q-sorting</u>. In the Q-sort procedure, a specified number of items must be place din each nine categories ranging from Category 9 = <u>Most descriptive</u> to Category 1 = <u>Least descriptive.</u> In placing the items, you should be aware that the use of either the <u>extremely high</u> or <u>extremely low</u> categories (i.e. Categories 9 or 8 and 1 or 2) is tantamount to making a very strong statement about the behavior and personality characteristics of the

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child. The "degree" of a personality quality is expressed in a Q-sort by the extremeness of an item's position rather than by the use of modifying adverbs. For example, if the item, "Is neat and orderly," is placed in Category 9 as one of the Most Descriptive items, the personality assessor is implying that the child is overly fussy and excessively fastidious. If, on the other hand, the same item is placed in Category 1 as one of the Least Descriptive items, then the assessor is implying that the child is very far from being neat and orderly and is, in fact, dirty and messy!

Or, another example, if the item "Is curious and exploring, eager to learn, open to new experiences," is placed in Category 9, it indicates that the child is extremely curious and seeking of new experiences. Conversely, if the item were to be placed in Category 1, the child is being described as without curiosity, unmotivated by new situations and uninterested in new experiences.

When placed low, the CCQ item takes on the opposite meaning unless otherwise indicated on the card. For example, the following CCQ items specifically indicate the meaning to be imputed to placement toward the Least Descriptive end of the continuum:

19. Open, straightforward (implies sneaky and deceitful when placed low).

4. Gets along well with other children (implies does NOT get along well with other children when placed low).

26. Is physically active (implies is sedentary when placed low).

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35. <u>Is inhibited and constricted</u> (implies is free and spontaneous if placed low).

Extremely placed items, whether placed at either extreme, are the most salient and most informative in conveying understanding of the child being described.

Items placed in the middle categories (Categories 4-5-6) can be of three kinds:

1. Some middle-positioned items are so placed because the particular characteristic is of little salience for understanding the child.

2. Some middle-positioned items are so laced because they are sometimes true and sometimes not so true. In such cases, placing an item in a middle category expresses its average importance.

3. Some middle-positioned items are so placed because the personality assessor has little or no information or is uncertain about the behaviors or qualities involved. You may find, in describing a child, that there are some aspects of the child which you simply cannot judge or feel uncertain judging. Such items should be placed in the middle where they, by virtue of the statistical procedures subsequently used, will carry the least quantitative weight. It is important to remember that placement of a item in an extremely low position indicates that you believe the item is <u>important</u> in developing a picture of the child.

<u>Developing a Differentiated Picture of a Child</u>. A psychologically complex picture of a child can be conveyed by the <u>set</u> or

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constellation of Q-items characterizing the child. Often the context in which an item is placed will influence the interpretive meaning of an item. Consider, for example, the item, "Overreacts to minor frustrations..." This item could be placed high in the descriptions of two quite different children.

CHILD A is described by the items:

95. Overreacts to minor frustrations; is easily irritated and/or angered.

46. Tends to go to pieces under stress, becomes rattled and disorganized.

51. Is agile and well coordinated (placed low).

12. Reverts to more immature behavior under stress (e.g., whines, sucks his thumb, has tantrums, etc.). When placed very low, implies pseudo-mature behavior under stress.

23. Is fearful and anxious.

94. Tends to be sulky or whiny.

CHILD B is described by the items:

95. Overreacts to minor frustrations; is easily irritated and/or angered.

85. Is aggressive (physically or verbally).

37. Likes to compete, tests and compares self against others.

80. Teases other children (including siblings).

56. Is jealous, envious of others.

62. Is obedient and compliant (placed low).

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    13. Characteristically pushes and tries to stretch limits; sees what he can get away with.

By considering the items surrounding the common item reflecting frustration-tolerance, very different impressions of the two children emerge. Child A, as described by the constellation of items, appears to be an anxious, immature child whose difficulty in coping with adversities is expressed in crying, sulkiness and other "babyish" behaviors. Child B, on the other hand, is depicted by the constellation of items as a child whose low frustration tolerance results in aggressive attacks on other people. Thus, a dynamically implicative "picture" of the child can be created by the <u>constellation</u> of items.

<u>Specific Instructions for Q-sorting</u>

    You have been given nine envelopes which are labelled as follows:

        Category 9. These items are <u>MOST DESCRIPTIVE</u>

        Category 8. These items are <u>VERY DESCRIPTIVE</u>

        Category 7. These items are <u>QUITE DESCRIPTIVE</u>

        Category 6. These items are <u>SOMEWHAT DESCRIPTIVE</u>

        Category 5. These items are <u>NEITHER DESCRIPTIVE NOR UNDESCRIPTIVE</u>

        Category 4. These items are <u>SOMEWHAT UNDESCRIPTIVE</u>

        Category 3. These items are <u>QUITE UNDESCRIPTIVE</u>

        Category 2. These items are <u>VERY UNDESCRIPTIVE</u>

        Category 1. These items are <u>MOST UNDESCRIPTIVE</u>

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The 100 cards are to be arranged into 9 categories, corresponding to these labeled envelopes. You should place 11 cares in each category except the middle category in which 12 cards are to be placed.

Here is how you proceed:

(1) Lay the 9 envelopes out across a table in numerical order so that you can keep the two ends of the distribution and the meanings of the categories clearly in mind as you sort the cards.

(2) Take the deck of CCQ cards and shuffle them a bit first.

(3) Go through all the CCQ cards and arrange them first in 3 piles: one pile for the statements which are descriptive of the particular child being evaluated, one pile for those which are not descriptive of the child, and a middle pile for those items in between the two extremes. It does not make any difference at this point how many cards you put in each of these 3 piles, but you will find it a bit more convenient subsequently if each pile contains approximately the same number of cards.

(4) Now, take the pile containing the cards that you have said describe the child and from this pile pick out the 11 cards which are the Most Descriptive of him/her. Put these cards on top of envelope Number 9. Do not put them inside yet, as you may wish to change some of your selections later.

(5) Next, pick the 11 cards which you think are Very Descriptive of the child and put these on top of envelope Number 8.

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(6) Next, pick the 11 cards which you think are <u>Quite Descriptive</u> of the child and put these on top of envelope Number 7. If you do not have enough cards in your "descriptive" pile to complete Category 7, you may have to "borrow" some items from your middle pile that are relatively descriptive.

(7) Now, it is best to shift to the opposite end of the continuum. Take the pile containing cards which are <u>Not Descriptive</u> and pick out those 11 cards which are <u>Least Descriptive</u> of the child. Put these on top of envelope Number 1.

(8) Then pick out the 11 cards that are <u>Very Undescriptive</u> and put them on envelope Number 2.

(9) Now, pick out the 11 cards that are <u>Quite Undescriptive</u> and put them on envelope Number. 3.

(10) In all, you should now have 34 cards left over. These are now to be sorted into 3 new piles: 11 cards which are <u>Somewhat Descriptive</u> of the child (to be placed on envelope Number 6), 11 cards which are <u>Somewhat undescriptive</u> of the child (to be placed on envelope Number 4), leaving 12 cards which are neither descriptive nor undescriptive of the child (to be placed on envelope Number 5).

(11) MOST IMPORTANT! Now you should check the CCQ items in each of the 9 piles to see if there are 11 cards in each category, except the middle category, which should have 12 cards. Review the cards and consider whether you feel satisfied with the psychological portrait of the child that you have developed. If you now wish to revise the position of any card, do so by exchanging it for another in an

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adjacent pile, but be sure that you wind up with 11 in each pile (except for the middle category, which as 12). When you have adjusted or "tuned" your description of the child to your satisfaction, put the cards in the envelopes where they belong.

(12) Put the 9 envelopes containing the Q-sort cards in the large envelope which indicates the child's name and code number. Check the identification to insure that your CCQ-description will be registered to the child you have described.

Time required to do a CCQ-sort. Experience over several years indicates that the time taken to complete a Q-sort is from 30 to 60 minutes. The first Q-sorts done by an assessor tend to take longer because of unfamiliarity with the items and the procedure itself. With practice, the time required by the average Q-sorter drops appreciably.

A list of the CCQ items accompanies the instructions so that you can scan the list to become familiar with the range of psychological characteristics tapped by the items. You will be given a separate set of cards and envelopes for each child to be described.

Ego Resiliency Composite

1. These items are most Undescriptive

1.0 Tends to be come rigidly repetitive or immobilized when under stress. (39)

1.0 Is inappropriate in emotive behavior. (91)

1.0 Tends to go to pieces under stress, becomes rattled and disorganized. (46)

1.3 Is inhibited and constricted. (35)

1.3 Appears to feel unworthy, thinks of self as "bad." (77)

1.7 Becomes anxious when the environment is unpredictable or poorly structured. (60)

1.7 Is fearful and anxious. (23)

1.7 Tends to be sulky or whiny. (94)

1.7 Has bodily symptoms as a function of tension and conflict. (50)

1.7 Tends to withdraw and disengage when under stress. (45)

1.7 Overreacts to minor frustrations; is easily irritated and/or angered. (95)

Ego Resiliency Composite

2. These items are very Undescriptive

1.7 Attempts to transfer blame to others. (11)

2.0 Has transient interpersonal relationships, is fickle. (10)

2.0 Is easily victimized by other children; tends to be treated as a scapegoat. (100)

2.0 Shows specific mannerisms or behavioral rituals. (49)

2.0 Tends to be suspicious and distrustful of others. (79)

2.3 Is easily offended, sensitive to ridicule or criticism. (78)

2.3 Characteristically pushes and tries to stretch limits; sees what s/he can get away with. (13)

2.3 Reverts to more immature behavior when under stress. (12)

2.3 Is afraid of being deprived, is concerned about getting enough. (55)

2.3 Tends to brood and ruminate or worry. (24)

2.3 Tries to take advantage of others. (20)

Ego Resiliency Composite

3. These items are quite undescriptive

2.7 Is restless and fidgety. (34)

2.7 Cries easily. (33)

2.7 Is jealous and envious of others. (56)

2.7 Tends to be judgmental of the behavior of others. (61)

3.0 Is unable to delay gratification; cannot wait for satisfactions. (65)

3.0 Tends to be indecisive and vacillating. (53)

3.0 Teases other children (including siblings). (80)

3.0 Prefers non-verbal methods of communication. (1)

3.0 Tries to manipulate others by ingratiation. (22)

3.7 When in conflict or disagreement with others, tends to yield and give in. (44)

Ego Resiliency Composite

4. These items are somewhat Undescriptive

3.7 Tends to keep thoughts, feelings, or products to self. (8)

3.7 Is visibly deviant from peers in appearance, size, or physical condition. (27)

3.7 Has rapid shifts in mood, is emotionally labile. (54)

3.7 Daydreams, tends to get lost in reverie. (70)

37. Seeks reassurance from others about his/her worth or adequacy. (45)

4.0 Tries to be the center of attention. (21)

4.0 Tends to imitate and take over the characteristic manners and behaviors of those admired. (87)

4.0 Likes to be by him/herself, enjoys solitary activities. (86)

4.0 Is shy and reserved, makes social contacts slowly. (98)

4.3 Is eager to please. (14)

4.3 Looks to adults for help and direction. (71)

Ego Resiliency Composite

5. These items are neither Descriptive nor Undescriptive

4.7   Seeks physical contact with others touching, hugging, holding, or being held). (7)

4.7   Is physically cautious. (52)

4.7   Has a readiness to feel guilty, puts blame on self. (72)

4.7   Is aggressive (physically or verbally). (85)

5.0   Likes to compete, tests and compares self against others. (37)

5.0   Is obedient and compliant. (62)

5.0   Is stubborn. (90)

5.0   Is physically attractive, good-looking. (92)

5.3   Girls: Behaves in a feminine style and manner. (17)

      Boys: Behaves in a masculine style and manner.

5.3   Is neat and orderly in dress and behavior. (59)

    (When placed very high, implies fussiness and overconcern).

5.3   Behaves in a dominating manner with others. (93)

5.7   Is protective of others. (29)

Ego Resiliency Composite

6. <u>These items are somewhat Descriptive</u>

6.0 Has unusual thought processes; thinks and perceives in uncommon ways. (38)

6.0 Has a rapid personal tempo, reacts and moves quickly. (63)

6.0 Is calm and relaxed, easy-going. (64)

6.0 Is a talkative child. (84)

6.3 Is admired and sought out by other children. (5)

6.3 Is helpful and cooperative. (6)

6.3 Tends to give, lend, and share. (32)

67. Is persistent in activities; does not give up easily. (41) (When placed very high, implies perseveration).

6.7 Has high standards of performance for self. (47)

6.7 Is agile and well coordinated. (51)

6.7 Is physically active. (26)

Ego Resiliency Composite

7. These items are quite Descriptive

7.0 Is considerate and thoughtful of other children. (2)

7.0 Gets along well with other children. (4)

7.0 Shows concern for moral issues, e.g., reciprocity, fairness, and the welfare of others. (15)

7.0 Expresses negative feelings toward peers directly and openly. (18)

7.0 Is self-assertive. (82)

7.0 Is cheerful. (75)

7.3 Shows a recognition of the feelings of others, is empathic. (31)

7.3 Tends to arouse liking and acceptance in adults. (30)

7.3 Becomes strongly involved in what s/he does. (74)

7.6 Is reflective; thinks and deliberates before speaking or acting. (99)

Ego Resiliency Composite

8. <u>These items are very descriptive</u>

7.7 Is planful, thinks ahead. (67)

7.7 Can be trusted, is dependable. (76)

7.7 Seeks to be independent and autonomous. (83)

7.7 Is warm and responsive. (3)

7.7 Is an interesting, arresting child. (42)

7.7 Tends to be pleased with and proud of his/her products and accomplishments. (16)

7.7 Is emotionally expressive (facially, gesturally, or verbally). (58)

8.0 Develops genuine and close relationships. (9)

8.0 Is open and straightforward. (19)

8.0 Is verbally fluent, can express ideas well in language. (69)

8.0 Can acknowledge unpleasant experiences and admit to own negative feelings. (81)

Ego-Resiliency Composite

9. These items are most Descriptive

9.0 Has an active fantasy life. (97)

8.3 Uses and responds to reason. (25)

8.3 Is competent, skillful. (89)

8.3 Is attentive and able to concentrate. (66)

8.3 Responds to humor. (73)

8.7 Can recoup or recover after stressful experiences. (43)

8.7 Is creative in perception, thought, work, or play. (96)

9.0 Is self-reliant, confident, trusts own judgment. (88)

9.0 Is curious and exploring, eager to learn, open to new experiences. (40)

9.0 Is resourceful in initiating activities. (36)

9.0 Is vital, energetic, lively. (28)

APPENDIX IV

RATING SCALE

FOR ATTACHMENT STORIES

RATING SCALE

A four point scale was devised to rate the story beginnings with 1 indicating mild supportiveness, 2 indicating moderate supportiveness, and 3 indicating extreme supportiveness. Likewise for non-supportiveness 1 indicating mild non-supportiveness, 2 indicating moderate non-supportiveness, and 3 indicating extreme non-supportiveness. 0 was used for irrelevant responses. Half points can be given when warranted by the subjects' voice intonation and placement of the figures. Examples for each story are presented below:

Story I   "Spilled Juice"

Supportive

    3 = Parents and child clean up juice together, then get more juice. Parents reassure child.

    2 = Parents or child get more juice and/or clean up.

    1 = Cleaning up

Non-Supportive

    3 = Parents spank child and send to room.

    2 = Parents spank child

    1 = Parents send child to room

Story II   "Hurt Knee"

Supportive

    3 = Parents get child a bandaid, ask if child is okay, carry

        home, and give physical affection

    2 = Parents get a bandaid and ask if child is okay or carry

        child home

    1 = Parents ask if child is okay or get bandaid

Non-Supportive

    3 = Parents leave child with hurt knee alone in park

    2 = Parents scold child for falling

    1 = Parents mildly reproach child

Story III   "Lion"

Supportive

    3 = Parents reassure child, and come to child's aid and scold

        him

    2 = Parents reassure child and child or parents move closer

        together

    1 = Parents show mild concern but take no action in the

        situation

Non-Supportive

    3 = Parents threaten to spank and scold child for being too

        close to cage

    2 = Scolding for being too close to the cage

    1 = Parents give mild warning and take no other action

Story IV   "Departure Story"

Supportive

> 3 =   Parents and child kiss and say good-bye, and child talks
>   about it
>
> 2 =   Parents or child say good-bye and then children move to
>   Grandma
>
> 1 =   Parents or child say goodbye

Non-Supportive

> 3 =   Parents threaten punishment if the child does not behave
>   during their absence
>
> 2 =   Parents don't allow child to come along and give no
>   reassurances
>
> 1 =   Parents don't say anything at departure

Story V   "Return Scene"

Supportive

> 3 =   Parents and child kiss and greet each other
>
> 2 =   Parents greet child verbally and express pleasure at their
>   return
>
> 1 =   Parents and children greet each other verbally

Non-Supportive

> 3 =   Parents return and talk about child's bad behavior and
>   threaten punishment
>
> 2 =   Parents return and mention bad behavior
>
> 1 =   Parents get out of car but don't greet children