MOTHERS' PARENTING PRACTICES AND CHILDREN'S PEER SOCIAL SKILLS AS PREDICTORS OF CHILDREN'S PEER ACCEPTANCE AND FRIENDSHIPS

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CHAPTER 1

THE PROBLEM

Introduction

The first social relationship that most children develop is with their parents. Interactions within this parent-child dyad are pivotal as they set the stage for the development of children's peer social skills and their relationships with peers and friends. An important aspect of the parent-child relationship is the responsiveness of parents toward the child's needs (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969/1982; Ladd, 1992; Maccoby & Martin, 1983). Over the past several decades, research has suggested that children's peer and friendship relationships are also important as they play a key role in promoting children's social development and sense of well-being (Hartup, 1979, 1989).

Therefore, the purpose of this research will be to examine how the responsiveness of mothers' parenting practices (e.g., disciplining and comforting) and children's peer social skills predict children's peer acceptance and friendships. This research will uniquely contribute to the body of knowledge of children's social development by examining whether maternal responsiveness during parenting practices predict peer acceptance and friendships, or whether peer social skills are also necessary to children's peer acceptance and friendships. Furthermore, it will add to the body of knowledge, in that three areas of children's social competence—social skills, peer acceptance, and friendships—will be examined in relation to mothers' responsiveness of parenting practices, in a single study. It is hypothesized that both nonmediating and mediating models will describe the prediction of peer acceptance and friendships by mothers' responsiveness of parenting practices and children's peer social skills.

Statement of Problem

The body of research on children's peer and friendship relationships suggests that there are important associations between responsiveness in parenting practices and children's social competence—including their peer social skills, peer acceptance, and friendships. This literature typically uses the correlation-prediction model to explain parental associations with children's social competence (Dishion, 1990; Mize, Pettit, & Brown, 1995; Putallaz, 1987.). The correlation model examines the extent that variables correspond to each other based on correlation coefficients, while predictions are based on regression coefficients that indicate the standings of the sample on selected criterion variables with an expected margin of error (Isaac & Michael, 1995). However, there are gaps in the literature exploring "pathways" or links between parenting practices and children's social competence. To partially fill the gap, the current research will examine the links between the predictor variables—responsiveness of mothers' parenting practices and children's peer social skills—and the criterion variables—children's peer acceptance and friendships.

In order to examine the links between mothers' responsiveness during parenting practices and children's social competence, two models will guide the research. These models relate to the concepts, "direct and indirect pathways," as proposed by Ladd (1992). He described these "pathways" as both (a) direct and (b) indirect parenting "influences." "Direct influences" relate to parenting practices that teach or model social behaviors specifically targeted to children's social behaviors with peers, while "indirect influences" are social behaviors that parents teach children and are not specifically targeted toward children and their peer interactions.

Ladd also used the concept "pathways" in reference to (a) direct and (b) indirect model "effects". The term "direct" refers to parenting practices that are specifically associated with children's with each aspect of children's peer social competence, while "indirect" refers to intervening behaviors, such as children's peer social skills, between parenting practices and children's peer relationships. One troublesome aspect in the use of the terms "direct and indirect pathways" is the very confusing conceptualization in the original literature (Ladd, 1992). Another area of difficulty relates to the inconsistent usage of these terms in several studies on parenting practices and children's social competence (Bhavnagri & Parke, 1991; Mize et al., 1995).

Therefore, in order to avoid confusion in the current research, the following explanations are provided to clarify the terms "direct and indirect pathways" as related to parenting practices and children's social competence. These explanations will also hopefully be of use in reducing the inconsistency and confusion in the professional child development literature.

First, as suggested by Ladd (1992), there are two "pathways of parenting influences" on children's peer relationships. These "pathways" include (a) direct and (b) indirect parenting "influences." For the sake of clarity in the current research, the term "parenting practices in the peer context" will replace the term "direct parenting influences" and the term "parenting practices in the nonpeer context" will replace the term "indirect parenting influences."

Parenting practices in the peer context refer to parents' activities that control or develop children's social skills with peers. These activities frequently occur within the peer context, or, the emphasis of the activities is on the child-peer relationship. Examples would

include providing prosocial directives (e.g., teaching children manners or problem solving skills with peers) and managing children's interactions with peers (e.g., unobtrusive monitoring of positive peer interactions, time out and reasoning in response to negative peer interactions, power assertions in response to negative peer interactions).

Parenting practices in the nonpeer context refer to parents' activities or family interactions that do not currently or specifically relate to children's peer relationships. These activities occur within the family context (Ladd, 1992). Examples include overall parenting style, and disciplinary and comforting practices (e.g., power assertion, induction, bribing, time out, warmth) not emphasizing peer relationships, as well as parents' interactions within their marital relationships.

Second, there are two "pathways" or model "effects" of parenting practices on children's peer relationships (Ladd, 1992). The direction of these relationships is most often from the family to the child and includes (a) the "direct effects" model and (b) the "indirect effects" model or the "mediating effects" model (Ladd, 1992). For the sake of clarity in the current research, the term "nonmediated model" will replace the term "direct effects model" and the term "mediated model" will replace the term "indirect effects model."

Examples of nonmediated associations include the relationship of parenting practices to children's peer acceptance and friendships. There may also be nonmediated associations of parenting practices with children's peer social skills. And third, there may be nonmediated associations of children's peer social skills with children's peer acceptance and friendships.

The mediated associations refer to the mediation of children's peer social skills in the relationship between maternal parenting practices and children's peer acceptance and

friendships. That is, the relationship between parenting and children's social relationships may be mediated by children's intervening peer social skills.

In summary, the concept of "pathways" describes:

(1) Nonmediated associations of responsiveness of parenting practices in the peer context with peer acceptance and friendships.

(2) Nonmediated associations of responsiveness of parenting practices in the nonpeer context with peer acceptance and friendships.

(3) Mediated associations of responsiveness of parenting practices in the peer context with peer acceptance and friendships.

(4) Mediated associations of responsiveness of parenting practices in the nonpeer context with peer acceptance and friendships.

These "pathways" can be represented by the following 2 x 2 grid:

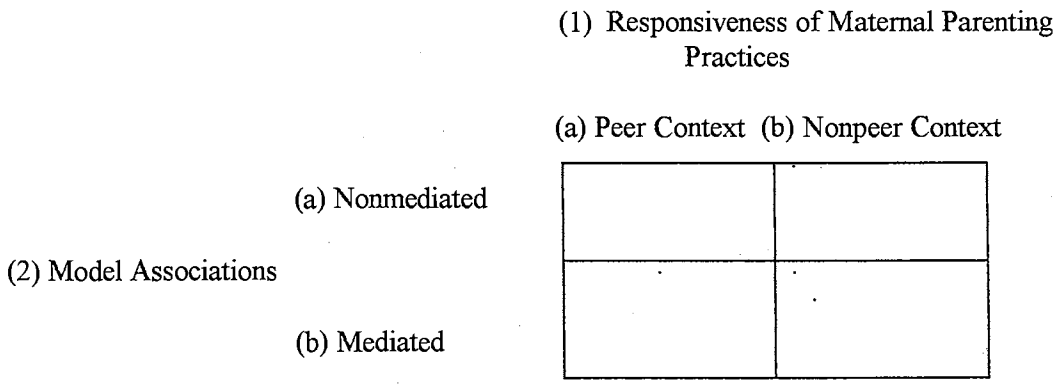

Figure 1. Responsiveness of Parenting Practices and Model Associations Grid.

The following figures provide detailed explanations of the grid:

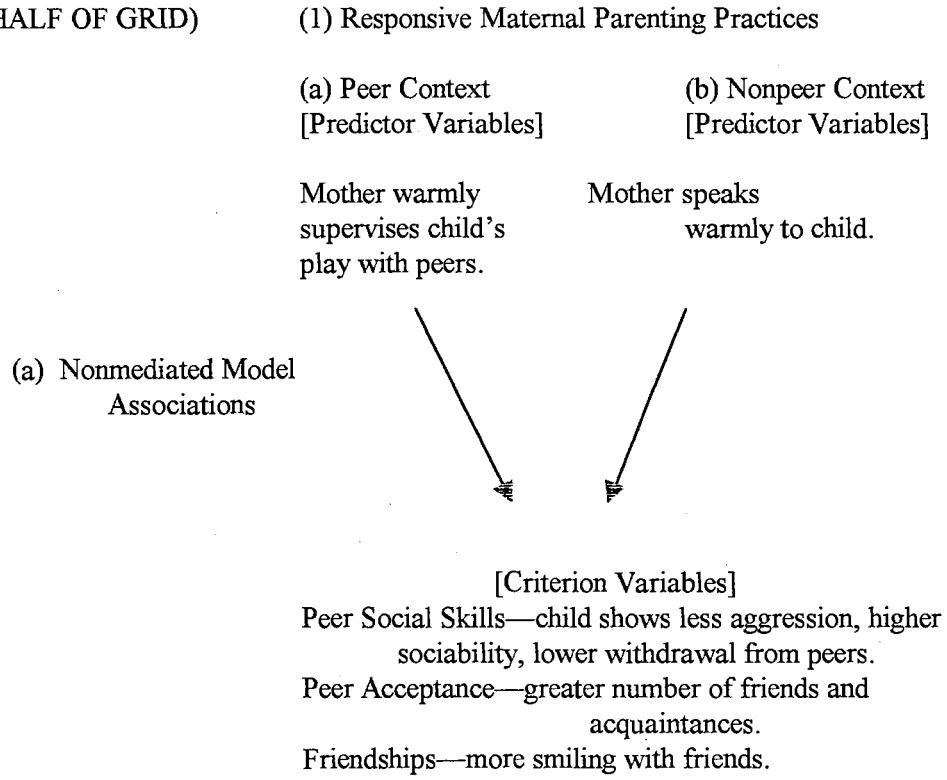

Figure 2. Top Half of Grid—Detailed.

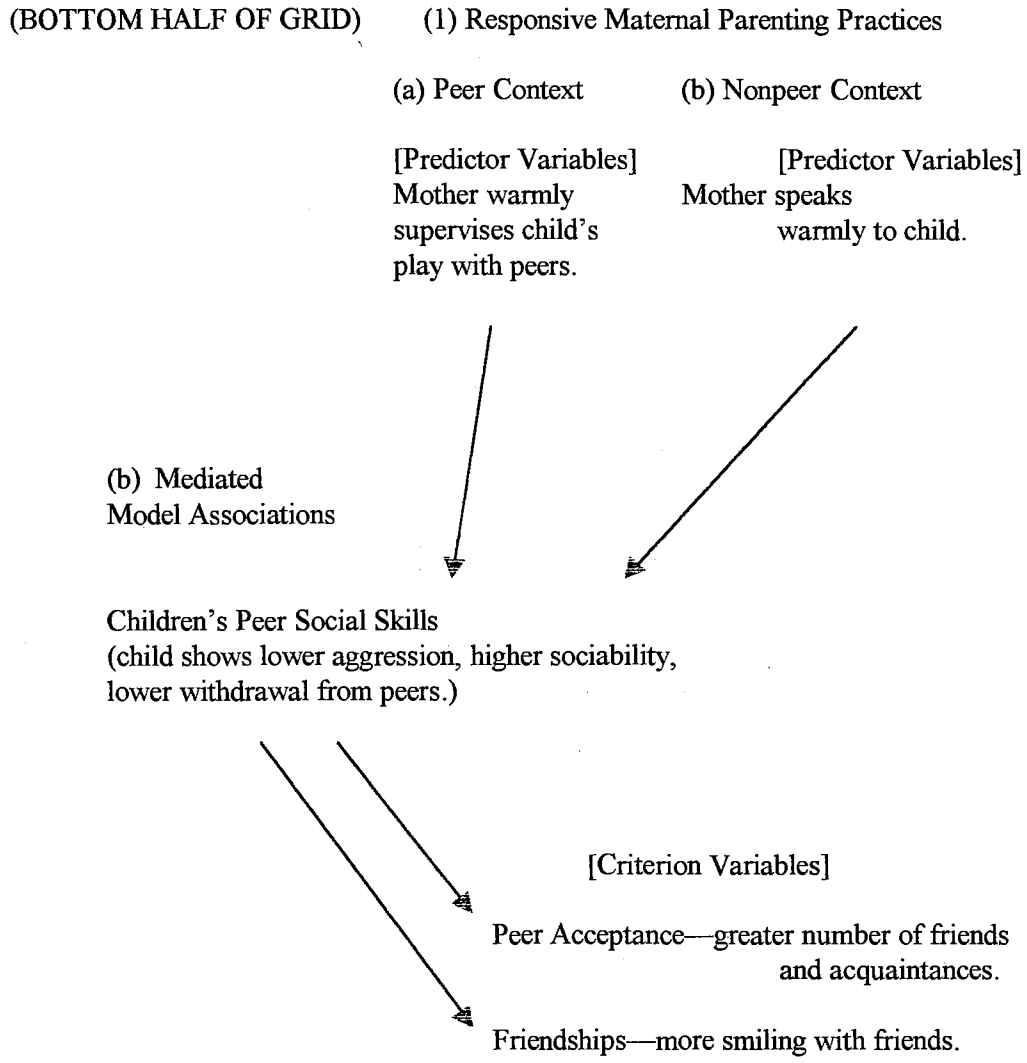

Figure 3. Bottom Half of Grid—Detailed.

Models

The following models of the responsiveness of parenting practices in the peer and nonpeer contexts, and nonmediated and mediated models will guide this research:

Model 1: Non-Mediated Model

(1) The nonmediated associations of the responsiveness of maternal parenting practices in the peer context with children's peer social skills.

(2) The nonmediated associations of the responsiveness of maternal parenting practices in the peer context with children's peer acceptance and friendships.

(3) The nonmediated associations of the responsiveness of maternal parenting practices in the nonpeer context with children's peer social skills.

(4) The nonmediated associations of the responsiveness of maternal parenting practices in the nonpeer context with children's peer acceptance and friendships.

(5) The nonmediated associations of children's peer social skills with children's peer acceptance and friendships.

Model 1

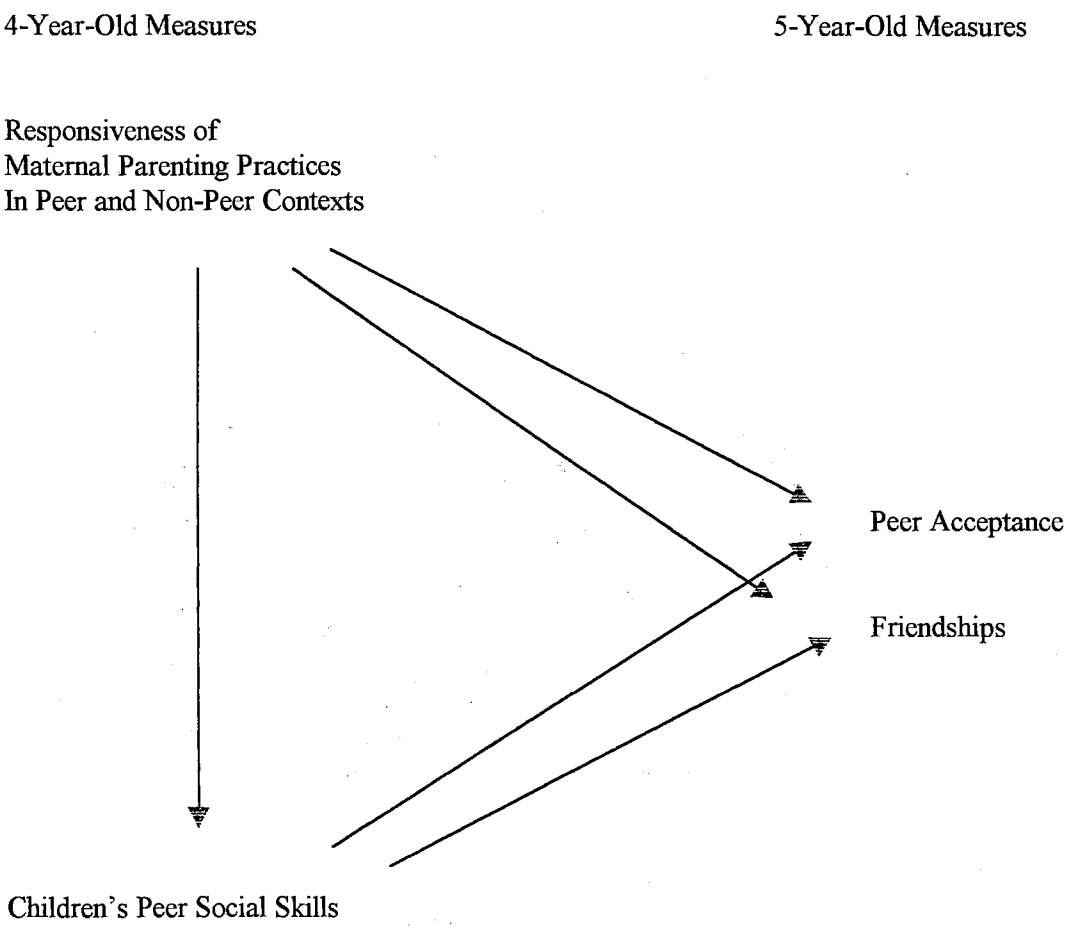

Figure 4. Nonmediated Model of hypothesized relationships between variables—the responsiveness of maternal parenting practices in the peer and nonpeer contexts, children's peer social skills, peer acceptance, and friendships.

Model 2: Mediated Model

The mediation of children's peer social skills in the relationship between the responsiveness of maternal parenting practices in the peer and nonpeer contexts and children's peer acceptance and friendships.

Model 2

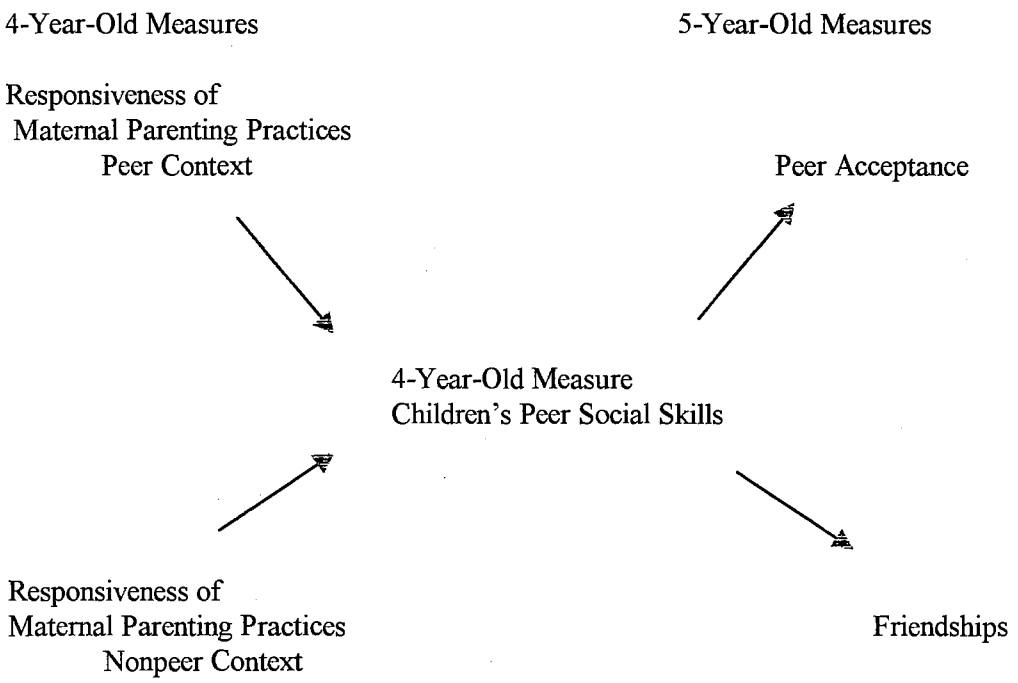

Figure 5. Mediated Model of hypothesized relationships between variables—children's peer social skills as mediating in the relationship between the responsiveness of maternal parenting practices in the peer and nonpeer contexts, and childrens' peer acceptance and friendships.

Theoretical and Conceptual Framework

Bandura (1989) developed the Social Cognitive Theory that explains human development from a social cognitive (i.e., learning) perspective. Several areas of social development are important to children, particularly those influenced by parental modeling. Parents model social behaviors for their children that provide tools for gaining new knowledge to dealing with social situations in the world. Because of children's initial cognitive immaturity, they partly depend on this modeling for learning. For young children in particular, learning from parents can take the form of observation and becomes a powerful tool in children's social development.

Parents and children also participate in reciprocal social learning (Bandura, 1989). Infants and young children learn most readily from their parents when there are positive interactions during their verbal and nonverbal communications. Children may initiate communications that parents imitate, thereby engaging in sustained responsiveness and vice versa. This mutual behavior or modeling conveys an interest and fascination in each other that further promotes responsiveness and warmth in relationships. These dyadic sensitive imitations establish further patterns of social responsiveness and learning through mutual modeling.

Children are keen observers of parental behaviors and take what they learn to influence their own future behaviors. Bandura (1989) explained that this learning would establish behavioral patterns, moral or judgment standards, and cognitive competencies that influence social behaviors. Several social behaviors that children learn from parental modeling include language, gender roles, and morals. This research will explore the notion of the responsiveness of parental behavior modeling as influencing children's peer social

skills. It will also assess the influence of this parental responsiveness as manifested in children's social competence with peers and friends.

Peers provide another set of opportunities for young children to learn about themselves and their environment. Bandura (1989) posited that peers represent the larger community of learning experiences for children where they can observe, learn, and model peer interaction behaviors. Peer social skills are further developed as children mature and expand their peer experiences into school, church, or other social venues. Children are especially sensitive to, and influenced by peers because these relationships serve as references for comparative efficacy appraisal and verification of opinions, attitudes, and behaviors. Therefore, this study will explore the importance of social skills with peers as influencing children's peer acceptance and friendship relationships.

Definitions

Parenting Practices

Parental influence is one of the most powerful factors in young children's social development (Henggeler, Edwards, Cohen, Summerville, 1991). This influence in the form of parenting practices can be manifested in (1) responsive and unresponsive parenting, (2) parenting practices in the peer and nonpeer contexts, and (3) nonmediated and mediated models (Bowlby, 1969/1982; Ladd, 1992).

Responsive Parenting Practices—Warmth. Responsive parenting practices refer to parents' overall positive behaviors toward their children that include sensitivity, love, and pleasure in the parenting role (Bowlby, 1969/1982). Research suggests that parents who are responsive to their children's needs promote secure attachments with their children (Ainsworth et al., 1978). Furthermore, positive (i.e., responsive) parenting practices,

specifically while disciplining and comforting (e.g., parental warmth) children are linked to children's increased social competence with peers (Baumrind, 1967/1978; Burleson, Delia, & Applegate, 1992). These positive feelings are manifested in children's expectations about relationships with peers and friends (LaFreniere & Sroufe, 1985; Park & Waters, 1989; Youngblade & Belsky, 1992) and may have important lifelong implications for intimate relationships (Cassidy & Berlin, 1994). Therefore, responsiveness during parenting practices that will be the focus of this study will be disciplining and comforting (e.g., maternal warmth).

Responsive, warm parenting practices during child-disciplining situations are conceptualized as practices that are caring and sensitive to children's needs for guidance. Parents who engage in responsive parenting practices prefer a positive, learning atmosphere during disciplining. They provide loving, firm discipline for their children that does not diminish or negate the children's responsibilities for their own actions (Baumrind, 1996). Thus, responsive parents use reasoning in disciplinary situations and warmth in comforting and learning situations. Research suggests that this type of discipline (i.e., authoritative discipline) promotes prosocial behavior in children (Baumrind, 1996).

Maternal warmth while comforting is also considered a responsive parenting practice with positive implications for children's social development. Studies have shown that parents who used warmth in child rearing practices had children who demonstrated the most competence (Baumrind, 1978; Stocker, 1994). In particular, research suggests that maternal comforting is important in developing children's positive peer social skills and acceptance by peers (Burleson et al, 1992).

In the research literature, a clear distinction between responsiveness of parenting practices in the peer and nonpeer contexts has not been made. This unclear distinction makes it difficult to determine from the literature, which of these responsiveness of parenting practices are related to peer interactions. Therefore, the current research will focus on determining the distinct relationships of parenting practices in both the peer and nonpeer contexts on children's peer acceptance and on children's interactions with their friends.

Unresponsive Parenting Practices. Unresponsive parenting practices are conceptualized as parental behaviors that convey negative feelings including insensitivity, lack of caring, harshness, anger, frustration, or a combination of negative feelings in the presence of their children. Unresponsive parenting does not promote positive relationships with children (Bowlby, 1969/1982). Research suggests that this type of parenting also relates to children's expectations and behaviors in future relationships in negative ways (Ainsworth et al., 1978).

Unresponsive parental disciplining is conceptualized as practices that are not caring or attentive to children's needs for guidance, as well as practices that are inconsiderate, demeaning, and may use tyranny (Baumrind, 1996). Additionally, parents may resort to permissive/neglectful or power assertion/coercion behaviors in their disciplining style and may be insensitive, permissive, as well as punitive and threatening to children. Research suggests that this type of disciplining (i.e., authoritarian and indifferent-uninvolved) is frequently manifested as parental use of aversive and/or neglectful techniques, that result in noncompliance behaviors on the part of children (Baumrind, 1968/1996; Maccoby & Martin, 1983).

For the purposes of the current research, a variety of parenting practices of the responsive/unresponsive dimension will be considered. However, the research does not consider the high expectations and control/low expectations dimension of parenting practices.

Parenting Practices in Peer and Nonpeer Contexts. The concept of parenting practices relates to parental behaviors or actions that are directly or indirectly related to children's skills with peers and friends. Parenting practices in the peer context refers to maternal socialization of children's behaviors with peers and friends. This is demonstrated by maternal parenting practices that teach, model, control, organize, monitor, or manage children's behaviors and activities in the peer and friend social context (Ladd, 1992; Ladd & Golter, 1988). Research suggests that mothers who directly facilitated and supervised (e.g., organized, managed) their children's play with peers had children who demonstrated more positive social skills (Bhavnagri & Parke, 1991).

Parenting practices in the nonpeer context refers to behaviors or attitudes that occur within the family or marital context, that subsequently impact children's social relationships (Ladd, 1992). Research suggests that coercive family processes during parental disciplining of children results in children's lower peer acceptance (Dishion, 1990).

Nonmediated and Mediated Model Influences. The concept of model influences refers to nonmediated or mediated models, or direction of influences of parenting practices on children's social competence (Ladd, 1992). The nonmediated model would include the direct or nonmediated relationship of parenting practices to children's peer acceptance and friendships. The mediating model includes the indirect or mediated relationship of children's

social skills. Specifically, this model includes the relationship between parenting practices and children's peer acceptance and friendships as mediated by children's peer social skills.

Previous research suggests that some maternal parenting practices directly predict both children's peer social skills and peer acceptance, and that peer social skills can mediate the relationship between parenting practices and children's social relationships (Pettit, Dodge, & Brown, 1988; Pettit, Harrist, Bates, & Dodge, 1991). Other research supports the nonmediating effects model of parenting practices, but not the mediating model (Hart, Ladd, & Burleson, 1990).

Children's Social Competence

Research suggests that social competence is a complex set of behaviors that include children's peer social skills, and the intense and intimate behaviors of friendships. (Howes, 1983/1990; Mendelson, Aboud, & Lanthier, 1994b). Experts have discussed social competence as children's adaptation to age-appropriate social situations, particularly emphasizing good social adaptation as central to effective social competence (Elicker, Englund, & Sroufe, 1992).

This research focuses on the social competence behaviors of children's peer social skills, peer acceptance, and friendships. The following figure depicts the relationship among children's social competence, peer social skills, peer acceptance, and friendships. Children's social competence is the overall behavior, with children's peer social skills, peer acceptance, and friendships as subcategories within their overall social competence.

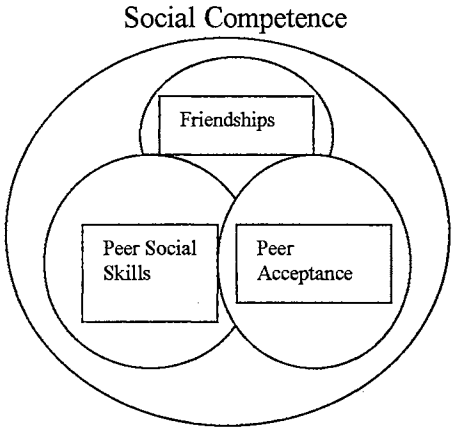

Figure 6. Model of Social Competence—Social Competence, Children's Peer Social Skills, Peer Acceptance, and Friendships.

Children's Peer Social Skills. Children's peer social skills refer to young children's behaviors that facilitate their relationships with their peers and friends (Hartup, 1989). Peer social skills are developed within the family environment and are positively and negatively influenced by parenting behaviors (Cassidy, Kirsh, Scolton, & Parke, 1996; Fagot, 1997; Kochanska, 1992). These skills are also developed within peer and friend relationships (Hubbard & Coie, 1994; LaFreniere & Sroufe, 1985; Mize & Pettit, 1997).

Research suggests that peer social skills include specific behaviors with peers and friends that influence these relationships. Peer social skills are typically described as positive (e.g., appropriate responsiveness to peers, successful entry into the peer group, cooperation, good communication skills, social critiques) and promoting of peer acceptance and friendships (Black & Hazen, 1990; Dodge, Pettit, McClaskey, & Brown, 1986; Hubbard & Coie, 1994; Nelson & Aboud, 1985). In contrast, peer social skills can also be negative or inappropriate (e.g. disruptive, causing conflict, disagreeable) and preventing of children's success at developing peer acceptance and friendships (Dodge et al., 1986).

Peer Acceptance. Peer acceptance refers to children's relationships with peers that may include their sociometric status or popularity (i.e., popular, average, controversial, neglected, and rejected), as well as numbers of peers and friends (Asher & Coie, 1990). Children notice their peers as early as during infancy while watching, gazing and smiling at, talking to, and reaching for each other (Rubin & Coplan, 1992). They are continually drawn to, and fascinated by peers throughout childhood (Hartup, 1989).

Research suggests that peer acceptance is important in children's overall sense of well being, with more popular children reporting less loneliness than rejected children (Sanderson & Siegal, 1995). Studies have also found that children with higher levels of social skills demonstrate more peer acceptance (Pettit, Clawson, Dodge, & Bates, 1996).

Friendships. Children's friendships refer to children's close relationships with peers that involve more personal behaviors than would a nonfriend relationship. Some peer relationships develop into friendships, which are important in children's social development (Ladd, 1990). Young children's friendships are typically close, reciprocal, and mutually committed interactions (Hartup, 1989).

Typically, children's friendships include social skill behaviors that are intimate and emotional. Frequently, children with friends demonstrate the ability to understand and anticipate another's thoughts and feelings (Slomkowski & Dunn, 1996). They also feel comfortable disclosing secrets or private thoughts to friends (Rotenberg & Sliz, 1988).

Summary

This research explores the important role that parents play in the development of their children's social competence—peer social skills, peer acceptance, and friendships. Research suggests that the positive development of these three areas of children's social

competence influence children's subsequent relationships and sense of overall well being (Ladd, 1990; Sanderson & Seigal, 1995).

First, maternal responsiveness during parenting practices are explored. The responsiveness of parenting practices is on a continuum and studies suggest that the sensitivity displayed in them is an important aspect of overall parenting (van den Boom, 1997). The specific parenting practices of disciplining and comforting are assessed, since these practices have been shown to be important in the development of children's social competence (Baumrind, 1967/1978; Burleson et al., 1992). This research is designed to examine responsive and unresponsive parenting practices and their relationships with children's peer social skills, peer acceptance, and friendships.

Second, the relationships between parenting practices in the peer and nonpeer context and children's social competence are examined (Ladd, 1992). Parenting practices in the peer context describe mothers' socialization activities, including the monitoring, management, supervision, and arrangement of their children's activities with peers (Mize et al., 1995; Bhavnagri & Parke, 1991). Parenting practices in the nonpeer context describe family interactions and behaviors (e.g. disciplining, the marital relationship) associated with children's social competence (Dishion, 1990).

Finally, nonmediated and mediated models guide the research (Ladd, 1992). This research assesses the nonmediated relationships of maternal parenting practices with children's social competence (Mize & Pettit, 1997; Putallaz, 1987). Additionally, the research assesses the relationship between responsiveness of maternal parenting practices and children's peer acceptance and friendships as mediated by children's peer social skills.

CHAPTER 2

REVIEW OF LITERATURE

Introduction

This literature review discusses the relationship of parent-child interactions to children's social competence. Specifically, research is presented that describes responsive and unresponsive maternal parenting practices in the peer and nonpeer contexts as related to children's peer social skills, peer acceptance, and friendships. Research that explores nonmediated and mediated models of parenting practices related to children's peer social skills, peer acceptance, and friendships is integrated into the appropriate sections on parenting practices and children's social competence.

The relationship between parenting practices and children's social competence serves as the organizing framework for the review. In order to provide a context for parenting practices, the first section of the review presents research related to children's social competence. This includes subsections of research related to children's peer social skills (Dodge et al., 1986; Kratz, 1982; Leaper, 1991), the relationship between children's peer social skills and peer acceptance (Asher & Coie, 1990; Pettit et al., 1996), and the relationship between children's peer social skills and friendships (Nelson & Aboud, 1985; Slomkowski & Dunn, 1996). Presenting the literature on children's social competence in this format is consistent with the models proposed by this research, as children's peer social skills may mediate in the relationship between parenting practices and children's peer acceptance and friendships.

The second major portion of the literature review discusses the parent-child relationship. Parenting style as reflected by parent responsiveness and parenting practices that demonstrate specific responsive parental behaviors toward children including disciplining and comforting are the main subsections in this portion of the review. In recent

years, the conceptualization of responsiveness of parenting style and practices has broadened into three bodies of literature in child development. These include research that focuses on (1) parent-child attachment (Ainsworth et al., 1978; Bowlby, 1969/1982) as a reflection of a responsive parenting style; (2) parental support and control (Baumrind, 1966/1978; Maccoby & Martin, 1983; Roberts & Strayer, 1987; Mize & Pettit, 1997) as a demonstration of warmth and authoritative parenting; (3) and parent monitoring and supervision (Ladd & Golter, 1988; Mize et al., 1995) as indictors of positive management, coaching, and warmth in parenting practices.

The first subsection presents research that explores parent responsiveness as a continuum of responsive and unresponsive parenting style (Ainsworth et al., 1978; Bowlby, 1969/1982). Subareas under this section include parent responsiveness related to children's peer social skills (Cassidy et al., 1996; Fagot, 1997; LaFreniere & Sroufe, 1985), parent responsiveness related to peer acceptance (Cohn, 1990; LaFreniere & Sroufe, 1985), and parent responsiveness related to friendships (Park & Waters, 1989; Youngblade & Belsky, 1992).

Parenting practices are discussed in the next subsection of the literature review. Subareas examining parenting practices in peer contexts related to children's peer social skills (Bhavnagri & Parke, 1991) and peer acceptance (Ladd & Golter, 1988; Mize et al., 1995) are presented. There is a gap in the research exploring parenting practices in peer contexts related to friendships. Following this section, research examining parenting practices in nonpeer contexts related to children's peer social skills (Denham, Renwick, & Holt, 1991; Putallaz, 1987) and peer acceptance (Rudolph, Hammen, & Burge, 1995;

Henggeler et al., 1991) is presented. Again, there is a gap in the research exploring parenting practices in nonpeer contexts related to friendships.

The next subarea under parenting practices addresses one specific parenting practice in the nonpeer context: parental disciplining practices. Overall parenting styles of disciplining are discussed in this section (Baumrind, 1966/1975; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Maccoby & Martin, 1983). Two subsections of this disciplining section are discussed related to children's peer social skills (Kochanska, 1992; Pettit et al., 1991) and children's peer acceptance (Hart, DeWolf, Wozniak, & Burts, 1992). There is a gap in the research exploring the parenting practice of disciplining in the peer and nonpeer context related to friendships.

Although the research on parental disciplining is most often examined from the nonpeer context perspective, there is research that has explored parental disciplining from the peer context perspective. The next section of the literature review presents the Hart et al., (1990) and Pettit et al., (1988) studies of parental disciplining practices in the peer context related to children's peer social skills and peer acceptance. As has been the case with other parenting practices, there is a gap in this literature exploring parental disciplinary practices in peer contexts as related to children's friendships.

The last section examining parenting practices in the peer and nonpeer contexts presents the research exploring parental comforting practices as an indication of maternal warmth (Baumrind, 1967/1978/1996). Subsections under parental comforting in the peer context presents research exploring parenting practices related to children's peer acceptance (Mize & Pettit, 1997; Pettit et al., 1996), while the nonpeer context explores parenting practices related to children's peer social skills (Roberts & Strayer, 1987) and friendships

(Stocker, 1994). The gap in the literature is in the area of parental comforting practices in the peer context as related to children's peer social skills and friendships, as well as in the nonpeer context related to children's peer acceptance.

Children's Social Competence—Children's Peer Social Skills, Peer Acceptance, and Friendships

The discussion in this first section will present research related to children's social competence. This will provide an appropriate context for the following discussions of parent responsiveness and parenting practices, in relation to children's social competence. Children's social competence refers to children's overall set of social behaviors with peers and friends, including their peer social skills, peer acceptance behaviors, and the more intimate social behaviors of friendships. Research from the social sciences has explored the influence of parent-child interactions on children's social competence, including children's peer social skills, peer acceptance, and friendships (Cohn, 1990; LaFreniere & Sroufe, 1985; Youngblade & Belsky, 1992). Of interest to this study will be the influence of maternal parenting practices (disciplining and comforting) and children's peer social skills on peer acceptance and friendships.

Children's Peer Social Skills

Children's positive peer social skills include successful entry into peer groups (Dodge et al., 1986). Additionally, responsive communication skills are important social skills with peers (Burleson et al., 1995).

One important opportunity for children to practice and develop their social skills is when they must negotiate entry into peer group activities. Research by Dodge, et al. (1986) assessed the peer social skills of 43 white, lower- and middle-class elementary school children. The purpose of the study was to determine the specific social skills that children used to gain entry into peer group activities. Each child was rated by peers and teachers for

entry skill. Children were then assigned to a low or high skill group and responded to videotapes about children's behaviors related to peer group entry.

Results demonstrated that high status (i.e., socially skilled) children were rated by coders as more skillful and successful during the peer group entry task than the low status group. Their successful behaviors included synchronous behavior (i.e., verbal behavior by the entry child that is appropriate to the group's on-going activity), positive reciprocity (i.e., the joint positive interchanges between the host child and the entry child), and connectedness (i.e., the joint verbal exchanges between the host child and the entry child that are determined to be correctly related in content). These children also refrained from negative conflict, as well as disruptive and disagreeable behaviors. Overall, the socially skilled children demonstrated friendly social skills that engaged peers in the group (Dodge et al., 1986).

Responsiveness to peers as a peer social skill was also explored in a study by Leaper (1991). A sample of 138 mostly white, middle-class children in preschool and early elementary school classrooms was assessed for speech acts that included collaboration, controlling, obliging, and withdrawing. Findings suggested that children used collaborative (i.e., cooperative) speech acts that illustrated contingent responding to peers. These responding speech acts were reflective of their positive social skills with peers (Leaper, 1991).

Social participation with peers is another area where young children can demonstrate social skillfulness. Krantz (1982) explored social interactions among 47 middle-class preschoolers and their peers. Results revealed significant correlations among sociometric awareness, social participation, and perceived popularity. Thus, when children exhibited awareness and consistent use of better social skills their social status rankings by peers increased. Children who were consistently involved with their peers in activities such

as play, were better able to ascertain peer preferences and were viewed as more socially skilled (Krantz, 1982).

In summary, children's social skills include successfully gaining access to peer groups, using responsive communication skills, being friendly to peers in groups, and being consistently involved in peer play activities. These positive skills set the stage for peer and friendships interactions.

Children's Peer Social Skills and Peer Acceptance

Children's social skills are also important in helping them to achieve peer acceptance. Peer acceptance is frequently referred to as peer popularity and describes children's social status within their peer group (i.e., acceptance or rejection). Children are typically classified in one of five social status groups--popular, rejected, neglected, average, or controversial (Asher & Coie, 1990).

Popular children are typically accepted by their group of peers. Children classified as rejected are overtly disliked by their peers, and children classified as neglected may be reasonably well liked but they typically lack friends in the school classroom and are described as shy. When rated as playmates, average and neglected children may have similar ratings, but rejected children are rated as extremely low. Rejected children also have the problem of stability of their rejected status—with research documenting this stability for as long as up to 5 years. Controversial children may have both negative and positive behaviors, are the most socially active of all children, are frequently in the company of adults as well as children, and demonstrate a lot of humor that makes their peers laugh (Asher & Coie, 1990).

Typical behaviors of accepted children include: they obey rules, they are helpful and friendly, and they have prosocial interactions with peers. These children are often characterized as leaders and cooperative. Socially rejected children are typically: disruptive

and aggressive at all ages, with aggression becoming more indirect as the child ages—self-isolating and with hypersensitivity behaviors, easily angered, and unhappy (Asher & Coie, 1990).

In research by Pettit, et al. (1996), children of mothers who used harsh discipline were assessed for their use of social skills in relation to peer acceptance. Findings revealed that children with higher levels of social skills were classified most often as accepted, while those with lower levels of social skills were classified as rejected. The researchers expressed concerns related to the lack opportunities for social skill development that rejected children may experience early in life. This may be a compounding problem as these young children are rejected by their peers, which further reduces their opportunities for social skill development, which makes them even more rejected, and so forth.

As children's positive social skills promote their peer acceptance, friendship relationships may also develop. In a study by Ladd (1990), children's peer acceptance was examined in relation to the quantity of their friendship relationships. The sample consisted of 53 mainly white, middle-class, kindergarten children and 72 of their classmates. Children were assessed for quantity of prior friendships (i.e., number of close friends, "other" friends, and acquaintances); mental age; classroom friendships (i.e., three preferred classmates—"someone you like to play with at school," and three disliked classmates); peer acceptance (i.e., frequently referred to as popularity or peer status—liking and disliking nominations by peers and teachers); early school adjustment by teachers, children, parents, and observers (i.e., the Preschool Behavior Questionnaire—PBQ; Behar, 1977; the California Preschool Social Competence Scale—CPSC; Levine, Elzey, & Lewis, 1969; teacher recordings of children's school absences and visits to the school nurse; researcher observations of children's classroom behaviors with peers; parental ratings of children's school avoidance); and end of school year assessments of children's peer interactions and school adjustment.

Results revealed that children's peer status (i.e., their peer acceptance) in the classroom predicted their quantity of friendship relationships. Children who were popular had, made, and kept more friends than the other peer status groups. Thus, the attributes or personal characteristics that help children achieve peer acceptance also help them in their more intimate and meaningful friendship relationships (Ladd, 1990).

The implications of this research for the assessment of children's peer acceptance and friendships are important. Similar to results found by Vandell and Hembree (1994), and Ladd (1990) suggested that quantity of friendships is one aspect of peer acceptance (i.e., popularity). In the research by Mendelson, et al. (1994a, 1994b) on the other hand, quality of friendships is independent of peer acceptance (see related studies under children's friendships). Therefore, both constructs (i.e., peer acceptance and quality of friendships) were assessed in this research.

In research by Parker and Seal (1996), children's peer acceptance and the quantity of their friendship relationships were examined. The sample consisted of mainly European-American, upper-middle-class children at a summer camp, where social assessments included acquaintances before camp, camp friendships, and acceptance by peers. Findings suggested that popular children had more friends and were reported as less lonely, more entertaining, pleasant to be around, and noted for their good sense of humor.

Peer acceptance also increases children's potential for the quantity of best friend relationships and subsequently promotes a sense of well being. Sanderson and Siegal (1995) studied 94 preschool, middle-class children in Australia who had been classified into the peer status groups of controversial, neglected, average, popular, and rejected. They were also assessed for stability of mutual friendships and self-reports of loneliness.

Results indicated that all of the popular children had at least one mutual friendship and none of the neglected children had mutual friends. Some of the children in each of the

other groups had mutual friends. Loneliness was reported as significantly higher in the children rated as rejected, especially those who did not have stable mutual friendships. Overall, findings suggested an additive effect with both peer acceptance and mutual friendships translating into less loneliness for preschool children (Sanderson & Siegal, 1995).

In research by Black and Hazen (1990), an important area of social skillfulness was the effective use of communication skills. Subjects included 66 middle-class preschool children rated as liked, disliked, or low-impact by their peers. Two separate play observations were made of these children with classroom peers. Results indicated that children with good communication skills were more likely to be rated as popular by their peers. Communication skills that were specifically identified with children's high social status were appropriate responses to peers' comments and attention to the on-going topics of discussion (Black & Hazen, 1990).

In summary, children are accepted or rejected by their peers in terms of whether peers classify them as popular, rejected, average, neglected, or controversial. Children with higher social skill development are more often classified as accepted, which translates into the ability to form friendship relationships. In turn, children's friendships promote their continued social development.

Children's Peer Social Skills and Friendships

The social skills involved in understanding and anticipating another's thoughts, feelings, and desires have been shown to be significant factors in children's friendship relationships (Slomkowski & Dunn, 1996). Thirty-eight preschool children and their friends were assessed for two aspects of social understanding (e.g., false-belief tasks, affective perspective-taking tasks) and three aspects of connected communication (e.g., connected, play, and pretend turns).

Findings suggested that most conversations between friends occurred during interactive activities such as play. Also, connected communication-dominated friends' conversations, with social understanding coordinating these conversations. Thus, friends' social skills include the ability to communicate with each other in a mutually meaningful way (Slomkowski & Dunn, 1996).

Research by Rotenberg and Sliz (1988) showed that the social skill of disclosing secrets or intimate information could be shared in relationships. In a study of 16 kindergarten, second grade, and fourth grade children and their friends and nonfriends, assessments of personal disclosures were made with five disclosure tasks. Results indicated that friends typically shared very highly personal topics with each other, as friendships represented trust in close relationships that allowed for disclosure of personal emotions. Additionally, these personal disclosures occurred across developmental groups, including the kindergarten children (Rotenberg & Sliz, 1988).

Friendship relationships are important in children's overall social skill development. Research shows that friends provide helpful, social critiques for each other as well as prefer each other as mediators of social behaviors. Although some critiques may be in the form of arguments or conflicts, these sometimes provide the feedback that is needed for social development. It seems that friends promote children's social development more than nonfriends (Nelson & Aboud, 1985).

Children's friendships are also positively correlated with their overall academic adjustment (Vandell & Hembree, 1994). In a study of 326 elementary-age, primarily Caucasian and middle-class children, peer social acceptance, friendships, and social competence were explored. Measures assessed social status (i.e., popularity scores, in terms of "liking" rankings that were converted to peer acceptance scores—popular, average, controversial, neglected, and rejected), quantity of mutual friendships, and children's social,

emotional, and school adjustment (teacher ratings of adjustment, grades, test scores, and children's own social competence with peers ratings).

Results showed that popular children were more likely to have mutual friends while rejected children were the least likely to have mutual friends. Popular children also had higher socio-emotional competence ratings. Having more friends was also a good predictor of children's social competence. Interestingly, although children's social status (i.e., peer acceptance scores) and the number of mutual friendships were found to be significantly related (i.e., Chi-square=143.41, $p < .0001$, both derived from nominations), they were also found to be unique contributors to children's overall social competence scores (Vandell & Hembree, 1994).

The study by Vandell and Hembree (1994) specifically related to the current research as peer acceptance in this study was measured by quantity of friends using the Friendship Network Inventory (FNI). Vandell and Hembree (1994) found that children's peer acceptance (i.e., the quantitative measure of social status, sometimes referred to as popularity) was highly related to children's quantity of mutual friends. Research by Parker and Asher (1993) also suggests that the number of mutual friends is reflective of peer acceptance. Therefore, the current research used this quantitative measure of peer acceptance.

In research that related to the assessment of peer acceptance and friendships, Mendelson, et al. (1994a, 1994b) found that peer acceptance and the quality assessment of friendship are two independent constructs. Therefore, for the purposes of the current research, peer acceptance was assessed using quantitative measures, while friendships were assessed using quality measures (see the following studies).

In two studies by Mendelson, et al. (1994a, 1994b) friendships and popularity (i.e., frequently referred to as peer acceptance or social status) were found to describe two aspects

of children's social relationships. The sample included 70 white, middle-class kindergarten children. Friendships were rated for quality (i.e., companionship, similarity, durability, and intimacy). Pairs of children were rated for friendliness while they engaged in two five-minute videotaped sessions: a drawing task and building a block tower with Duplo blocks. Popularity was assessed by "liking" ratings (i.e., a quantitative measure of peer acceptance).

Findings revealed that friendship and popularity (i.e., peer acceptance) are functionally distinct. Children's friendship qualities did not enhance their popularity with peers. Therefore, these studies emphasized the independence of the two constructs—friendships imply the qualities of mutuality, intensity, and dyadic behaviors while popularity is acceptance by peers. The researchers concluded that it is a mistake to assume that popular children always have quality friendships (Mendelson et al., 1994a, 1994b).

These studies by Mendelson, et al. (1994a, 1994b) raised two important issues related to the current research. First, they assessed the construct of friendships as a quality and therefore, raised the issue of measuring the quality or quantity of children's friendships. Several studies (Ladd, 1990; Stocker, 1994; Vandell & Hembree, 1994; Youngblade, Park, & Belsky, 1993) used quantitative instruments that measured numbers of mutual friends, including close friends and friends, and children's abilities to have, make, and keep these friends across the academic year. On the other hand, Parker and Asher (1994) found that the number of mutual friends (i.e., the quantitative measure) covaried with peer acceptance, and they suggested that it was probably a better reflection of peer acceptance than it was of children's friendships. For this reason, researchers such as Mendelson, et al. (1994a, 1994b) developed more quality measures that examined the characteristics of children's friendships, including intimacy, sharing, and similarity. Therefore, the current research followed the initiative and intent of Mendelson, et al. (1994a, 1994b) as the measure of the

quality of children's friendships (i.e., Friendship Dyad Behaviors) was developed by the researcher.

The second issue related to the independence or dependence of friendships and peer acceptance that was addressed in the previous discussion. Research by Mendelson, et al. (1994a, 1994b) suggested that peer acceptance and quality of friendships were independent constructs. Therefore, this research used the measure of quality of friendships (i.e., Friendship Dyad Behaviors) that was developed by the researcher to assess friendships, and the Friendship Network Inventory (FNI), developed by the researcher's advisor (i.e., Dr. Laura Hubbs-Tait) as the measure of peer acceptance.

In summary, children who have positive social skills tend to be rated as popular with their peers and subsequently have more mutual friendship relationships. Some research shows that this is not always the case though. It is also important to assess popular children for social competence in the form of friendships. Additionally, children and their friends seem to communicate with each other in mutually meaningful ways, disclose personal emotions, and provide social critiques of each other's behaviors. Therefore, friendships serve an important role in children's social development and competence.

The Parent-Child Relationship

The first social relationship that most children develop is with their parents. Interactions within the parent-child dyad set the stage for children's social development and future relationships with peers and friends. Therefore, establishing a positive relationship between the parent and child is important and requires the presence and availability of parents (Sroufe, 1990). An available, responsive parenting style is reflected in the ability of parents to respond warmly, appropriately, and promptly to signals of their children (Baumrind, 1996; De Wolff & Van Ijzendoorn, 1997). Incorporated with the overall style of parental responsiveness are the specific, positive practices or behaviors parents use in

child rearing, such as during comforting and disciplining (Darling & Steinberg, 1993) that will also affect children's future social development.

Parental readiness and responsiveness are important components of parenting practices (van den Boom, 1997) and these behaviors can move back and forth along a continuum from responsive to unresponsive. The focus of this study was to examine these parenting practices as they influence children's peer social skills, peer acceptance, and friendships.

Parent Responsiveness

Responsiveness during parenting is important in promoting the parent-child relationship (Thompson, 1997). Originally discussed by Bowlby (1969/1982) as critical in establishing attachment (van den Boom, 1997) and later further defined by Ainsworth and her colleagues (Ainsworth et al., 1978), parent responsiveness includes the mother's ability to perceive her child's signals accurately, and then her ability to respond to these signals in a prompt and appropriate manner (De Wolff & Van Ijzendoorn, 1997).

The attachment that develops between children and their parents as a result of parent responsiveness is a strong relationship (Bowlby, 1969, 1982). Attachment has been characterized by Ainsworth et al. (1978) as consisting of secure attachment and two types of insecure attachment, resistant and avoidant (Ainsworth et al., 1978). Numerous studies have documented the importance of secure versus insecure attachment in influencing children's later relationships with peers (Cassidy et al., 1996; LaFreniere & Sroufe, 1985; Turner, 1991).

Originally, Bowlby (1969/1982) described the framework that infants use to evaluate the relationship they have with their mothers. He called these "internal working models." [Bowlby later referred to these models as "representational models" (Cassidy et al., 1996).] These models are constructed from children's expectations of behaviors from

the physical environment, parents, self, and how each of these interacts with the others (Bowlby, 1969/1982).

Children who are classified as securely attached have secure "representational models," or social and emotional expectations of relationships. Securely attached children approach social relationships in a positive manner and expect the same to be reciprocated (Cassidy et al., 1996). In contrast, insecurely attached children approach social relationships more negatively and expect more negative results (Cassidy et al., 1996; LaFreniere & Sroufe, 1985; Turner, 1991). Interestingly, studies have shown that successful interventions to improve attachment relationships lie in the area of improving parental responsiveness (Van Ijzendoorn, Juffer, & Duyvesteyn, 1995). For example, studies by Anisfeld, Casper, Nozyce, and Cunningham (1990) and van den Boom (1988) found that as maternal responsiveness increased, infant security of attachment also increased. Prevention and therapeutic intervention programs were used in these studies to promote mothers' responsiveness toward their infants.

Parent Responsiveness in the Nonpeer Context Related to Children's Peer Social Skills

Parent responsiveness has been shown to influence children's peer social skills. For example, LaFreniere and Sroufe (1985) studied 40 preschool children of middle- and low-economic status, with family histories of instability and stress. The subjects were first-born and were assessed for peer interaction behaviors, teacher evaluations of peer social skills, and peer acceptance.

The analysis revealed that children with responsive parents ranked significantly higher in the use of the social skills of social exchanges and attention, and were more accepted by peers than children of unresponsive parents. In contrast, children of unresponsive parents had higher scores on the negative social behaviors included in

dominance such as verbal and physical assertion and aggression. They were also ranked as less accepted by peers (LaFreniere & Sroufe, 1985).

Forty, British preschool children and their mothers participated in a study by Turner (1991) to examine the links between parent responsiveness and children's use of social skills with peers. Social skills with peers were measured using transcribed and coded observations that focused on duration and level of interaction. Results showed differences in social skills as a function of parent responsiveness and gender. Preschoolers of unresponsive parents had more overall negative social skills (e.g., dependent, aggression, control) than preschoolers of responsive parents, and boys of unresponsive parents showed aggression-type behavior while girls of unresponsive parents showed more dependent behaviors (Turner, 1991).

Research that explored connections between parent responsiveness and peer-related representations of social skills was conducted with 160 mainly white, middle-class, preschool through fifth-grade children (Cassidy et al., 1996). The analyses suggested that children respond to peer emotions and play behaviors in accordance with their parent responsiveness. When confronted with controversial peer situations, children of responsive parents had more positive social skill responses than children of unresponsive parents. Also, children of responsive parents showed positive social expectations, as they believed that their peers would react with more positive intent and show more positive emotions in these controversial situations than their peers with unresponsive parents (Cassidy et al., 1996).

In a study by Fagot (1997), 156 middle-class, mainly white toddlers and parents were assessed for the relation between parent responsiveness and peer relationships. Peer measures included observer assessments of children's peer social skills, as well as teachers' responses to a 7-point rating scale of children's playgroup behaviors with peers.

Results indicated that children who had responsive parents demonstrated positive social skills with peers (e.g., paying attention, talking together, reacting to the other child).

Conversely, children who had unresponsive parents were more likely to have negative social behaviors with peers (e.g., negative peer responses to positive initiations). The study suggested that these responsive vs unresponsive parent-child interchanges become very influential in children's development of social skills (Fagot, 1997).

Parent Responsiveness in the Nonpeer Context Related to Peer Acceptance

Several studies have shown the relationship between parent responsiveness and children's peer acceptance. The previously discussed research by LaFreniere and Sroufe (1985) explored children's peer acceptance in the context of their parental responsiveness. Findings of this study suggested that children of responsive parents were more accepted by peers than children of unresponsive parents. The children of the unresponsive parents were typically ranked as rejected and neglected by peers.

Responsive parents and their children's peer acceptance at school were also explored by Cohn (1990). During the summer following kindergarten, 89 mothers were assessed for responsiveness and then their children were ranked for peer acceptance during the fall of the first year of school. Results suggested that boys of responsive parents were more likely to be accepted by their peers, while boys of unresponsive parents were more likely to be rejected by their peers.

Parent Responsiveness in the Nonpeer Context Related to Friendships

The influence of parent responsiveness on children's friendships has been explored in several studies. Specifically, the quality of the children's best friendships was assessed in relation to responsiveness of mothers (Park & Waters, 1989). The sample consisted of 33 preschool children and their best friends, who played in a laboratory session for one hour. Measures assessed parent responsiveness and best friend dyadic relationships.

Findings suggested that dyads of responsive parents had more positive behaviors including: harmony, responsiveness, and less controlling behaviors. Dyads of unresponsive

parents had less positive behaviors including protests and complaints. Thus, children of responsive parents have more quality friendships (Park & Waters, 1989).

Exploring the developmental and longitudinal impact of the responsiveness of parents and preschool children's friendships was the purpose of a study by Youngblade and Belsky (1992). Seventy-three white, middle- and working-class mothers were assessed for responsiveness at one year. At 3 years the parent-child relationships were assessed again for control, teaching, and self-reliance. And at the 5-year probe the children and their best friends were assessed for friendship behaviors such as connectedness, synchrony, and proximity. Path analysis revealed that early positive maternal-child interactions forecasted later positive friendships, and that children of responsive parents had less dyadically negative and asynchronous friendship behaviors.

Similarly, the 1993 study by Youngblade et al. suggested that children's friendships were related to the quality of both parents' responsiveness. Seventy-three white, middle- and working-class preschoolers and their parents were assessed for responsive relationships. Friendship behaviors of the child dyads were measured in a laboratory setting. Results of the study indicated that children of responsive fathers showed more positive, interactive friendship behaviors.

Other research has also shown that children of responsive mothers demonstrated more positive friendship behaviors (Kerns, 1994). Thirty-seven white, middle-class preschool children and their best friends were assessed for quality of friendships. Parent responsiveness was assessed and videotaped sessions of friendship dyads were scored. Results revealed that children of responsive parents exhibited the highest socially positive behaviors with friends while children of unresponsive parents showed significantly more negative friendship relations.

In summary, responsive parenting in the nonpeer context is related to children's overall social competence, as demonstrated by positive peer social skills, peer acceptance, and friendships. Therefore, responsive parenting behaviors enhance children's social competence in their peer relationships and friendships.

Parenting Practices

It has been suggested that parenting practices are reflective of parents' overall parenting style and are the specific actions that parents take to help socialize their children (Darling & Steinberg, 1993). These actions are typically situation specific and are associated with children's social development. Examples might include using time-out and inductive techniques such as reasoning as positive discipline techniques, hugging as a comforting measure, and laughing and giggling as positive social behaviors. Positive parenting practices are important in helping children acquire social skills that promote peer relationships (Darling & Steinberg, 1993).

Overview of Parenting Practices in the Peer Context Related to Children's Peer Social Skills

Bhavnagri and Parke (1991) explored parents' management of children's relationships with peers. In a study of 70 white, middle- and upper middle-class socioeconomic status preschoolers and their parents, play sessions with children's gender and age-matched peers were videotaped. Parental management behaviors toward their children were rated on a five-point scale during four- six-minute play sessions.

Findings revealed that parental management of children's peer play sessions resulted in the use of more positive social skills by the children. These skills included more turn-taking and positive affect. Both mothers and fathers used similar management techniques during the sessions. The study suggests that parent management of children's peer play sessions promotes the use of positive social skills with peers (Bhavnagri & Parke, 1991).

Parents teach their children social skills that are subsequently used in peer interactions. Laird, et al. (1994) explored the link between maternal-child discussions about peer relationships and children's social skills. The sample consisted of 39 mainly professional, Caucasian mothers and children. Measures included maternal interviews about the social skills that they discussed with their children. Children were rated by peers and teachers for social skillfulness.

Analyses revealed that mothers used discussions of child-peer emotional interactions to teach their children social skills. These conversations predicted peer skillfulness, perhaps by presenting opportunities for mothers to provide concrete examples of optimal peer social skills that preschoolers could understand and use (Laird et al., 1994).

Overview of Parenting Practices in the Peer Context Related to Peer Acceptance

Parental management of children's activities in the peer context has also been shown to influence children's acceptance by peers. In the study by Mize, at al. (1995) mothers' beliefs and supervision practices were assessed in relation to children's peer acceptance. Seventy-six, predominately white, middle-SES mothers and their preschool children participated in the study. Measures included mothers' beliefs about children's peer social skills, mother's perceptions of social competence and acceptance, social knowledge, videotape ratings of mothers' supervision of their children's peer interactions, and teacher ratings of children's peer acceptance.

Results suggested that mothers of children with higher peer acceptance ratings were less directly involved in supervising their children's peer interactions. On the other hand, children with lower peer acceptance had mothers who were intrusive and

showed inappropriate guidance in their peer activities. Recommendations were made that included more quality supervision and less intrusion into children's peer activities. (Mize et al., 1995).

Research by Ladd and Golter (1988) examined direct parenting practices in relation to children's peer social skills. The sample consisted of 58 middle-class kindergarten children and their parents, who were assessed three times during the school year. Measures consisted of telephone interviews assessing parent management of children's peer relations (i.e., referred to as parent monitoring—(1) intrusive supervision consisted of parents who were generally present, involved in, or joined in their children's peer activities; (2) less intrusive supervision consisted of parents who were not generally present or involved in their children's peer activities but were aware of these activities and may have watched from a distance), classroom observations of children's behaviors with peers (i.e., peer social skills) nominations and ratings of children's classroom peer status (i.e., acceptance), mental age, and teacher ratings of children's peer social skills (California Preschool Social Competence Scale—CPSC and the Preschool Behavior Questionnaire—PBQ).

Results suggested parents who used less intrusive supervision of their children's peer interactions (i.e., peer context parenting practice—monitoring) had children, particularly boys, with higher peer acceptance later in kindergarten. In contrast, parents who used more intrusive supervision of children's peer interactions (i.e., still a peer context parenting practice—monitoring) had children who were less accepted by peers. The researchers speculated that this intrusive monitoring may be too intrusive or that children with less peer acceptance may actually need more monitoring and their parents were responding to this need.

In summary, parenting practices in the peer context influence children's peer social skills and peer acceptance. Parental management and supervision that is positive (i.e., higher quality and less intrusive) results in positive peer social skills and peer acceptance. Research has not yet been conducted on, and is needed to identify the relationship between parenting practices in the peer context and children's friendships.

Overview of Parenting Practices in the Nonpeer Context Related to Children's Peer Social Skills

In a study by Putallaz (1987), mothers' behaviors were examined in order to assess the link between maternal modeling of social behaviors and children's social skills with peers. Fifty-five mainly white, middle- class socioeconomic status mothers and their first-grade children participated in the study.

Social skills of the target mothers and children were measured in three videotaped contexts: mother-child, mother-mother (i.e., another mother), and child-child (i.e., another child). Questionnaires and hypothetical situations-responses were also administered to the mothers and children.

Results indicated that positive social skills modeled by mothers during interactions with children and other mothers were highly correlated with target children's used of positive social skills with peers. Positive social skills included being less disagreeable and demanding. In contrast, mothers who modeled more negative social skills had children who demonstrated more negative and controlling behaviors. Thus, positive parent modeling serves to foster a repertoire of positive social skills that children can use with peers (Putallaz, 1987).

Mothers' positive emotionality in ongoing mother-child interactions and child-child peer play has been associated with preschoolers' use of social skills with peers (Denham et al., 1991). The researchers videotaped 48 middle- to upper middle- SES preschooler's and their mothers during 4 play-teaching activities. Teachers completed the Baumrind Preschool Behavior Q-sort (BPB; Baumrind, 1968) and the Behar Preschool Behavior Questionnaire (PBQ; Behar & Stringfield, 1974) for each child. The analyses revealed that mothers' positive behaviors (e.g., support, appropriate structure, positive emotion, and allowance for autonomy) predicted children's use of positive social skills and assertiveness with peers, while buffering them from sadness (Denham et al., 1991).

Overview of Parenting Practices in the Nonpeer Context Related to Peer Acceptance

Children's perceptions of self, family, and peer relationships are significantly affected by internalized cognitive representations of others (Rudolph et al., 1995). In a two-part study of 161 mainly white school-age children, cognitive representations of mothers were linked to peer acceptance. Multiple measures were developed for the study that provided assessments of children's self-schemas and representations of mother and peers.

The analysis demonstrated correlations among peer acceptance, family relationships, and social functioning. Children with negative maternal representations and low family support had more negative impressions of peers and were less accepted by peers. Conversely, children rated as "social stars" had more positive parent and peer representations and were more accepted by peers. Path analysis suggested that children's beliefs about peers mediated the relationships between their family representations and peer acceptance (Rudolph et al., 1995).

Research has also shown that positive parental practices increase family positive relations and peer acceptance (Henggeler et al., 1991). In a study of 24 mainly white, middle-class SES elementary school children and their families, multiple measures were used to assess children's peer relationships (e.g., PCS; Harter, 1985; SCS-CBC; Achenbach & Edelbrock, 1981), parental relationships, and parent-child interactions.

Findings indicated that positive parent behaviors predicted children's peer acceptance. In particular fathers' positive behaviors predicted children's peer acceptance. Mothers who encouraged their children to be more independent from the family had children who were accepted by peers. Overall, higher quality family interactions fostered development of children's peer acceptance (Henggeler et al., 1991).

In summary, studies demonstrate that positive parenting practices are related to children's use of successful social skills with peers and acceptance by peers. Conversely, children who are the recipients of negative parental behaviors seem to use poor social skills and are less well accepted by peers. Additionally, actual parental practices in the form of actions or modeling seem to be very influential in developing children's social skills and peer acceptance. Studies have shown that some subtle parental expressions of values and attitudes can also be important in the development of children's social skills and acceptance by peers. Research has not yet been conducted on, and is needed to identify the relationship between parenting practices in the nonpeer context and children's friendship relationships.

Parental Disciplining Practices in the Peer Context

Research suggests that parenting practices related to parental disciplining focus on the child-peer context. The styles identified by Baumrind (1968/1978) including permissive [i.e., permissive-indulgent and permissive-neglectful as delineated by Maccoby and Martin

(1983)], authoritarian, and authoritative means of parental control are used within this context.

Parental disciplining practices in the peer context related to children's peer social skills and peer acceptance. Family disciplinary practices are important in the development of children's social cognitions and social skills related to peer acceptance as Hart et al. (1990) explained in their study exploring the link between mothers' disciplinary styles, children's expectations of outcomes of social skills, and children's peer acceptance. The induction discipline style uses explanations and reasoning that teach children the impact of their actions on others—"Don't be mean to Johnny because it will hurt his feelings," while power assertions (e.g., physical punishment, threats) focus primarily on mothers' self-interests and not on children's peer relationships.

Subjects consisted of 144 elementary-age children and their mothers. Mothers' disciplinary styles were measured by interviews and children's outcome expectations of social strategies were measured using two hypothetical conflict situations and 24 possible resolution strategies. Additionally, children's peer acceptance was assessed through ratings of peer social status.

Analyses demonstrated that children of mothers who used more power assertive disciplinary styles expected to get their way if they used more unfriendly-assertive strategies to resolve peer problems. Also, mothers who used more power assertive disciplinary styles had children who were significantly less accepted by their peers. These findings were especially true for boys. Path analysis suggested that although there was not a direct path from mother's disciplinary style to children's expectations to their peer acceptance, mother's

disciplinary styles did make independent and significant contributions to children's social expectations and peer acceptance (Hart et al., 1990).

Research suggested that peer acceptance was influenced by parent disciplining practices. In a study by Pettit, et al. (1988), links among children's family disciplining practices, their social skills, and their peer acceptance were examined. The sample consisted of 46 preschool, Caucasian children and mothers, from lower socioeconomic status backgrounds. Measures included peer and teacher assessments of children's social skills, and questionnaires, vignettes, and stories that assessed family experiences from the mothers' perspectives.

Path analysis indicated that children's social skills mediated in the relationship between family experiences and children's peer acceptance in the classroom. Family experiences that were strongly related to children's social skills included mothers' biased expectations and endorsements of aggression toward peers. This suggests that there may be covert influences from mothers in the form of attitudes, values, and expectations. These influences were found to be more stable than other early family experiences such as discipline or teaching (Pettit et al., 1988).

In research conducted by Pettit, et al. (1996), mothers' discipline practices, family ecology, and children's peer skills were examined to identify precursors to children's peer acceptance or rejection. The sample consisted of two groups (N=309, N=276) of mostly white children during kindergarten and first-grade, and their mothers. Measures included: children's social competence—peer acceptance, aggression, academic skills, and social skills; parent discipline techniques; parental interest in children's peer experiences; observations of family interactions; and family ecology and stress.

Findings showed that aggression was a distinguishing characteristic of children's acceptance by peers where rejected children demonstrated aggression more often than accepted children. Children's acceptance or rejection status was also found to be stable over the kindergarten and first-grade years. Mothers' early harsh discipline was found to be a significant predictor of rejected children's social status. Rejected children were also found to come from lower socioeconomic status family ecology situations. Path analysis suggested that children's behavior characteristics were found to mediate the relationship between family ecology and children's rejection by peers (Pettit et al., 1996).

Parental Disciplining Practices in the Nonpeer Context

The idea of an overall parenting style has been conceptualized by Baumrind to include qualitatively different means of parental control: permissive, authoritarian, and authoritative (Baumrind/1966/1968/1975; Darling & Steinberg, 1993). Permissive parenting has been further revised into permissive-indulgent and permissive-neglectful Maccoby & Martin, 1983). Parenting styles are typically independent of a particular situation and are displayed over a range of parent-child interactions. They convey the parental attitude toward child socialization, as opposed to actions or reactions toward child behaviors (Darling & Steinberg, 1993). These four typologies of parental control are used in the context of power for child discipline (Baumrind, 1978).

Parents who use permissive disciplining believe that children are capable of self-actualization and should be left to do this. Moreover, children have the ability to independently learn all the socially acceptable behaviors that are necessary to function in society. Parents are accepting and positive about their children's desires and behaviors.

Children are therefore freed from adult rules and regulations and parents provide only minimal guidance in their children's socialization (Baumrind, 1978).

Permissive-indulgent parents use low levels of control with their children; are democratic, supportive, non-directive, and trusting of their children; require little evidence of mature behavior; and show indulgence in their children's desires. Permissive-neglectful parents also use low levels of control and support, while demonstrating disengagement in child-rearing activities. They may also be quick to meet the child's needs in order to end involvement with the child as soon as possible (Lamborn et al., 1991; Maccoby & Martin, 1983).

The use of authoritarian disciplining by parents would include strict family control and order, parental power through coercion, and highly uncompromising demands on children. Parents believe in punishment, keeping children in subordinate positions, restricting autonomy and verbal discussion, and believe that parents are the final word for what is right (Baumrind, 1978/1996).

Authoritative disciplining includes parental control that balances pleasure and freedom with duty and obligation. These parents believe in verbal give and take with children, they direct children's discipline in a rational manner using power as well as reasoning, value autonomy and children's individual needs, set high standards, and demand realistic, socially appropriate behaviors while providing responsive actions, fostering social competence (instrumental competence), and honoring the individual child's desires (Baumrind, 1978/1996).

Research on parental disciplinary practices indicates that over time parenting style remains relatively stable, while specific disciplinary practices change as children mature

(McNally et al., 1991). In a study of 32 mainly white, middle-class mothers of elementary school-age children, interviews were conducted every two years, over an eight-year period. Results revealed that over these eight years parent disciplinary styles remained highly consistent, even though specific practices varied. The study findings showed that parents would frequently use common sense in disciplining their children by imposing decreased privileges for wrongdoing for older children, while imposing isolation as punishment for younger children. This mirrors society in that privileges come about with successes and children learn this through a parental disciplinary style that continues to expect achievement as children mature (McNally et al., 1991).

Parental disciplining practices in the nonpeer context related to children's peer social skills. Relationships with parents are very influential in developing children's social skills with peers. The role that parents play in shaping their children's development will significantly affect the outcomes.

Mothers influence children's social interactions with peers in disciplining situations, including the balance of power negotiations between themselves and their children. Kochanska (1992) studied 76 middle-class, five-year-olds and their mothers in control and influencing situations (e.g., disciplining). Each child then interacted in a control and influencing situation with a peer. It was hypothesized that positive maternal influencing strategies (e.g., polite suggestions and explanations) would predict positive, social skills with peers, while maternal power-assertions including negative control (e.g. threats, criticism, reprimands) and physical enforcements would predict unskillful peer interactions.

The analysis suggested that mothers who used polite guidance had children who rarely used coercive social skills with peers. Additionally, children whose mothers used physical enforcements (e.g., forceful guidance, restraint, spanking) were aggressive and

unsuccessful in peer interactions. Thus, mothers' use of appropriate power negotiations with their children predicted more successful peer interactions for their children (Kochanska, 1992).

Pettit, et al. (1991) explored the influence of responsive family social interactions on children's subsequent peer social skills in kindergarten. The sample consisted of 30 kindergarten boys from lower- and middle-class socioeconomic status, Caucasian families. Measurement included home observations of family interactions, coded for parental control, teaching, social contact, reflective listening, coercive interactions, responsiveness, intrusiveness, and involvement. The aggression scale of the CBCL was used to assess children's social behaviors, and teachers rated children's social skills on the TCPR.

Path analysis suggested that responsive family interactions (i.e., family histories) are means for children to learn social skills in the nonpeer context. Children from these responsive families were rated as having more positive social skills and lower ratings of aggression with peers. The children found it difficult to use aggression in conflicts, preferring more prosocial behaviors that they learned in the family context. The researchers suggested that children's social skills are mediating factors between family interactions and their subsequent peer interactions (Pettit et al., 1991).

In a study by Weiss, Dodge, Bates, and Pettit (1992) two cohorts (cohort 1, n=309 and cohort 2, n=275) of kindergarten children and their parents from lower socioeconomic status backgrounds were assessed for: (1) parental harsh disciplinary punishment or restrictive discipline, (2) parent report of children's peer social skills (i.e., child aggression—CBCL; Achenbach & Edelbrock, 1983), (3) parent ratings of child temperament, (4) children's responses to video cartoon vignettes to assess social information processing patterns, (5) teacher ratings of children's use of aggression as a social skill with peers, (6) peer ratings of children's use of aggression, and (7) behavior observations of

playground and classroom aggression with peers. Results indicated that parents who used harsh disciplining techniques early in the children's life had children who exhibited peer social skills in the form of externalizing behaviors—specifically aggression. Harsh discipline effects were significantly related to aggression with peers even when socioeconomic status, children's temperament, and marital violence were controlled. Aggression by these children was especially prevalent in the school environment (Weiss et al., 1992).

In a related study, Deater-Deckard, Dodge, Bates, and Pettit (1996) examined the link between physical discipline techniques used by African American and European American mothers and their children's peer social skills—externalizing behaviors—up to four years later. The participants consisted of 100 African American and 466 European American mothers and their kindergarten children. Original assessments were conducted when children were in kindergarten and then again when they were in grades 1, 2, and 3. Measures consisted of mothers' reported use of physical disciplining strategies (e.g., hitting, spanking) and ratings of children's poor social skills—externalizing behavior problems (e.g., aggression and conflict)—by teachers, peers, and mothers.

Analyses revealed that there are culture-specific links between physical disciplining techniques used by mothers and children's social skills with peers. European American children had higher aggression and externalizing behavior scores when their mothers used physical discipline. There was no such trend for African American children. Children of both groups who were classified as physically abused scored higher on externalizing behaviors. The researchers suggested further study is needed to determine what behaviors various cultural groups consider as good parenting (Deater-Deckard et al., 1996).

Larzelere and Merenda (l994) conducted a study that also explored the impact of parental discipline on children's social skills. They assessed the effectiveness of mothers' disciplining techniques on toddlers' peer social skills at various levels of the children's distress. Forty mostly white, middle- and working-class mothers kept a record of maternal attitudes (i.e., not angry to very angry), child emotion (i.e., not distressed to very distressed), talking (e.g., commands, explanation, discussion, scolds, threatens, yells, verbal withdrawals), and acting (e.g., diverts, ignoring, time out, slaps, spanks, withdrawal, other techniques). Of the 21 possible parental discipline responses, seven categories that included combinations of behaviors were developed including reasoning, corporal and noncorporal consequences, and forced compliance.

Results suggested that reasoning is most effective in disciplining children when used in a moderate stress situation. When toddlers are highly stressed by an incident—using poor social skills (e.g., fighting, yelling) that provoke parental discipline—and are then disciplined in a negative manner, reasoning is mostly ineffective and children may not cognitively process the reasoning (i.e., the reasons) for later behavioral changes. On the other hand, reasoning is very effective with less harsh discipline techniques and in less stressful incidents. The researchers suggested that children are more likely to process information for later internal moral change when reasoning is used with less harsh disciplining and in less stressful situations. They also suggested that the appropriate use of reasoning is important in the development of children's positive social skills (Larzelere & Merenda, 1994).

Another study exploring parental discipline practices was conducted by Grusec and Kuczynski (1980). The sample consisted of middle-class families (20 mothers of 4- to 5-

and 20 mothers of 7- to 8-year olds). Mothers were instructed to identify the types of discipline they would use in 12 different child misbehavior incidents, including 7 disobedience situations (e.g., ignores call to dinner, ignores request to stop making noise, repeatedly argues about turning off TV, refuses belligerently to clean room, breaks vase playing ball, ignores warning to not play on stair railing, runs into street after ball, and is almost hit by car) or 5 poor social skills situations (e.g., pushes peer off tricycle, hits peer with bat and draws blood, refuses to share candy with peer, makes fun of others, steals from mother). Mothers were allowed to respond to these situations with any discipline technique they desired, including combining techniques. The ordering of disciplining combinations was also noted.

Findings revealed that mothers would use a variety of disciplining techniques based on the situation. For example, 95% of the mothers would use power assertion (e.g., withdrawal of privileges, forced performance of appropriate behavior, forced compliance with requests) for behaviors such as breaking objects, running into the street to get a ball and is almost hit by a car, and refusing to share properly; and matter of fact induction (e.g., description of rules or consequences of behavior, statement of norms) for behaviors such as stealing money from mother. Approximately 70% of these same mothers said they would also use power assertion in the form of verbal and physical acts (e.g., threats, yells, commands, shame, physical punishment—hit, spank, slap) as needed. And, 80% of these same mothers identified other-oriented induction (i.e., description of physical or emotional consequences to others, including mother) as another possible option. The important finding of the study suggests that mothers are flexible in their disciplining practices based on the

types of misbehaviors or use of poor social skills by their children (Grusec & Kuczynski, 1980).

One of the reasons that parents discipline their children is so that as they mature their social skills will be appropriate. Therefore, it is important to examine the effectiveness of parental discipline in promoting children's social skills. A study by Grusec and Goodnow (1994) explored parental disciplining practices. Results of the study suggested that effectiveness of these practices referred to children's internalization of appropriate social skills. These skills were guided by an internal acceptance of parental (i.e., societal) values and attitudes rather than by the fear or anticipation of external consequences (i.e. parental discipline).

In research conducted by Kochanska (1997), well and depressed mothers and their preschool children were assessed for use of power in disciplinary situations and the degree of internalization of rules, at two separate times. At time 1 the children (N=103) were 26-41 months old and at time 2 the children (N=99) were 43-56 months old. Measures included observations of responsiveness (e.g., mother-to-child, child-to-mother, shared positive affect, mutually responsive orientation, mother-reported mutually responsive orientation), discipline (i.e., mothers' observed use of power and mothers' reported use of power), children's internalization of mothers' rule (e.g., observed prohibition, request, reluctance, mother-reports), and mothers' perspective taking.

In this study, mothers' diagnoses and children's gender showed no significant main effects. The analyses did reveal, however, that maternal-child reciprocal interactions were important as part of the overall socialization process. Specifically, mothers' use of lower power (control) in parent-child interactions was related to highly, mutually responsive

mother-child interactions. Also, highly, mutually responsive mother-child interactions were significantly associated with children's internalization of mothers' rules (Kochanska, 1997).

Peer relationships were impacted as mothers' frequent use of physical enforcements, negatives, and unclear commands predicted children's high scores on Aggressive/Unsuccessful styles of peer social skills, and low scores on Immediately Successful/Prosocial styles of social skills. Conversely, mothers' frequent use of suggestions predicted children's low scores on the Inarticulate/Coercive peer social skills (Kochanska, 1997).

Parental disciplining practices in the nonpeer context related to peer acceptance.

Coercive family processes affect children's use of social skills with peers and peer acceptance (Dishion, 1990). A study of 206 mainly white, lower-class boys in elementary school and their families explored the hypothesis that parental disciplining practices will influence the interpersonal successes of children with their peers. Family discipline was assessed with home observations and family stress was measured by parental reports including: daily hassles, parent employment status, adjusted family income, number of children per parent, and number of health problems experienced in the family. Child measures included the teacher and parent versions of the Child Behavioral Checklist (CBC; Edelbrock & Achenbach, 1984) and peer acceptance. Results found that boys who were classified by their peers as socially "rejected" were more likely to have come from problematic families and to subsequently exhibit antisocial skills with peers. Typical family interactions for these boys involved family stress (i.e., parent report of hassles and parent report of life events), the use of aggression in conflicts, and inconsistent discipline practices including negative "power assertion." Also consistent with this disturbing picture was that

the peer relations for these boys were substantially more antisocial than were those of "popular" or "average" boys (Dishion, 1990).

Hart, DeWolf, Wozniak, and Burts (1992) also found that parental disciplinary practices impact children's peer relationships. In a study of 106 mainly white, middle- to upper class preschool-age children and their parents, instruments measured parental disciplinary styles, peer social skills on the playground, and children's peer acceptance. Findings revealed that preschool children of more inductive mothers and fathers (i.e., less power assertive) were less disruptive in their playground behaviors with peers. These children were also more preferred by their peers and showed more prosocial and less antisocial playground social skills. Interestingly, daughters of power assertive mothers showed the least amount of positive peer social skills than any other group of children (Hart et al., 1992).

In summary, parental disciplining practices in the peer and nonpeer contexts that include the use of harsh, negative power control techniques are associated with children's use of negative social skills with peers and peer acceptance. Conversely, parental disciplining practices in the peer and nonpeer contexts that include reasoning, responsiveness, and flexibility are associated with children's positive social skills and peer acceptance. Research has not yet been conducted on, and is needed to identify the relationships between parental disciplining practices in the peer and nonpeer contexts and children's friendship relationships.

Parental Comforting Practices in the Peer Context

Parenting style also includes mothers' comforting practices as an indication of overall maternal warmth. According to Baumrind (1967/1996) maternal warmth indicates

an emotional expression of love and nurturance. Parents who provide nurturance to their children are also responsive to their children's needs. These parents find pleasure in their children, praise them, and are concerned for their overall welfare. Studies have shown that parents of the most socially competent children were warm to their children (Baumrind, 1978). Warm parenting does not mean permissive parenting. On the contrary, parents who provide warmth to their children may also be firm, consistent disciplinarians. These parents can be sincere, reciprocal, and empathetic as a part of their authoritative parenting style (Baumrind, 1996).

Parental comforting practices in the peer context related to peer acceptance.

The influence of warmth as a positive parental practice was explored by Mize and Pettit (1997). Two studies were conducted to compare mothers' coaching of their children's social behaviors and the mother-child relationship style as linked to preschoolers' peer social skills and peer acceptance. Subjects in study 1 (N=43 mother-child dyads, mainly white, middle-class) were videotaped and rated for responsive interaction styles (i.e. warmth and interactional synchrony) by the researchers. Teachers rated children's social skills using the Teacher Checklist of Peer Relations (TCPR; Coie & Dodge, 1988) and children rated each other in the classroom for peer acceptance. Subjects in study 2 (N=62), mainly European-American, middle-class in the university day care center and mainly Africa-American, working class in the after-school care center) were also rated on tapes, rated by teachers for social skills (TCPR), and rated by peers for acceptance. Children's receptive vocabularies were also assessed.

The analysis demonstrated that mothers who used warmth and mutually rewarding

styles (i.e., mothers and children show joint pleasure in each other's company such as smiling and laughing together) when interacting with their children have children who had better social skills with peers (e.g., expresses friendly responses to peers, outgoing personality, able to find and ask peers to play with them, is aware of the effect of his or her behavior on others), were less aggressive with peers, and were more accepted by peers. Thus, positive parenting practices are associated with children's social competence (Mize & Pettit, 1997).

In the previously reported study by Pettit, et al. (1996), the importance of maternal warmth was also part of overall parenting practices as related to children's use of social skills and peer acceptance. The sample consisted of 585 mostly white mothers and kindergarten children. Interviews with mothers and observations of their children revealed that maternal warmth was correlated positively with interest in children's peer activities and negatively with restrictive disciplining (e.g., severe, strict, often physical). Parent interest in children's peer activities was correlated with children's use of social skills. Children's use of social skills was positively correlated with peer acceptance.

Parental Comforting Practices in the Nonpeer Context

As discussed previously, comforting parenting practices included overall maternal warmth. Parents who demonstrate this style in their parenting practices express love, nurturance, and responsiveness (Baumrind, 1967/1996). Their children are the most socially competent (Baumrind, 1978).

Parental comforting practices in the nonpeer context related to children's peer social skills. In research conducted by Roberts and Strayer (1987), the importance of parental warmth was examined in relation to children's use of social skills in the classroom. Data were collected on a sample of 30 middle-class families that included mothers, fathers, and

preschool children in naturally occurring emotional distress interactions in the home. Parenting practices were assessed for warmth, responsiveness, and control. Children's use of social skills was assessed by teacher ratings.

Results of the study indicated a nonlinear relationship between parental responsiveness to emotion distress and preschool children's use of social skills, so that moderate levels of parental responsiveness to children's distress were associated with children's use of social skills. Parental warmth also showed a strong nonlinear relationship with children's social skills. Although warmth and responsiveness were related, they were also found to be distinct from each other. Pragmatically, responsive parents may teach their preschoolers' problem-solving, control behaviors during emotional distress that are more helpful in developing their social skills than are some comforting measures (Roberts & Strayer, 1987).

Maternal comforting has been shown to be correlated with children's social skills such as constructive expressions of emotions when angered (Eisenberg & Fabes, 1994). A sample of 79, mainly middle-class, Caucasian preschool children and their mothers were assessed for: (1) mothers' reactions to children's negative emotion, and (2) children's temperamental characteristics and coping in social interactions. Preschool teachers and aides also assessed the children for social skills.

Analyses revealed that mothers' use of comforting responses was associated with their children's use of appropriate social skills such as constructive verbal reactions to anger situations and low use of anger intensity. Children's constructive verbal reactions during anger situations are related to appropriate development of social skills and acceptance by peers. Thus, mothers' use of comforting measures promotes children's coping behaviors and the development of social skills (Eisenberg & Fabes, 1994).

Parental comforting practices in the nonpeer context related to friendships.

Stocker (1994) found that socially competent children also had other positive qualities in their lives. In this study, children's adjustment was examined in relation to other close interactions. Subjects included 85 Caucasian, middle-class, elementary school children and their mothers, siblings, and friends. Measures included friendships, sibling relationships, maternal warmth, and children's psychological adjustment (e.g., loneliness, depressive mood, self-worth) assessments.

Findings revealed that children's reports of friendships were positively correlated with reports of warmth and support used by mothers. These children reported lower levels of conflict in their friendships and demonstrated more positive affect in relationships overall. Additionally, these same children's reports of friendships were significantly correlated with feelings of greater self-worth (Stocker, 1994).

In summary, parenting practices in the peer and nonpeer contexts that reflect warmth and comforting are associated with children's development of positive peer social skills, peer acceptance, and friendships. Peer social skills include control of aggression, constructive verbal responses during anger, problem solving abilities, friendliness, and outgoing personalities. Research has not yet been conducted on, and is needed to identify the relationships between parental comforting practices in the peer context and children's peer social skills and friendship relationships. Research is also needed to identify the relationships between parental comforting practices in the nonpeer context and children's peer acceptance.

Gaps in the Research

There are gaps in the research related to parenting practices and children's peer social skills, peer acceptance, and friendship relationships. The following is a list of those gaps.

Parent Responsiveness

(1) Parent Responsiveness in the Peer Context Related to Children's Peer Social Skills, Peer Acceptance, and Friendships.

Parenting Practices

(1) Overall Parenting Practices in the Peer Context Related to Friendships.

(2) Overall Parenting Practices in the Non-peer Context Related to Friendships.

(3) Parental Disciplining Practices in the Peer Context Related to Friendships.

(4) Parental Disciplining Practices in the Non-peer Context Related to Friendships.

(5) Parental Comforting Practices in the Peer Context Related to Peer Social Skills.

(6) Parental Comforting Practices in the Peer Context Related to Friendships.

(7) Parental Comforting Practices in the Non-peer Context Related to Peer Acceptance.

Research Models and Related Literature

The following discussion will indicate the literature that supports the models proposed by the current research in Chapter 1. Both models will be presented with supporting literature.

Model 1 proposes the following: (1) the nonmediating relationship of maternal parenting practices in the peer context to children's peer social skills; (2) the nonmediating relationship of maternal parenting practices in the peer context to children's peer acceptance and friendships; (3) the nonmediating relationship of maternal parenting practices in the nonpeer context to children's peer social skills; (4) the nonmediating relationship of maternal parenting practices in the nonpeer context to children's peer acceptance and friendships; and (5) the nonmediating relationship of children's peer social skills to children's peer acceptance, and friendships.

Supporting Literature

(1) Nonmediating Relationship of Parenting Practices in the Peer Context—Children's Peer Social Skills.

Research by Bhavnagri and Parke (1991) found that parent management of children's play activities with peers is associated with their development of positive peer social skills. These skills included more turn-taking and positive affect with peers. Hart, et al. (1990) also found that mothers' who used more power assertive disciplinary practices in teaching their children about peer interactions had children who used more unfriendly-assertive social skills with peers.

(2) Nonmediating Relationship of Parenting Practices in the Peer Context—Children's Peer Acceptance and Friendships.

Ladd and Golter (1988) suggest that maternal monitoring (i.e., a parenting practice in the peer context) has nonmediating associations to children's peer acceptance, with increased peer acceptance associated with less parental supervision[1] [i.e., less intrusive monitoring of children's activities with peers including watching from a distance (Ladd, 1992)] of peer activities. Childrens' higher peer acceptance ratings were associated with less intrusive parental management of children's peer activities in the study by Mize, et al. (1995). Mize and Pettit (1997) suggested that mothers who used warmth when interacting with their children had children who were more accepted by peers.

Research has not yet been conducted that examines the nonmediating relationship of: (a) maternal disciplining practices in the peer and nonpeer contexts and children's friendships; (b) maternal comforting practices in the peer context and children's peer social skills and friendships; and (c) maternal comforting practices in the nonpeer context and children's peer acceptance. The current research will fill this gap.

(3) Nonmediating Relationship of Parenting Practices in the Nonpeer Context—Children's Peer Social Skills.

Children's peer social skills are associated with parental disciplining practices in the nonpeer context. Research by Kochanska (1992) suggested that positive maternal disciplining practices were associated with children's increased use of peer social skills. Weiss, et al. (1992) found that harsh disciplinary practices by parents were related to children's aggression with peers. Roberts and Strayer (1987) suggested that parental warmth during distress (i.e., maternal comforting) was associated with children's use of peer social skills.

(4) Nonmediating Relationship of Parenting Practices in the Nonpeer Context—Children's Peer Acceptance and Friendships.

The nonmediating relationships of parental disciplining practices in the nonpeer context were associated with boys' peer acceptance, with more negative disciplinary practices by parents (e.g., power assertion) associated with more peer rejection and aggression (Dishion, 1990). DeWolf, et al. (1992) found that parents who used more induction (i.e., less power assertion) had children who were more preferred by peers.

The nonmediating relationships of parental comforting practices in the nonpeer context have been associated with children's friendships. Stocker (1994) found that warm, supportive maternal parenting practices were related to children's warmth in friendships.

(5) Nonmediating Relationship of Children's Peer Social Skills With Peer Acceptance and Friendships.

Studies have also shown that children's social skills are associated with their peer acceptance, including their ability to be helpful, cooperative, and demonstrate leadership (Asher & Coie, 1990). Pettit, et al. (1996) found that children with higher levels of social skills were more accepted by peers. Additionally, Ladd (1990) suggests that children's

social skills (e.g., involvement, performance) are associated with their ability to have, keep, and make friends (i.e., measured as quantity of friends—peer acceptance per Mendelson et al., 1994a, 1994b), as well as be liked by peers (i.e., peer acceptance).

The nonmediating relationship of children's social skills are also important in their friendship relationships, with connected communication associated with children's friendship relationships (Slomkowski & Dunn, 1996). Sharing secrets and intimate information is also associated with children's friendship relationships (Rotenberg & Sliz, 1988). Mendelson, et al. (1994a, 1994b) found that children's friendships (i.e., quality of friendships) were also associated with social skills.

Model 2 proposes the following: the mediating relationship of children's peer social skills between maternal parenting practices in the peer context, and children's peer acceptance and friendships.

In research by Pettit, et al. (1988) children's social skills were found to mediate in the relationship between early family relationships (e.g., disciplining and mother's endorsements of aggression toward peers) and children's peer acceptance. Children's aggression as a social skill was also found to mediate the relationships between family characteristics (i.e., including parental interest in children's peer experiences) and peer acceptance (Pettit et al., 1996).

Research that examines the model where children's social skills mediate the relationship between parenting practices in the peer context and children's friendships has not yet been conducted. The current research will fill this gap.

Model 2 also proposes the following: the mediating relationship of children's peer social skills between maternal parenting practices in the nonpeer context, and children's peer acceptance and friendships.

Research by Rudolph, et al. (1995) suggested that children's beliefs about peers mediated in the relationship between their family representations and peer acceptance. Additionally, children's social problem-solving skills were found to mediate in the relationship between family interactions and children's peer acceptance (Pettit et al., 1991).

There is a gap in the research examining the model where children's peer social skills mediate in the relationship between parenting practices in the nonpeer context and children's friendships. The current research will fill this gap.

In summary, research supports the nonmediated model of relationships between responsiveness of overall maternal parenting practices in the peer context and children's peer social skills and peer acceptance. (Asher & Coie, 1990; Bhavnagri & Parke, 1991; Ladd, 1990; Ladd & Golter, 1988; Mize et al., 1995; Pettit et al., 1996). There are gaps in the research supporting overall maternal parenting practices in the peer context and children's friendships. There are also gaps in the research supporting maternal disciplining practices in the peer context and children friendships, as well as maternal comforting practices in the peer context and children's peer social skills and friendships.

Research also supports the nonmediated model of relationships between responsiveness of maternal parenting practices in the nonpeer context, children's peer social skills, and peer acceptance, and friendships (DeWolf et al., 1992; Dishion, 1990; Mize & Pettit, 1997; Stocker, 1994).

Research supports the mediated model postulating the mediation relationship of children's peer social skills between responsiveness of maternal parenting practices in the peer context and children's peer social skills and peer acceptance (Pettit et al., 1988; Pettit et al., 1996). There is a gap in the research examining the mediating relationship of children's peer social skills between responsiveness of maternal parenting practices in the peer context and children's friendships. The current research will fill this gap.

Research supports the mediated model postulating the mediating relationship of children's peer social skills between responsiveness of maternal parenting practices in the nonpeer context and peer acceptance (Pettit et al., 1991; Rudolph et al., 1995). There is a gap in the research examining the mediating relationship of children's peer social skills between responsiveness of maternal parenting practices in the nonpeer context and children's friendships. The current research will fill this gap.

Delineated Hypotheses and Related Literature

Research has been presented to support the hypothesized models of the relationships between responsiveness of maternal parenting practices, children's peer social skills, and peer acceptance and friendships. Therefore, the following hypotheses are presented with related literature:

(1) Nonmediated Models: Parenting Practices

(A) Mothers' responsiveness of parenting practices in the peer and non-peer contexts will predict children's peer social skills (Bhavnagri & Parke, 1991; Kochanska, 1992; Roberts & Strayer, 1987; Weiss et al., 1992).

(B) Mothers' responsiveness of parenting practices in the peer and non-peer contexts will predict children's peer acceptance (DeWolf et al., 1992; Dishion, 1990; Ladd & Golter, 1988; Mize et al., 1995; Mize & Pettit, 1997) and friendships (Stocker, 1994).

Nonmediated Model: Children's Peer Social Skills

(C) Children's peer social skills will predict children's acceptance by peers (Asher & Coie, 1990; Ladd, 1990) and friendships (Mendelson et al., 1994a, 1994b; Pettit et al., 1996).

Although research is not present in the literature to support the specific hypothesis of the nonmediated model that posits that responsive maternal parenting practices in the peer context are associated with children's friendships, the current research will test this hypothesis. Additionally, research is not present in the literature to support the specific hypothesis of the nonmediated model that posits that unresponsive maternal parenting practices in the nonpeer context are associated with children's friendships. The current research will also test this hypothesis.

(2) Mediated Model

(A) Children's peer social skills will mediate in the relationship between mothers' responsive parenting practices in the peer context and children's peer acceptance and friendships.

Although research is not present in the literature to support the mediated model postulating that children's peer social skills mediate in the relationship between mothers' parenting practices in the peer context and children's peer acceptance and friendships, the current research will test this hypothesis. According to Baron and Kenny (1988) in order to establish mediation the following conditions must be met. First, (1) the predictor variable must be associated with the presumed mediator (Path a); (2) the predictor variable must be associated with the outcome variable (Path c); and (3) the presumed mediator must be associated with the outcome variable (Path b). The following figure depicts these relationships:

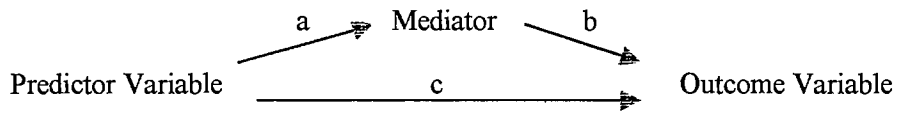

Figure 7. Mediational Model

Second, " when Paths a and b are controlled, the previously significant relationship between the predictor variable and outcome variable (Path c) is no longer significant (i.e., the association of the predictor variable with the outcome variable is reduced to insignificance). Mediation becomes the strongest when Path c is actually zero (i.e., perfect mediation occurs if the predictor variable has no association with the dependent variable when the mediator is controlled)" (Baron & Kenny, 1986, p. 1176-1177).

Therefore, this mediation model in the current research proposes a tenable hypothesis for testing, as the first three of conditions for mediation (i.e., Paths a, b, and c) have been met in previous research. Research results support all relationships among variables in the nonmediated model except the relationship between responsive parenting practices in the peer context and children's friendships. Since the current study will test this specific hypothesis of the nonmediated model, results will then be available for testing the second set of conditions (i.e., the hypothesis of the mediation model).

(B) Children's peer social skills will mediate in the relationship between mothers' responsive parenting practices in the nonpeer context and childrens' peer acceptance (Pettit et al., 1988; Pettit et al., 1991; Rudolph et al., 1995) and friendships (no literature).

Although research is not present in the literature to support the mediated model postulating that children's peer social skills mediate in the relationship between mothers' responsiveness of parenting practices in the nonpeer context and children's friendships, the current research will test this hypothesis. The argument to support predicting mediation for the relationship between mothers' responsiveness of parenting practices in the nonpeer context and children's peer acceptance is based on previous findings (Pettit et al, 1988; Pettit et al., 1991; Rudolph et al., 1995). The argument to support predicting mediation in the relationship between mothers' responsiveness of parenting practices in the nonpeer

context and children's friendships is the same argument as that proposed above for the mediating model of peer acceptance (See Figure 7. and accompanying text).

Therefore, this mediation model in the current research proposes a tenable hypothesis for testing, as the three relationships necessary for mediation have been met in previous research. Research results support all relationships among variables in the nonmediated model except the relationship between responsive parenting practices in the nonpeer context and children's friendships. Since the current study will test the relationship required by the mediation model, results will then be available for testing the second set of conditions (i.e., the hypothesis of the mediation model).

Based on theory (Bandura, 1989), research presented in this literature review from the child development literature, and the conditions that must be met in the Mediational Model (Baron & Kenny, 1986) it is hypothesized that children's peer social skills will mediate in the relationship between mother's responsive parenting practices in the non-peer context and children's peer acceptance.

This hypothesis will be supported in the current study because: (1) model 1 was supported in the literature for maternal parenting practices in the peer context (Ladd & Golter, 1988; Mize et al., 1995) and non-peer context (DeWolf et al., 1992; Dishion, 1990; Mize & Pettit, 1997; Stocker, 1994) in their associations with children's peer acceptance; (2) children's peer social skills were supported in their associations with children's peer acceptance (Asher & Coie, 1990; Ladd, 1990) and friendship relationships (Mendelson et al., 1994a, 1994b; Pettit et al., 1996); and (3) model 2 was supported in the literature for children's peer social skills as mediating in the relationship between mother's responsive parenting practices in the non-peer context and children's peer acceptance (Pettit et al., 1988; Pettit et al., 1991; Rudolph et al., 1995). Therefore, the introduction of children's peer

social skills as a mediator will reduce the association of maternal parenting practices in the non-peer context and children's peer acceptance to insignificance.

Summary

The review of literature has presented research that supports the relationship between responsiveness during parenting practices and children's social competence. Specifically, research relating nonmediated and mediated models of responsiveness of maternal parenting practices to children's peer social skills, peer acceptance, and friendships has been reviewed. Additionally, research supporting nonmediated and mediated models of responsiveness of parenting practices and children's social competence has been reviewed. Proposed hypotheses for testing these models are also presented. Gaps in the research related to parenting practices and children's social competence are identified and proposals to fill the gaps with the current research are made. Based on theory (Bandura, 1989) and current literature in child development it is hypothesized that children's peer social skills will mediate in the relationship between responsive maternal parenting practices in the non-peer context and children's peer acceptance (Pettit et al., 1988; Pettit et al., 1991; Rudolph et al., 1995).

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

Introduction

This chapter addresses the design and methodology of the research. It discusses the correlation-regression design using standard regression to assess the influence of parenting practices on children's social competence. The presentation of the methodology includes sampling, procedures, and measurement of maternal parenting practices in children's peer and nonpeer contexts, as well as measurement of children's peer social skills, peer acceptance, and friendships.

Design

The current research used the nonexperimental, correlation design with standard regression analysis. Correlational designs allow variations in one factor to be compared with variations in another factor; this relationship is summarized by correlation coefficients. This design was selected because measuring parenting practices in their normal context lends practical or realistic implications to the data for future research and professional application (Isaac & Michael, 1995).

The study was nonexperimental in that there was only one group of subjects that was assessed and no control group (i.e., one parent group—mothers, and one child group—their kindergartners); there was no treatment given to either group; and the sample was a convenience sample, not randomized. The design was correlational in that two aspects of parenting—disciplining and comforting—and children's peer social skills were analyzed in relation to children's peer acceptance and friendships.

There were multiple instruments measuring multiple traits of mothers and children (i.e., multiple variables). Therefore, a chart was developed to clearly delineate variables, instruments, and items of the instruments involved in the measurement process (see Appendix A).

Methodology

Sampling

The sampling technique included the nonrandom, purposive, and convenience methods. The nonrandom sampling method was the major threat to the external validity of the study, which would prevent generalizability of the results beyond the study population (Isaac & Michael, 1995). Mothers and children in the population did not have an equal chance of being selected for this study as the 1995-1996 study sample was selected with respect to maternal age and all children were 4-year-olds when they begin their participation in the study.

The purposive method was chosen to access the study population due to the possible limited number of mothers in the population that would be available and agreeable for study. The sampling method was particularly appropriate in a natural setting such as a school, and increased the ease of obtaining mothers and children with similar demographic characteristics (Isaac & Michael, 1995). A limitation of this method was the inability to generalize results beyond the study population.

Study Sample

The sample consisted of approximately 87 mothers and their kindergarten children who attended eight Head Start programs, in north central Oklahoma. This sample was derived from the original sample of 167 mothers and children in Head Start. Of the original sample of 167 mothers and children, 93 mothers, children, and the children's friend returned to be videotaped for the Peer Interaction Task (PIT) that were coded for Friendship Dyad Behaviors (FDB). Of this group, teachers of the 87 children returned the Friendship Network Inventory (FNI). The following table presents the demographic information about the mothers and children in the study.

Table 1.

Demographic Data of the Sample: Mothers and Children

Category	Mothers (n = 87)	Children (n = 87)
Age (i.e., at September of Head Start)		
Mean	29.3 years	4.6 years
Median	28.6 years	4.6 years
Minimum	19.2 years	4.0 years
Maximum	48.0 years	5.0 years
Gender		
Girls		46%
Boys		54%
Ethnicity		
Native American	21.8%	35.6%
African American	1.1%	3.4%
Hispanic	0%	2.3%
Caucasian	74.7%	57.5%
Multiethnic	2.3%	1.1%*

*Discrepancies are due to coding of multiethnic: more than one ethnicity of color.

(table continues)

	Mothers	Children
Education		
		Head Start
7th Grade	1.1%	
8th Grade	1.1%	
9th Grade	1.1%	
10th Grade	5.7%	
11th Grade	8.0%	
12th Grade/Some VoTech	36.7%	
Some College	27.6%	
VoTech Graduate	12.6%	
College Graduate	5.7%	
Median (some VoTech)	13 years	
Marital Status		
Married	49.4%	
Never Married	10.3%	
Separated	4.6%	
Divorced	12.6%	
Widowed	5.7%	
Remarried	17.2%	

(table continues)

Monthly Income	Mothers
$0-100	1.1%
$100-499	11.5%
$500-999	13.8%
$1000-1499	33.3%
$1500-1999	26.4%
$2000-2499	5.7%
$2500-2999	6.9%
$4000+	1.1%

The ethnicity of the mothers was largely Caucasian (74.7%), with African-Americans (1.1%) and Native Americans (21.8%). Children were deemed as belonging to an ethnicity of color if either biological parent's ethnicity was of color. Previous research on children's friendships in the U.S. has included mainly subjects of Caucasian and African-American families. Subjects were invited to participate in the study through flyers sent home with children, telephone calls, and home visits. The mothers were paid $5-$15 each time they participated. The goal of the sample size (87 mothers and their children) was ambitious, but offered several advantages. These included: smaller sampling errors, greater reliability of the data measures, and increased power of the statistical tests that applied to the data (Isaac & Michael, 1995).

Procedures

Mothers' responsive parenting practices in peer and nonpeer contexts (e.g., disciplining and comforting), children's peer social skills, children's peer acceptance, and children's friendships were the variables to be measured in this research. The variables were measured using multiple methods that included: videotaped interactions of mothers and their children folding a paper boat; videotaped interactions of children with a close friend while building a tower with Duplo blocks and then sharing colored pencils during a drawing task; computer-presented parenting dilemmas; and questionnaires for mothers, teachers, and children.

Sources of data included two federal grants as administrated by this researcher's faculty advisor, Dr. Laura Hubbs-Tait, and her colleagues Dr. Anne M. Culp and Dr. Rex E. Culp. Support for these grants were from the National Institute of Mental Health, MH52115, and the Administration on Children and Families/Administration on Children, Youth, and Families, 90-YD-0036. Each grant was conducted in phases 1, 2, 3, and 4 according to the following timeline:

Table 2.

Grant and Measurement Guideline

Head Start Year (4-Year-Olds):

NIMH Phase 1: Fall – Adult-Adolescent Parenting Inventory (AAPI).

NIMH Phase 2: Spring – Computer-Presented Parenting Dilemmas (CPPD), Maternal-Child Teaching Task (MCTT), Howes' Rating Scale of Social Competence with Peers (RSSCP), California Preschool Social Competence Scale (CPSCS), Preschool Behavior Questionnaire (PBQ), and Pictorial Scale of Perceived Competence and Social Acceptance for Young children (Pictorial PCS).

Kindergarten Year (5-Year-Olds):

ACF/ACYF Phase 3: Fall – AAPI

ACF/ACYF Phase 4: Spring – Friendship Network Inventory (FNI), Videotaped – Peer Interaction Tasks (PIT – Coding of the Friendship Dyad Behaviors—FDB), and Friends Questionnaire (FQ).

The following presentation illustrates the measurements related to the conceptual models of the research presented in Chapter 1. Model 1 represents the Nonmediated Model and Model 2 represents the Mediated Model.

Nonmediated Model and Measures

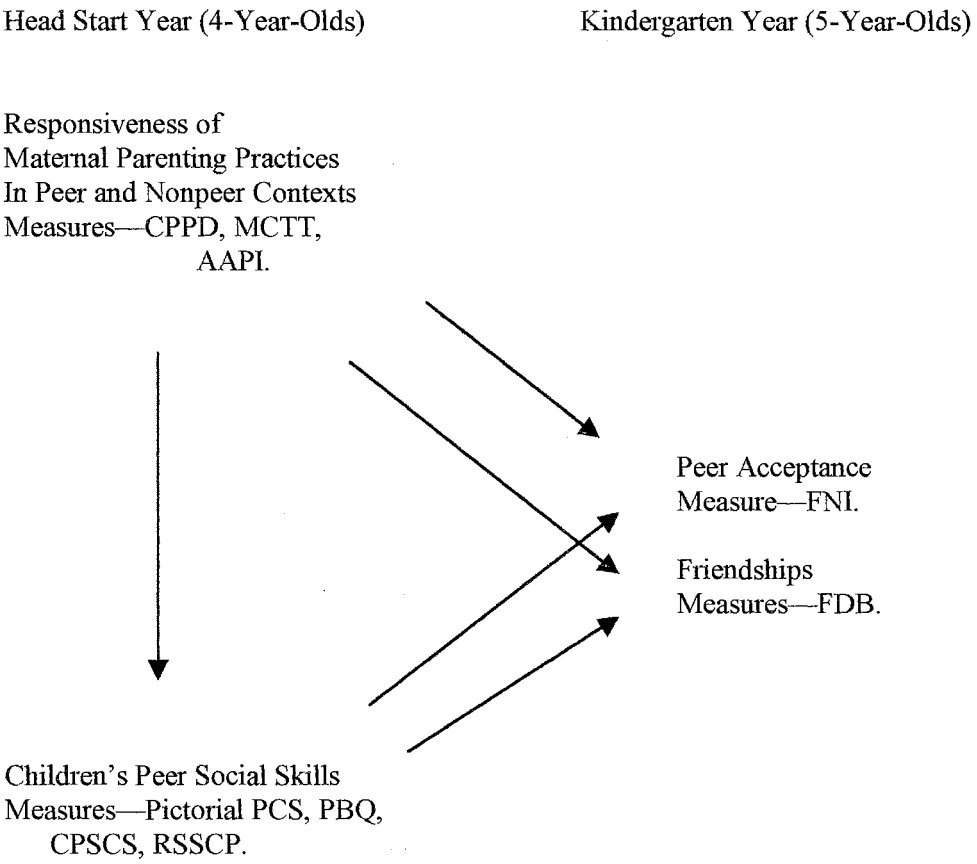

Figure 8. Nonmediated Model and Measures.

Mediated Model and Measures

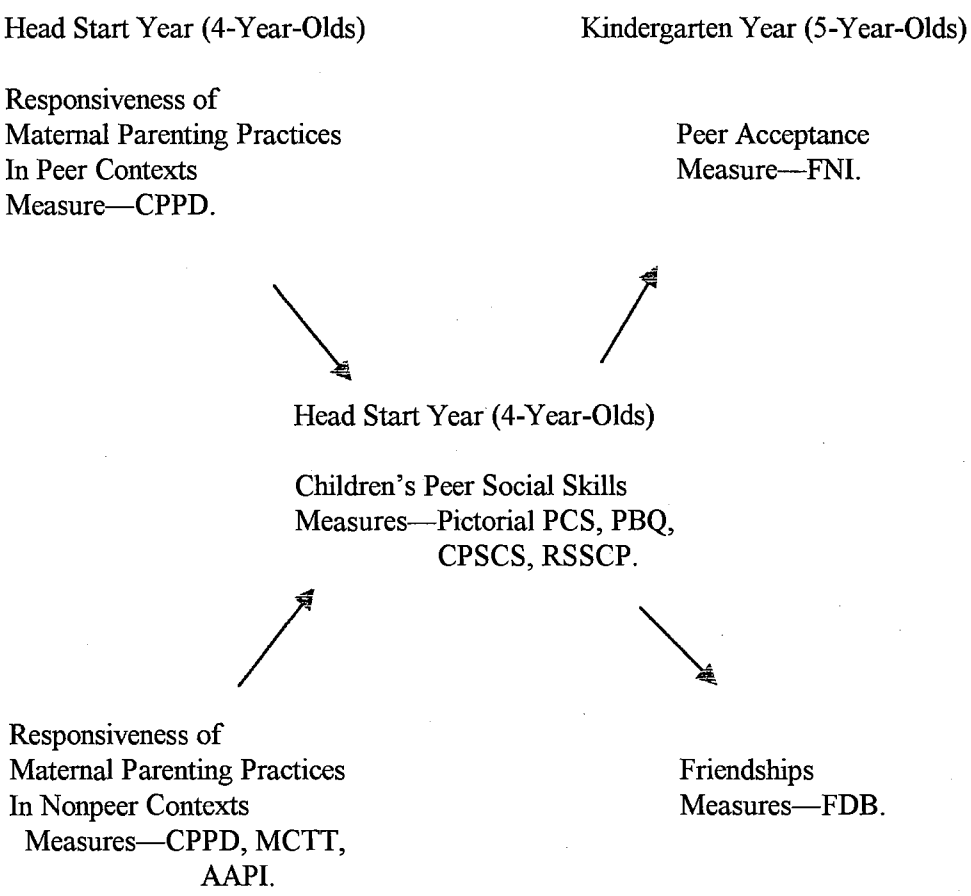

Figure 9. Mediated Model and Measures.

Measurement

Responsiveness of Parenting Practices In Peer and Nonpeer Contexts

The parenting practices variable is delineated into the constructs of parental responsiveness in children's peer and nonpeer contexts. These constructs were assessed using multiple measures including: the Adult-Adolescent Parenting Inventory (AAPI), the Mother-Child Teaching Task (MCTT), and the Computer-Presented Parenting Dilemmas (CPPD). The following discussion is an overview of these measures.

(1) AAPI—this measure assessed responsiveness of parenting practices in the nonpeer context. It is an inventory of mothers' attitudes and behaviors toward raising children using four subscales including: physical punishment, inappropriate expectations, lack of empathy, and role reversal. All four of the subscales assess general parenting practices rather than practices that are directed toward peer relationships or interactions, hence their nonpeer context classification.

(2) MCTT—this measure assessed responsiveness of parenting practices in the nonpeer context. Parenting practices were assessed during videotaped sessions with each mother and child while they participated in a paper boat-folding task. Children were instructed to fold the boat independently while mothers were instructed only to provide verbal instructions. The session was coded for the mothers' responsive and unresponsive behaviors including perspective taking, modulated control, and intrusive control.

(3) CPPD—this measure assessed responsiveness of parenting practices in the peer and nonpeer contexts. Peer context parenting practices were assessed in three peer monitoring vignettes where children were playing in the child's room and in a park. These vignettes included computer-presented choices that parents could monitor, or manage, or supervise social behaviors in the peer context and participate in child-peer

play interactions. Nonpeer context parenting practices were assessed in other vignettes that included child misbehavior (i.e., disciplining) and child distress (i.e., disciplining and comforting).

Measures

(1) The first measure of responsiveness of parenting practices in the nonpeer context assessed mothers' attitudes and behaviors related to child raising with the Adult-Adolescent Parenting Inventory (AAPI). Mothers were administered this inventory in an individual interview in the fall of the children's Head Start and kindergarten years. The time commitment for the mothers to complete this measures was approximately 15 minutes. This is a 32-item inventory consisting of four subscales at a 6th grade reading level. These four subscales include: (1) physical punishment; (2) inappropriate expectations; (3) lack of empathy; and (4) role reversal. The response choices are on a 5-point Likert-type scale and include: strongly agree, agree, uncertain, disagree, and strongly disagree.

The AAPI has demonstrated acceptable construct validity and test-retest reliability (Bavolek, 1984/1989). For the 167 mothers of Head Start children who participated in this project in both the fall and spring of their children's Head Start year, internal consistency [Cronbach—Coefficient Alpha (Isaac & Michael, 1995, p. 132)] for the four subscales was as follows: physical punishment (.81); inappropriate expectations (.77); lack of empathy (.86); and role reversal (.87). The current research uses two of the subscales: physical punishment to measure disciplining and lack of empathy that will be reverse coded (i.e., so that it is measuring empathy) to measure comforting. Alphas for these two measures for the current sample (i.e., n = 87) were .79 and .85 respectively.

(2) The second measure of responsiveness of parenting practices in the nonpeer context consisted of behavioral codes of mothers' interactions in a Mother-Child Teaching Task (MCTT). During the spring of the children's Head Start year mothers and children (N = 167) were videotaped for the MCTT session. The video camera was set up in a research trailer parked close to the Head Start center. The camera was placed behind a curtain and hidden (i.e., with the exception of the lens) from the direct view of the mothers and children. Each video session took 5 minutes to complete. A trained research assistant filmed each mother and child. Mothers instructed their children in folding a paper boat that was illustrated in six steps on a display board. The mother was told that she might touch the paper but not to fold it for her child.

The MCTT was developed by Siegel and Flaugher (1980). It continues to be used in research on parenting and children's cognitive competence (Barocas et al., 1991; Brody et al., 1994) (see Appendix B.).

Thirty-three percent of the tapes were coded independently by two coders to monitor reliability throughout the duration of coding. These codes were subsequently used by the primary graduate student coder, C. Miller, for her thesis. The following Maternal Behavior Codes with interrater reliability coefficients [product-moment correlation coefficient—Pearson r (Isaac & Michael, 1995, p. 176)] were used in the current study:

Table 3.

MCTT—Maternal Behavior Codes and Reliability Coefficients

Maternal Behavior Code	Interrater Reliability Coefficient
Inquiry About Child's Needs/Wants (Responsive)	.96
Offer of Help (Responsive)	.98
Mother Folds Paper Herself (Unresponsive)	.78
Direct Command (Unresponsive)	.97
Using Questions to Direct Child's Behavior (Responsive)	.99
Command With Reason (Responsive)	.93
Physical Restraint/Force (Unresponsive)	.79
Positive Feedback (Responsive)	.98

(see Appendix B for relevant sections of the MCTT coding manual)

(3) The third measure of responsiveness of parenting practices in the peer and nonpeer contexts assessed mothers' reactions to computer generated vignettes (Computer-Presented Parenting Dilemmas—CPPD). The measure was administered to mothers during the spring of their children's Head Start year. Vignettes depicted peer and nonpeer context situations involving disciplining and comforting interactions between mothers and children. The response choices allowed mothers to indicate how responsive they would be in each situation. Cronbach's alphas were calculated for the original sample (Isaac & Michael, 1995, p. 132).

The computer program was interactive and each mother was asked to type in the name of her "partner" (i.e., the name of the other adult who interacted with her and her Head Start child—the actual question was "Who do you spend the most time with?") and her Head Start child's name. These names appeared as the name of the partner and child in the

relevant vignettes (i.e., some featured only mother and child). The mother then proceeded to review each of the vignettes and respond to the series of questions related to each story.

The CPPD (Hubbs-Tait et al., 1997) consisted of 15 stories divided into four themes: child distress, child noncompliance, peer monitoring, and family violence. The current research will use responses to the vignettes from the following three themes: child distress, child noncompliance, and peer monitoring. Potential parental behavioral responses included behavioral control (e.g., verbal power assertion—"Don't do it because I told you so!" and physical power assertion—yelling and spanking), explaining/reasoning, ignoring, putting children in time out, and permissiveness such as bribing. Also, mothers' responses to a possible comforting/affection situation with warmth (e.g., hugging, praising) were included. Additional responses were programmed into the peer interaction vignettes and included: praise of friendly interactions, unobtrusive monitoring at a distance, and participation in the children's ongoing positive play.

(A) Child Distress (Indirect Parenting Practice)—there were three child distress stories. These included: stories 2, 3, and 7. For each story there were behavioral response choices for the mother that she rated on a 7-point Likert-type scale for likelihood of response, from not at all likely (1) to very, very likely (7). In story 2, the child spilled juice during breakfast, the child then became very upset, and was sad and crying very loudly. The mother had the following options for her behavioral responses to the situation: explain to the child that accidents happen, ignore the child and do nothing, put the child in time out, yell at the child, make a joke or do something to make the child laugh to distract him/her so the crying will stop, tell the child to "Stop crying, because I said so," give the child a piece of candy or other treat, spank the child, and hug the child to comfort him/her.

In story 3, mother instructed the child how to make a paper kite to fly in the park. Mother went to make a picnic lunch for a few minutes and the child became frustrated and

cried that he/she could not make the paper fold right. The mother had the following options for her behavioral responses to the situation: praise the child for what has been done right and help the child figure out what went wrong, ignore the child and do nothing, put the child in time out, yell at the child, distract the child so that he/she will forget to be upset and go back to work on the kite, tell the child to "Stop whining, because I said so," give the child a piece of candy or a treat to stop crying and go back and work on the kite, spank the child, hug the child to comfort him/her, and finish making the kite herself (i.e., mother).

In story 7, the child was outside and was sitting and crying in the yard. Mother went out and asked why he/she was crying and the child said that he/she had fallen down and gotten hurt. The mother had the following options for her behavioral responses to the situation: tell the child you are sorry he/she fell down and got hurt, ignore the child and do nothing, put the child in time out, yell at the child, make a joke or do something to make him/her laugh to distract him/her and stop the crying, tell the child to "Stop crying, because I said so," give the child a piece of candy or treat to stop the crying, spank the child, and hug the child for comfort.

Maternal responses to child distress had six factors (Hubbs-Tait, Culp, Culp, Steele, & Fore, 1998). The following table presents the factors, items, and alphas. The factors and alphas were computed on the original sample (i.e., $\underline{N} = 167$).

Table 4.

Maternal Responses to Child Distress (Factors, Items, and Alphas)

Factor	Items	Alpha
Hostile/Punitive (Unresponsive)	8	.89
Warmth (Responsive)	3	.75
Distract (Unresponsive)	3	.75
Authoritarian/Ignore (Unresponsive)	3	.70
Permissive-Bribe (Unresponsive)	3	.74
Authoritarian/Time Out (Unresponsive)	4	.71

(B) Child Noncompliance (Nonpeer Context Parenting Practices)—there were three child noncompliance stories. These included: stories 1, 6, and 10. For each story there were behavioral response choices that mothers rated on a 7-point Likert-type scale for likelihood of response, from not at all likely (1) to very, very likely (7). In story 1, the mother set breakfast in front of the child and the child said, "I don't want this. I won't eat it. I want to eat something else." The mother had the following options for her behavioral responses to the situation: talk with the child about why it is important to eat healthy foods for breakfast, ignore the child and do nothing, put the child in time out, yell at the child, tell the child that if he/she refuses breakfast he/she will have to wait until lunch to eat, tell the child "You will eat it, because I said so," tell the child that if he/she eats breakfast that he/she will get candy or another treat, and spank the child.

In story 6, the child was playing quietly alone in his/her room. He/she had made a big mess in the room with toys and the mother had recently asked the child not to make a mess. The mother had the following options for her behavioral responses to the situation: talk to the child about why the mess is a problem, ignore the child and do nothing, put the child in time out, yell at the child, tell him/her that if he/she continues to make a mess with

the toys that they will have to be put away, tell the child "You better clean up, because I said so," give the child a piece of candy or another treat to stop making a mess, and spank the child.

In story 10, the child was busy drawing with crayons while the mother was talking to someone else. The child suddenly interrupted the mother to show her the drawing and wanted to know what she thought of it. The mother had the following options for her behavioral responses to the situation: talk to the child about why he/she should not interrupt, ignore the child and do nothing, put the child in time out, yell at the child, tell the child that she (i.e., the mother) is already talking and the child must wait his/her turn, tell the child, "Don't interrupt, because I said so," give the child a piece of candy or treat to stop interrupting, and spank the child.

Maternal responses to child noncompliance had six factors (Hubbs-Tait et al., 1998). The following table presents the factors, items, and alphas. The factors and alphas were computed on the original sample (i.e., N = 167).

Table 5.

Maternal Responses to Child Noncompliance (Factors, Items, and Alphas)

Factor	Items	Alpha
Power Assertion (Unresponsive)	7	.79
Punitive Reasoning (Unresponsive)	2	.78
Bribe (Unresponsive)	3	.63
Ignore (Unresponsive)	4	.56
Nonpunitive Reasoning (Responsive)	3	.55
Time Out (Unresponsive)	3	.56

(C) Peer Monitoring (Peer Context Parenting Practices)—there were three peer monitoring stories. These included: stories 4, 5, and 9. For each story there were

behavioral response choices for the mother that she rated on a 7-point Likert-type scale for likelihood of response, from not at all likely (1) to very, very likely (7). In story 4, a friend had come over to play with the child. They were playing nicely and quietly in the child's room. The mother had the following options for her behavioral responses to the situation: go in the child's room and join in the children's activity or game, go in the child's room and watch what was going on but not play with the children, continue her own activities and check on the children's play by listening to their voices from the other room, continue with her own activities and watch the children's play from the doorway periodically, ignore the children and go on with her own activities, and briefly go in the room and tell the children how pleased she (i.e., the mother) is that they are playing nicely.

In story 5, the child and a friend were playing in the child's room. Mother walked by the door and saw the child hit the friend hard. The friend began to cry. The mother had the following options for her behavioral responses to the situation: talk to the child about how painful hitting is, ignore the child and do nothing, put the child in time out, yell at the child, tell the child that if he/she hits the friend then the friend won't want to play anymore, tell the child "You better not hit, because I said so," give the child a piece of candy or another treat to stop hitting, and spank the child.

In story 9, the child and a friend went with the mother to the playground. The children were playing together and having a good time. The mother had the following options for her behavioral responses to the situation: join in the children's activities on the playground, sit very close by and watch the children, sit nearby and read or keep busy with crochet or some other activity and check on the children's play by listening to their voices, sit nearby and talk with other adults while watching the children periodically, ignore the children and go on with her own activities, tell the children how pleased she is that they are

playing so nicely, and allow the children to play alone in the park for about an hour and then go back to pick them up.

Maternal responses to peer monitoring were computed. There were five factors (Hubbs-Tait et al., 1998). The following table presents the factors, items, and alphas. The factors and alphas were computed on the original sample (i.e., N = 167).

Table 6.

Maternal Responses to Peer Monitoring (Factors and Alphas)

Factor	Items	Alpha
Pleased (Responsive)	2	.68
Permissive-Neglectful Response to Hitting (Unresponsive)	4	.63
Power Assertion to Hitting (Unresponsive)	3	.71
Distant Monitoring (Responsive)	3	.67
Joining In (Unresponsive)	2	.62

The Computer-Presented Social Situations (Holden & Richie, 1991) served as the basis for the development of the Computer-Presented Parent Dilemmas (CPPD). The CPPD was developed by the researcher's advisor in collaboration with the co-principal investigators on the grant.

Children's Peer Social Skills

The children's peer social skills variable was assessed by four measures that were completed by teachers and children. These instruments included: Howe's Rating Scale of Social Competence with Peers (RSSCP), the California Preschool Social Competence Scale (CPSCS), the Preschool Behavior Questionnaire (PBQ) and the Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Pictorial PCS).

(1) Howes' Rating Scale of Social Competence with Peers (RSSCP). Teachers completed the RSSCP during the spring of the children's Head Start year. The measures took approximately 10 minutes per child to complete and were placed in confidential envelopes. Howes (1988) developed this 18-item, teacher rating scale of peer social functioning. Ratings are stable over time and behavior observations support the construct validity of the three factors (Howes, 1988). For the 167 children who participated during their Head Start year, internal consistencies for the three factors were as follows: difficult (.89), hesitant (.78), and sociable (.77). For the current sample (i.e., $\underline{n} = 87$) alphas for the three factors were as follows: difficult (.89), hesitant (.79), and sociable (.79).

(2) California Preschool Social Competence Scale (CPSCS). Teachers completed the CPSCS during the spring of the children's Head Start year. The measures took approximately 10 minutes per child to complete and were placed in confidential envelopes. The CPSCS is a 30-item evaluation of the social competence of children between the ages of 2 1/2 and 5 1/2 years. The scale was standardized (Levine, Elzey, & Lewis, 1969) on 400 males and 400 females, with 50% coming from families of "low occupational level." Cronbach's alpha for the total Social Competence score was .93 for $\underline{N} = 167$ children. Subscales included: peer involvement and shares. For the current sample (i.e., $\underline{n} = 87$) alphas were as follows: peer involvement (.82) and shares (.89).

(3) Preschool Behavior Questionnaire (PBQ). Teachers completed the PBQ for each child during the spring of the Head Start year. The measures took approximately 10-20 minutes to complete and were placed in confidential envelopes. The PBQ (Behar, 1977), a teacher rating scale of behavior problems in children from ages 3 to 6 years, yields three subscales: hostile/aggressive, anxious/fearful, and hyperactive/distractible. In the sample of 167 children who participated during their Head Start year, internal consistencies (i.e., alphas) for the subscales were as follows: hostile/aggressive (.94), anxious/fearful (.74),

and hyperactive/distractible (.88). The hyperactive/distractible subscale was not used in the research sample as it measured personal behaviors not social behaviors, and the current study was concerned with children's social behaviors. For the current sample (i.e., n = 87) alphas were as follows: hostile/aggressive (.95) and anxious/fearful (.76).

(4) The Pictorial Scale of Perceived Competence and Social Acceptance for Young Children (Pictorial PCS). Head Start children completed the Pictorial PCS in the spring of the Head Start year. The measure took 20 minutes of time in the trailer phase of the assessment. The Pictorial PCS (Harter & Pike, 1984) consists of 4 subscales with 6 pictures in each subscale and each picture featuring a child engaged in an activity. The maternal acceptance and peer acceptance subscales were used in the research. Maternal acceptance consisted of children's perceptions of their acceptance by their mothers. Items consisted of: mom smiles, mom takes you places you like, mom cooks favorite foods, mom reads to you, mom plays with you, mom talks to you. For peer acceptance, children judged themselves in terms of which child they are most like in the peer interactions depicted (e.g., the one who gets asked to play with others or the one who does not). In the sample of N =167 children who participated during their Head Start year, overall Cronbach's alpha = .62. For the current sample (i.e., n = 87) subscale alphas were as follows: mother acceptance (.73) and peer acceptance (.66).

Children's Peer Acceptance

The children's peer acceptance variable refers to the quantity of children's peer relationships, represented by unilateral friendship nominations (Sanderson & Siegal, 1995). Measurement of this variable was with the Friendship Network Inventory (FNI).

Teachers completed the FNI checklist with reference to the target child, for each child on the class roster by identifying each classmate as a close friend, friend, acquaintance, or none of the above from January to May of the school year.

The specific four areas assessed by this measure were: (1) Close friends - companions who prefer the child most as playmates: companions who smile and laugh with the particular child the most; companions who associate most with the particular child; (2) Friends - companions who the child plays with, but not as much as close friends; companions who smile and laugh with the child, but not as much as close friends; (3) Acquaintances - more distant companions who play occasionally with the child and who get along with the child; and (4) Not Acquaintances - classmates who do not know the child or who do not get along with the child (see Appendix C for Instructions to the Friendship Network Inventory).

The FNI checklist was adapted from the measure used by Ladd (1990; Ladd & Price, 1987). The researcher's advisor adapted this measure for the research grants. The current research will measure the quantity of children's friendships from January through May. Originally, mothers were to complete the FNI in the fall, to be compared with teachers' data from the FNI later in the year. This would have allowed for tracking of the quantity of children's friendships throughout the school year. Unfortunately, one school district refused to allow mothers to read the names of the children in their child's class because of confidentiality policies in the district. Therefore, mothers did not complete the FNI. However, mothers' permissions were solicited in the Fall, leaving early winter (January) as the time of initial administration of the FNI to teachers.

Children's Friendships

The friendship variable describes the quality of friendship relationships. Measurement of this variable included two assessments. They were: (1) the Videotaped Peer Interaction Task (PIT) which was coded by (2) the Friendship Dyad Behaviors (FDB). The Friends Questionnaire (FQ) was used as a control measure to verify children's friendship relationships.

(1) The videotaped Peer Interaction Task (PIT) is adapted from two 5- minute interaction tasks used with kindergarten children by Mendelson, et al. (1994a, 1994b). During the spring of the kindergarten year, each Head Start graduate (i.e., the target child) and his/her friend and the target child's mother participated in the videotaped PIT that took place in the research trailer where the camera lens protruded through the curtain. This involved the target child and his/her friend in two cooperative tasks. The first task was a block building task. The children were given one container of building blocks (Duplos) and only one large base. They were instructed to make a big tower. The second task was the cooperative drawing task. The children were given a piece of paper with rows of geometric shapes and instructed to make designs in the shapes using both pencils (i.e., a red one and a blue one) that were left on the table for the children.

The mother of the target child remained throughout the PIT to help the children but was told "not to build the block towers or draw the designs." The children's behaviors during the PIT were scored for friendship behaviors using the Friendships Dyad Behaviors (FDB). Each video session lasted 10 minutes (i.e., the block building sequence was videotaped for 5 minutes and the drawing task was videotaped for 5 minutes). Following this session the mothers completed the Friends Questionnaire (FQ). Or if a mother did not complete the FQ at that time, she was contacted and encouraged to complete it at a later time. Also during this session the Head Start children completed the Pictorial PCS. This took an additional 20 minutes, for a total time in the trailer phase of approximately 30 minutes.

Videotaped PIT conversations of mothers, children, and each child's friend were first transcribed using a version of CHAT (MacWhinney, 1991). This researcher and two other research assistants performed Transcriber 1, 2, and 3 functions. Transcriber functions consist of the following tasks: Transcriber 1—transcribe the original conversations from the

videotapes; Transcriber 2—check the original transcription for accuracy and correct mistakes; Transcriber 3—check the corrected version for accuracy and correct any remaining mistakes. Then the final, edited and corrected transcriptions were scored using (2) the Friendship Dyad Behaviors (FDB, which was developed by the researcher for this study).

(2) The FDB is a nine-item rating scale of children's friendship dyad behaviors including Conversational Turns (Kaye & Charney, 1981; Kysela, Holdgrafer, McCarthy, & Stewart, 1990), Imitations, Smile/Laugh/Giggle, Touching, Share/Offer/Build and Draw Together, Show/Look at Work/Joint Attention, Ask/Answer Questions, Tell Mother About Friend/Target Child, and Comply/Cooperate/Exchange/Trade (Youngblade & Belsky, 1992; Waters & Deane, 1985).

Conversational Turns, Imitation, Smile/Laugh/Giggle, Touching, Share/Offer/Trade/Build and Draw Together, Show/Look at Work/Joint Attention, and Comply/Cooperate/ Exchange/Trade were each measured per minute for 5 minutes for block building and per minute for 5 minutes for the drawing task. This measurement strategy yielded the total frequency of these seven behaviors across the 10 minutes of the videotaped PIT (i.e., 5 minutes for block building and 5 minutes for the drawing task). The 5-minute total for block building was the score for that task and the 5-minute total for the drawing task was the score for that task (see Appendix D for the manual). Ask/answer and Tell Mother About Friend/Target Child were measured as present or absent for each minute of the same 10 minutes (i.e., 5 minutes for blocks and 5 minutes for the drawing task).

Initial interrater reliability was computed between this researcher and a trained research assistant for the Friendship Dyad Behaviors (FBD) measure. These training reliabilities were computed at .81 for Blocks and .89 for Drawings on the Touching behavior. The trained research assistant continued to serve as the reliability coder for the

researcher throughout the study. Continuous reliability checks were made on 37% of the videotapes coded by this researcher for each group of 42 and 51 tapes, for a total of 93 tapes coded. The research assistant was compensated from a $1000 John and Sue Taylor Student Research Grants (1997-1998) that this researcher received for the study.

The interrater reliabilities for the Friendship Dyad Behaviors were calculated. They are presented in the following table.

Table 7.

Interrater Reliabilities for Friendship Dyad Behaviors (n = 93)

Behavior	Blocks	Drawings
Conversational Turns	.92	.95
Imitation	Low Frequency	.99
Smile/Laugh/Giggle	.82	.90
Touching	.74	.92
Share/Offer/Draw and Build Together	.79	.95
Show/Look at Work/Joint Attention	.96	.83
Ask/Answer Questions	.81	.97
Tell Mother About Friend/Target Child	Low Frequency	.85
Comply/Cooperate/Exchange/Trade	.62	.99

The Friends Questionnaire (FQ) was given to each mother at the PIT videotape session. The questionnaire was developed for this study by Dr. Laura Hubbs-Tait and this researcher. It was to be completed by the mother at the videotape session, or as soon as possible if the mother failed to complete it at the time. It is a single page document and consists of three questions identifying the target child's name, the friend's name, and the date.

Then there are eight friendship questions that relate to the target child's preferences of friends for play, the length of their friendship, the frequency of their play opportunities, and three dyad behaviors. This instrument was not used as an outcome measure, but as a control measure to verify children's friendship relationship between the target child and the child that came to the videotape session.

Data Collection

Data were collected from eight Head Start/kindergarten programs in north-central Oklahoma. Written and verbal permission to collect data at these programs was obtained from the United Community Action Program, Inc. (UCAP) Head Start Policy Council. Protection of human subjects included mothers' signing informed consent forms before participating in each of the four phases of the study. Each teacher also signed an informed consent form before participating in the study. Head Start data were collected from September of 1995 through May of 1997. Kindergarten data were collected from November of 1996 through May of 1998. These data were collected by assistants who had been trained by the principal investigator and the co-principal investigators.

Threats to Validity

Threats to internal validity are frequently a consideration in a research project (Isaac & Michael, 1995). A major threat to internal validity in this study could have been hypothesis guessing, or "social desirability" by the mothers. The measures of the study assessed parenting practices and mothers could have tried to perform in a more positive manner in order to fulfill the hypotheses, or to be assessed as demonstrating more positive parenting practices. Positive parenting practices are highly valued in this country and these mothers may have been aware of disciplining and comforting techniques that society valued highly, but that the mothers do not always or "naturally" use.

In the research situation, mothers may have been more inclined to choose more positive parenting practices when they knew they were being studied than they would have otherwise. Or, because Head Start programs typically enroll "high-risk" children, these mothers may have felt that they were at risk for being "judged" and perhaps felt threatened if their parenting practices were not "judged" positively enough by the experts. This type of behavior would also be a threat to internal validity in the area of evaluation apprehension, where subjects "fake well to make results look good," or to make their parenting styles look good (Isaac & Michael, 1995).

Another possible threat to internal validity is subject attrition (Isaac & Michael, 1995). Mothers may have chosen to withdraw from the study for a variety of reasons including: adolescent and young mothers frequently change life situations (e.g.. move from the geographic area, begin a job, or become pregnant again), or they cannot continue to commit to the time requirements of the study.

Analysis

Likert-type scales were used in both the AAPI and CPPD. The observation measures yielded interval and ratio level data as frequencies of parenting practices in terms of positive and negative behaviors. The FNI was used to assess the number of friends for each child and yielded ratio level data as zero friends, although not in actuality for this research, were possible for each child.

The correlational design of the study indicated that parenting practices and children's social skills would be compared to children's friendship relationships and peer acceptance. This correlational design does not allow the assumption of cause and effect from the results of the data analysis, nor are results generalizable beyond this study sample (Isaac & Michael, 1995). Alphas for statistical significance were set at $\underline{p} < .10$, $\underline{p} < .05$, and $\underline{p} < .01$. Data related to income was controlled as a covariate. They are recognized as

important variables in friendship relationships and have been analyzed in previous studies as cited in the literature review. This particular population was limited to the Head Start/kindergarten age group. Practical significance of the results will be discussed in a conservative manner, due to the preliminary nature of this research.

Research Models and Measurement

The following discussion will indicate the measures involved in assessing the research variables as proposed in Chapter 1. The two models with measures are presented.

Model 1 proposes the following: (1) the nonmediated relationship of responsive maternal parenting practices in the peer context (e.g., CPPD Peer Monitoring: mothers' telling children how pleased they are with positive interactions) or nonresponsive maternal parenting practices in the peer context (e.g., CPPD Peer Monitoring: neglectful response to hitting peer, power assertive response to hitting peer) on children's peer social skills (e.g., Pictorial PCS, PBQ, CPSCS, RSSCP); (2) the nonmediated relationship of responsive maternal parenting practices in the peer context (e.g., CPPD Peer Monitoring: mothers' telling children how pleased they are with positive interactions) or unresponsive maternal parenting practices in the peer context (e.g., CPPD Peer Monitoring: neglectful response to hitting peer, power assertive response to hitting peer) on children's peer acceptance (e.g., FNI) and friendships (e.g., PIT, FDB); (3) the nonmediated relationship of responsive maternal parenting practices in the nonpeer context (e.g CPPD Child Distress: warmth, Child Noncompliance: nonpunitive reasoning; AAPI: empathy) or unresponsive maternal parenting practices in the nonpeer context (e.g., CPPD Child Distress: hostile/punitive, authoritarian/ignore, authoritarian/time out, permissive-bribe; AAPI: physical punishment; MCTT: mother folds paper herself, direct command, physical restraint/force) on children's

peer social skills (e.g, Pictorial PCS, PBQ, CPSCS, RSSCP); (4) the nonmediated relationship of responsive maternal parenting practices in the nonpeer context (e.g., CPPD Child Distress: warmth, Child Noncompliance: nonpunitive reasoning; AAPI: empathy) or unresponsive maternal parenting practices in the nonpeer context (e.g., CPPD Child Distress: hostile/punitive, authoritarian/ignore, authoritarian/time out, permissive-bribe; AAPI: physical punishment; MCTT: mother folds paper herself, direct command, physical restraint/force) on children's peer acceptance (e.g., FNI) and friendships (e.g. PIT, FDB); and (5) the nonmediated relationship of children's peer social skills (e.g., Pictorial PCS, PBQ, CPSCS, RSSCP) on children's peer acceptance (e.g., FNI) and friendships (e.g., PIT, FDB).

Model 2 proposes the following: the mediated relationship of children's peer social skills (Pictorial PCS, PBQ, CPSCS, RSSCP) between responsive maternal parenting practices in the peer context (e.g., CPPD Peer Monitoring: mothers' telling children how pleased they are with positive interactions) or unresponsive parenting practices in the peer context (e.g., CPPD Peer Monitoring: neglectful response to hitting peer, power assertive response to hitting peer), and children's peer acceptance (e.g., FNI) and friendships (e.g., PIT, FDB).

Model 2 also proposes the following: the mediated relationship of children's peer social skills (e.g., Pictorial PCS, PBQ, CPSCS, RSSCP), between responsive maternal parenting practices in the nonpeer context (e.g., CPPD Child Distress: warmth; Child Noncompliance: nonpunitive reasoning; MCTT: inquiry about child's needs/wants, offer to help, using questions to direct child's behavior, command with reason, positive feedback; AAPI: empathy) or unresponsive maternal parenting practices in the nonpeer context (e.g.,

CPPD Child Distress: hostile/punitive, authoritarian/ignore, authoritarian/time out, permissive-bribe; AAPI: physical punishment; MCTT: mother folds paper herself, direct command, physical restraint/force) and children's peer acceptance (e.g., FNI) and friendships (e.g., PIT, FDB).

Summary

Examining the links between parenting practices and children's social competence has been of interest to child development professionals for decades. Of specific interest has been the impact of these factors on children's friendship relationships. The current research increases the understanding of the relationship of specific parenting practices and children's peer social skills to children's peer acceptance and friendships.

CHAPTER 4

ANALYSIS AND EVALUATION

Introduction

This chapter consists of a discussion of the analyses and results. The data analyses consisted of correlations and multiple regressions. Two sets of predictors were compared: mothers' parenting practices and children's 4-year-old social skills. The amount of variance they explained was calculated for two sets of outcomes: children's peer acceptance and children's friendship behaviors at 5 years. In addition, the possibility that children's social skills mediated in the relationship between mothers' parenting practices in peer and non-peer contexts, and children's peer acceptance and friendships was examined using the correlation and multiple regression techniques for testing mediation following Baron and Kenny (1986). Two models were proposed that delineated the hypotheses of nonmediated and mediated relationships among maternal parenting practices variables in peer and nonpeer contexts, children's peer social skills, and children's peer acceptance and friendship relationships. The proposed models are presented to illustrate these relationships.

Nonmediated Model and Measures

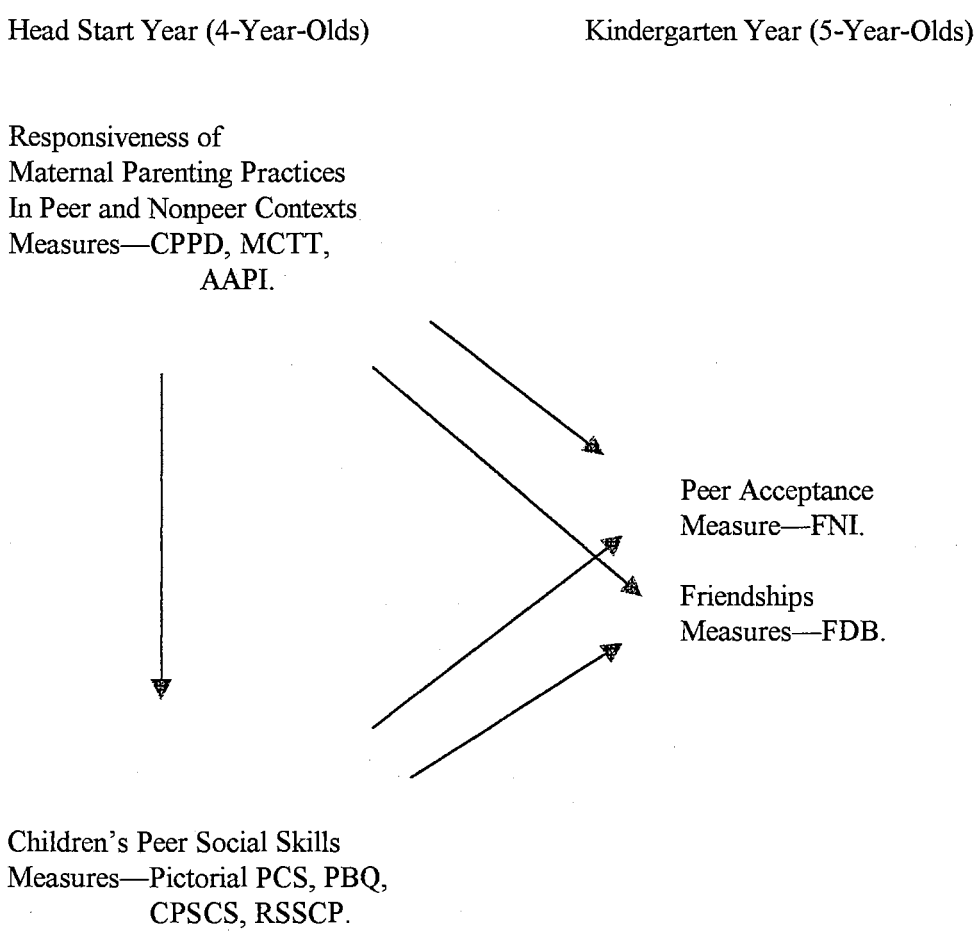

Figure 10. Nonmediated Model and Measures

Mediated Model and Measures

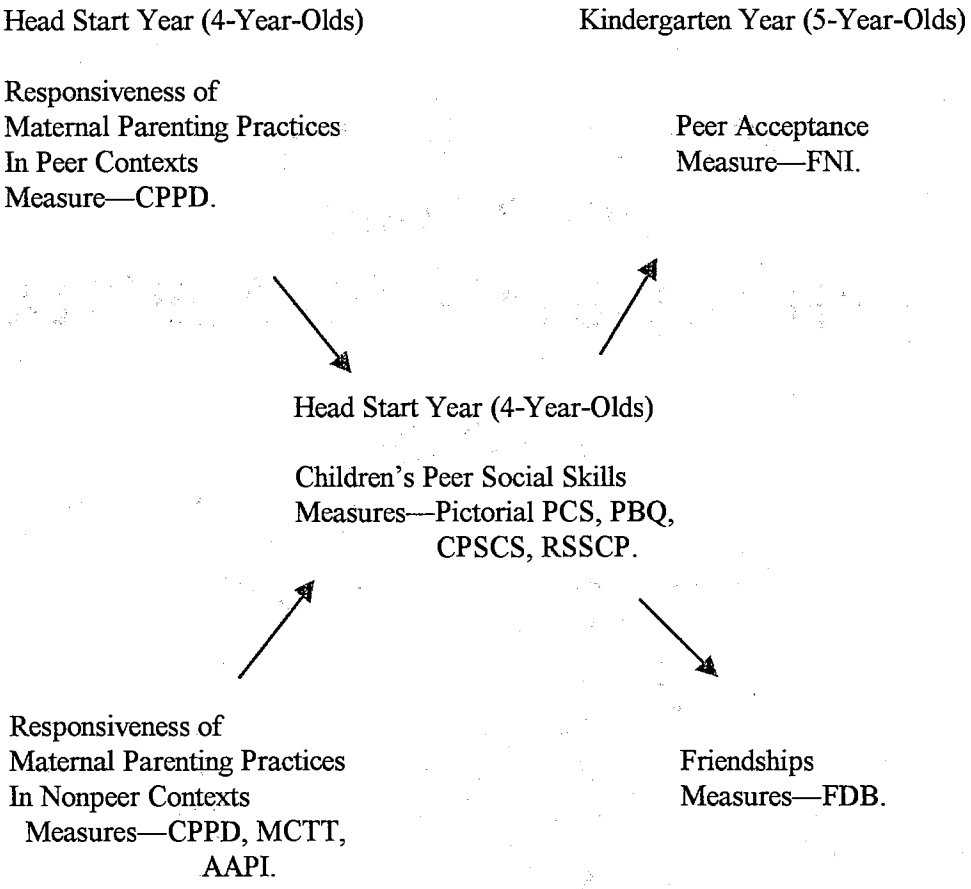

Figure 11. Mediated Model and Measures

Data Organization

After data were collected using the instruments and methods discussed in Chapter 3, raw data were then transcribed onto data pads or entered directly into the computer using the SSPS (i.e., Statistical Package for the Social Sciences) 8.0 for Windows (SSPS, 1998) program on the computer in the research laboratory. Data that had been transcribed onto data pads were then entered into the computer. Accuracy of data entry onto the data pads and then into the computer was checked by the researcher and masters level graduate students who also worked in the research laboratory. Frequencies of the Friendship Dyad Behaviors for both blocks and drawings were also rechecked for accuracy of addition and transcription by the researcher.

Data Reduction

Because of the large number of variables and the magnitude of the data, a data reduction scheme was established that consisted of reducing the predictor variables first—mothers' responsive and unresponsive parenting practices in the peer and non-peer contexts. The second group of variables reduced was children's peer social skills. Finally, the criterion variables—children's peer acceptance and friendships were reduced. The SPSS 8.0 for Windows (SSPS, 1998) computer program was used throughout the analyses.

Predictor Variables: Parenting Practices

As was discussed in Chapter 3, subscales were used from the AAPI for this research and included: (1) physical punishment and (2) empathy (i.e., this was reverse coded in the analysis to be consistent with mothers' comforting). The Pearson r correlation coefficient between these subscales was computed at .45. Correlations of this magnitude suggest no serious overlap between variables or problems with collinearity (Pedhazur, 1997). Therefore, data reduction was not necessary for the AAPI.

As was discussed in Chapter 3, there were 8 items from the MCTT used for this research. They included: (1) inquiry about child's needs/wants, (2) offer of help, (3) using questions to direct child, (4) command with reason, (5) positive feedback, (6) mother folds paper herself, (7) direct command, and (8) physical restraint/force. Pearson r correlation coefficients were computed among these variables and the magnitudes of the correlations (i.e., the absolute values) ranged from .03 to .39. Again, correlations of this magnitude suggest minimal overlap among the variables and so no data reduction of the MCTT was necessary for this research.

The Computer-Presented Parenting Dilemmas (CPPD) instrument was conceptualized as measuring both responsive and unresponsive maternal parenting practices in both the peer and non-peer contexts. The 17 CPPD subscales (with alpha > .50) of the parenting practices including peer contexts and alphas are presented in Table 8.

The CPPD subscales from the original sample of 167 were entered into a Principal Components Factor Analysis. A component extraction and an orthogonal rotation method were used. The Kaiser criterion (eigenvalues > 1) was used to determine the number of factors [i.e., eigenvalues equal to zero indicate linear dependency and small eigenvalues indicate near linear dependency (Pedhazur, 1997, p. 304)]. A factor-variable correlation > .50 on the rotated factor matrix was the criterion used to determine the items that comprised each factor [loadings or structure coefficients—a ratio—obtained by dividing the zero order correlation coefficient of each independent variable with the dependent variable, by the multiple correlation of the dependent variable with all the independent variables (Pedhazur, 1997, p. 898)]. The factor-variable correlation of the greatest magnitude was selected whenever cross loadings occurred (Hubbs-Tait et al., 1998). The cumulative variance explained by the five factors was 63%. Results of the factor analysis are presented in Table 9.

Table 8.

Variables—CPPD Subscales (Parenting Practices—Contexts) and Standardized Alphas

Subscale	N = 167	n = 87
Responsive Parenting—Peer Context		
Distant Monitoring (Peer Monitoring)	.67	.69
Pleased (Peer Monitoring)	.68	.76
Non-Peer Context		
Warmth (Child Distress)	.75	.80
Non-Punitive Reasoning (Non-Compliance)	.55	.56
Unresponsive Parenting—Peer Context		
Permissive Hit (Peer Monitoring)	.63	.19
Power Hit (Peer Monitoring)	.71	.70
Join In (Peer Monitoring)	.62	.66
Non-Peer Context		
Hostile (Child Distress)	.89	.71
Distract (Child Distress)	.75	.78
Ignore (Child Distress)	.70	.71
Bribe (Child Distress)	.74	.76
Time Out (Child Distress)	.71	.53
Power Assertion (Non-Compliance)	.79	.75
Punitive Reasoning (Non-Compliance)	.78	.76
Bribe (Non-Compliance)	.63	.66
Ignore (Non-Compliance)	.56	.56
Time Out (Non-Compliance)	.56	.57

Table 9.

Rotated Component Matrix

	Component				
	1	2	3	4	5
Power3	.75	.21	-.07	.03	.28
Punreasn	.83	-.01	-.07	.10	.06
Bribe	-.03	.21	-.06	.84	.20
Ignore	.56	.05	-.21	.06	.18
Nonpnrsn	-.42	-.49	.51	-.05	.05
Timeout	.14	.02	.06	-.09	.80
Unobtrsv	.43	.09	-.07	.32	-.16
Join In	-.27	-.09	.61	-.14	.17
Prmsvhit	.09	.88	-.04	.19	.09
Powerhit	.81	.25	-.01	.02	.06
Pleased	-.01	.05	.82	-.03	-.13
Hostile	.28	.89	-.12	-.04	.09
Warmth	-.34	-.33	.54	.24	.12
Distract	.21	-.38	.50[a]	.23	-.20
IgnoreU	.57	.04	-.34	.22	.27
BribeU	.25	-.10	.06	.74	.14
TimeoutU	.35	.31	-.14	.04	.51

Note. Varimax with Kaiser Normalization with underlining of all loadings that constitute factors (i.e., factor loading > .50).

[a] Exact loading was .498.

Power3 = Power Assertion (Non-compliance), Punreasn = Punitive Reasoning (Non-compliance), Bribe = Bribe (Non-compliance), Ignore = Ignore (Non-compliance), Nonpnrsn = Nonpunitive Reasoning (Non-compliance), Timeout = Time out (Non-compliance), Unobtrsv = Unobtrusive Monitoring (Peer Monitoring), Join In = Join In (Peer Monitoring), Prmsvhit = Permissive Hit (Peer Monitoring), Powerhit = Power Hit (Peer Monitoring), Pleased = Pleased (Peer Monitoring), Hostile = Hostile (Child Distress), Warmth = Warmth (Child Distress), Distract = Distract (Child Distress), IgnoreU = Ignore (Child Distress), BribeU = Bribe (Child Distress), TimeoutU = Time Out (Child Distress).

The results of this analysis showed that maternal parenting practices in peer and nonpeer contexts were blended on several factors. For example, power (child noncompliance), punitive reasoning (child noncompliance), ignore (child noncompliance), power hit (peer monitoring), and ignoreu (child distress) are all items on Factor 1. On Factor 2 are permissive hit (peer monitoring) and hostile (child distress) items. Factor 3 has nonpunitive reasoning (child noncompliance), join in (peer monitoring), pleased (peer monitoring), and warmth (child distress) items. The items on Factor 4 include bribe (child noncompliance) and bribeu (child distress). And Finally, Factor 5 items are time out (child noncompliance) and time outu (child distress). Because Factors 1, 2, and 3 had peer and nonpeer contexts items blended on each factor, determining the context was not included in further interpretation of maternal parenting practices.

Alphas were computed for the factors resulting from this analysis for the study sample of $\underline{n} = 87$ and were named to reflect the group of behaviors in each factor. Results of this analysis are presented in Table 10.

Table 10.

CPPD Higher-Order Factors and Alphas (n = 87)

Factor	Name	Standardized Alpha
1	Authoritarian	.86
2	Rejecting	.70
3	Nurturant	.83
4	Bribing	.78
5	Time Out	.63

In order to determine possible collinearity among the parenting variables, correlations were computed. The results of these analyses are presented in Table 11.

The parenting variables were not highly intercorrelated as the correlations did not exceed .60 (Pedhazur, 1997). Therefore, the variables were not combined into composite variables and were left separate for further analyses.

Table 11.

Correlations: Predictor Variables—CPPD, MCTT, and AAPI (n = 87)

	Rej	Aut	Nur	Bri	Tim	Inq	Off	Dir	Us	Co	Po	Mo	Phy	Em	Ph
Rej	---														
Aut	**.59**	---													
Nur	**-.49**	**-.52**	---												
Bri	.09	.30	-.04	---											
Tim	**.49**	.33	-.09	.06	---										
Inq	-.14	-.17	.02	-.15	-.24	---									
Off	-.03	-.25	.07	.12	.00	.14	---								
Dir	-.08	.05	.05	.00	.20	-.22	-.25	---							
Us	-.17	-.06	-.19	-.01	-.26	.26	.04	-.29	---						
Co	.06	-.07	.06	-.06	.03	-.12	-.04	-.12	-.10	---					
Po	.02	-.04	.09	.03	.06	.17	.03	-.15	-.02	-.20	---				
Mo	.22	.19	-.16	.00	.04	.08	.09	-.14	.11	.10	-.24	---			
Phy	.34	.18	-.19	-.08	.07	-.13	.05	.10	-.04	-.02	-.17	**.39**	---		
Em	**-.42**	**-.42**	.32	-.17	-.20	.19	.14	-.22	.13	.13	.04	-.11	-.27	---	
Ph	**.49**	**.50**	-.32	.14	.09	-.05	.01	.09	.02	-.07	.07	.22	.30	**-.45**	---

Note. Rej = Rejecting, Aut = Authoritarian, Nur = Nurturant, Bri = Bribing, Tim = Time Out, Inq = Inquiry About Child's Needs/Wants, Off = Offer of Help, Dir = Direct Command, Us = Using Questions to Direct Child, Co = Command/Reason, Po = Positive Feedback, Mo = Mother Folds Paper, Phy = Physical Restraint, Em = Empathy, Ph = Physical Punishment.

Underline = $p < .05$. **Bold** = $p < .01$.

Hypothesized Mediating Variables: Children's Peer Social Skills

The second group of variables reduced consisted of children's peer social skills. The subscales and instruments consisted of the following: (1) difficult—RSSCP, (2) hesitant—RSSCP, (3) sociable—RSSCP (4) peer involvement—CPSCS, (5) share (no share)—CPSCS, (6) aggressive—PBQ, (7) anxious—PBQ, (8) mother acceptance—Pictorial PCS, and (9) peer acceptance—Pictorial PCS. Cronbach's alphas from the original sample of 167 were acceptable for these variables.

In order to determine possible overlap in the conceptualization of these variables, correlations were computed. Results of these correlations are presented in Table 12.

Table 12.

Correlations of Children's Peer Social Skills Variables (n = 87)

Variables	Agg	Dif	Share	Soc	PeerInv	Hes	Anx	Moth	Peer
Agg	---								
Dif	.84**	---							
Share	-.80**	-.80**	---						
Soc	-.45**	-.46**	.48**	---					
PeerInv	-.10	-.17	.24*	.56**	---				
Hes	-.15	-.10	.22*	-.20*	-.34*	---			
Anx	.36**	.31*	-.21*	-.29*	-.22*	.17	---		
Moth	.05	.07	-.10	.08	.12	-.13	-.08	---	
Peer	-.08	-.06	.16	.19*	.21*	.09	-.02	.61**	---

Note. Agg = Aggressive, Dif = Difficult, Share = Share, Soc = Sociable, PeerInv = Peer Involvement, Hes = Hesitant, Anx = Anxious, Moth = Mother Acceptance, Peer = Peer Acceptance.

+$p < .10$. *$p < .05$. **$p < .01$.

Aggressive and difficult were combined into a composite variable that was renamed negative peer play as their correlation was > .60. Share was highly inversely correlated with aggressive and difficult, while positively correlated with sociable and peer involvement, so it was recoded and combined with aggressive and difficult into negative peer play for further analyses. For the current sample (i.e., n = 87) the alpha for negative peer play was .97. Sociable, peer involvement, hesitant, and anxious were left as separate variables as their correlations were < .60. And finally, mother and peer were combined into a composite variable that was renamed social acceptance as their correlation was >. 60. For the current sample (i.e., n = 87) the alpha of social acceptance was .81.

Criterion Variables: Children's Peer Acceptance and Children's Friendships

During the kindergarten year, children's peer acceptance and friendship relationships were examined. The first analyses were conducted on the measures of children's peer acceptance.

Peer Acceptance

Children's peer acceptance was examined first. Variable reduction consisted of a Principal Component Factor Analysis (PCA) of the Friendship Network Inventory (FNI) scores. Before the factors were determined, the proportions for the friendship categories were first calculated by dividing the frequencies of close friends, friends, acquaintances, and not acquaintances by the total number of children in each classroom during the specific time-period (i.e., January to February and April to May). The researcher considered two metrics for the FNI scores: arcsin transformation conversion and standardization. Because the metric for the Friendship Dyad Behaviors (FDB) was in standard scores (i.e., scores would be standardized), the proportions of the friendship categories (i.e., close friend, friend, acquaintance, and not acquaintance) for peer acceptance (FNI) were standardized (i.e, z-

scores) in order to match with the same metric (i.e., standardization) that was to used for the Friendships Dyad Behaviors (FDB).

For the PCA, a component extraction and an orthogonal rotation method were used in the same manner as discussed previously, with the Kaiser criterion (eigenvalues > 1) used to determine the number of factors and a factor-variable correlation of > .50 used to determine the items comprising each factor. Again, factor-variable correlations of the greatest magnitude were selected whenever cross loadings occurred (Hubbs-Tait et al., 1998). The sample size for the PCA was n= 80 as there were 7 incomplete FNI's at Time 2. The results of this factor analysis are presented in Table 13. Recall that Time 2 refers to January - February and Time 3 refers to April - May.

Factor 1 showed that female friends at Times 2 and 3 loaded positively and female acquaintances at Times 2 and 3 loaded negatively. Factor 2 showed that male close friends at Times 2 and 3 loaded positively and female close friends at Times 2 and 3 loaded negatively. Factor 3 showed that male not acquaintances and female not acquaintances at Time 2, and male acquaintances at Time 3 loaded positively. Also, male friends at Time 3 loaded negatively. Factor 4 showed that male friends at Time 2 loaded positively at male acquaintances at Time 2 loaded negatively. Factor 5 showed that male not acquaintances and female not acquaintances at Time 3 loaded positively.

Table 13.

Factor Analysis of the Friendships Network Inventory (FNI)—Factors, Items, and Loadings (n=80)

Factor	Items	Loadings
1	Female Friends, Time 2	.82
	Female Acquaintances, Time 2	-.73
	Female Friends, Time 3	.82
	Female Acquaintances, Time 3	-.90
2	Male Close Friends, Time 2	.73
	Female Close Friends, Time 2	-.71
	Male Close Friends, Time 3	.60
	Female Close Friends, Time 3	-.60
3	Male Not Acquaintances, Time 2	.66
	Female Not Acquaintances, Time 2	.56
	Male Friends, Time 3	-.74
	Male Acquaintances, Time 3	.63
4	Male Friends, Time 2	.81
	Male Acquaintances, Time 2	-.82
5	Male Not Acquaintances, Time 3	.76
	Female Not Acquaintances, Time 3	.75

Factor 1contrasted female friends and acquaintances. Those people with more friends at both times had fewer acquaintances at both times and vice versa. Factor 2 contrasted male and female close friends at both times. Having male close friends at Time 2 and Time 3 was related to having fewer female close friends at both Time 2 and Time 3 and

vice versa. For Factor 3, having male and female not acquaintances at Time 2, as well as male acquaintances at Time 3 was related to fewer male friends at Time 3 and vice versa. Additionally for Factor 4, having male friends at Time 2 was related to having fewer male acquaintances at Time 2. Finally for Factor 5, having male not acquaintances at Time 3 was related to having female not acquaintances at Time 3.

Although the factors showed interesting patterns among female and male close friends, friends, acquaintances, and not acquaintances, the literature thus far has not used factors to describe these relationships. Therefore, this researcher decided to follow tradition and use the actual numbers of children's close friends and friends instead of the factors. Also, the interest of this researcher was in the specific relations between children's close friends and friends and the predictors, so further analyses used only the female and male close friends and friends standardized scores.

Correlations were then conducted on the female and male close friends and friends standardized scores at Times 2 and 3. The results of this analysis are presented in Tables 14 and 15 by female and male categories.

Table 14.

Correlations: Female Close Friends and Friends at Time 2 and Time 3

Variables	$FemCF_2$	$FemCF_3$	$FemF_2$	$FemF_3$
$FemCF_2$	---			
$FemCF_3$	.41*	---		
$FemF_2$	-.02	.41*	---	
$FemF_3$	.15	.15	.61*	---

Note. $FemCF_2$ = Female Close Friends at Time 2, $FemCF_3$ = Female Close Friends at Time 3, $FemF_2$ = Female Friends at Time 2, $FemF_3$ = Female Friends at Time 3.

+$p < .10$. *$p < .05$. **$p < .01$.

Table 15.

Correlations: Male Close Friends and Friends at Time 2 and Time 3

Variables	$MaleCF_2$	$MaleCF_3$	$MaleF_2$	$MaleF_3$
$MaleCF_2$	---			
$MaleCF_3$	.52**	---		
$MaleF_2$	.01	.27*	---	
$MaleF_3$	.31*	.24*	.41**	---

Note. $MaleCF_2$ = Male Close Friends at Time 2, $MaleCF_3$ = Male Close Friends at Time 3, $MaleF_2$ = Male Friends at Time 2, $MaleF_3$ = Male Friends at Time 3.

+$p < .10$. *$p < .05$. **$p < .01$.

These correlations showed that children's close friends and friends at Time 2 were significantly, positively correlated with children's close friends and friends at Time 3 at $p < .01$ for female close friends and friends, and at $p < .05$ and $p < .01$ for male close friends and friends. Due to the overlap in close friends and friends over time, it was decided to use only one time period. Because more children participated at Time 3 than at Time 2 (i.e., some mothers and children returned to the study at the end of the year), Time 3 was chosen for all further analyses.

Correlations were then computed for Time 3 male and female, close friends and friends to determine the possibility of collinearity among these variables. The results of the analyses are presented in Table 16.

Results showed that female close friends and male friends were significantly correlated at .34 and male close friends and friends were significantly correlated at .24. These results do not demonstrate highly intercorrelated variables so all of the categories were kept separate for further analyses.

Table 16.

Correlations: Friendship Network Inventory—FNI (n = 87)

	Female Cl Fr	Female Fr	Male Cl Fr	Male Fr
Female Cl Fr	---			
Female Fr	.15	---		
Male Cl Fr	-.02	.12	---	
Male Fr	.34*	.08	.24*	---

Note. Female Cl Fr = Female Close Friends at Time 3, Female Fr = Female Friends at Time 3, Male Cl Fr = Male Close Friends at Time 3, Male Fr = Male Friends at Time 3. +p < .10. *p < .05. **p < .01.

Friendship Relationships

Children's friendships were examined next. Friendship Dyad Behaviors (FDB) of the Peer Interaction Task (PIT) were analyzed first. Interrater reliabilities had previously been calculated for all of the Friendship Dyad Behaviors, as discussed in Chapter 3. The Friendship Dyad Behaviors were then entered into a Principal Component Analysis. A component extraction and an orthogonal rotation method were used, as discussed in the previous section, and included the Kaiser criterion (eigenvalues > 1) to determine the number of factors. A factor-variable correlation > .50 on the rotated factor matrix was the criterion used to determine the items that comprised each factor. The factor-variable correlation of the greatest magnitude was selected whenever cross loadings occurred (Hubbs-Tait et al., 1998).

Due to the wide divergence in alphas and standardized alphas for the resulting factors, Z-scores were computed for the original raw scores and the analysis was re-run. The results of the principal components analysis of the z-scores were identical to the principal

components analysis of the original scores. The cumulative variance explained by the five components that resulted from this analysis was 66%. Results of the analysis are presented in Table 17.

Table 17.

Factor Analysis of Friendship Dyad Behaviors[a]—Factors and Loadings (n = 87)

(B = Blocks z-scores D = Drawings z-scores)

Factor 1		Factor 2		Factor3		Factor 4		Factor 5	
D-conturn	.77	B-conturn	.71	D-share	.86	B-smile	.64	B-share	-.69
D-ask	.73	B-ask	.80	D-show	.52	D-imitate	.74	B-show	.76
D-tell	.67	B-comply	.80	D-comply	.76	D-smile	.75		

Note. [a]Conturn=Conversational Turns, Ask=Ask/Answer Questions, Tell=Tell Mother About Friend, Comply=Comply/Cooperate/Exchange/Trade, Share=Share/Offer/Build and Draw Together, Show=Show/Look at Work/Joint Attention, Smile=Smile/Laugh/Giggle/, Imitate=Imitations (i.e., of each other).

Alphas for these components were then computed and components were named to reflect the group of behaviors in each factor. Alphas are presented in Table 18.

Table 18.

Additive Factors (Friendship Dyad Behaviors) and Z-score Alphas (n=87)

Factor	Name	Alpha
1	Draw Talk	.70
2	Block Talk	.71
3	Draw Cooperate	.60
4	Smile[a]	.67

Note. [a]=the Smile factor was calculated without D-imitate, as alpha with D-imitate was only .59. Also, Factor 5 (i.e., B-share and B-show) was not retained as there was no way to

reverse code frequencies of behaviors so that the opposite of sharing could be compared to showing to compute the relevant alpha. Alpha for Factor 5 without reverse coding was -.171.

Predicting Peer Acceptance

Preparation for Testing Mediated and Non-Mediated Models:

Correlations Among Mother's Parenting Practices and Children's Peer Acceptance

The maternal parenting practice variables, children's peer social skills variables, and children's peer acceptance and friendships relationships variables were correlated as the first phase of testing mediation following Baron and Kenny (1986). According to their criteria for testing mediation, three conditions must be met: (1) the predictor variable (i.e., maternal parenting practices) must be related to the mediator (i.e., children's peer social skills); (2) the predictor variable (i.e., maternal parenting practices) must be related to the criterion variable (i.e., children's peer acceptance and friendship relationships); and (3) the mediator (i.e., children's peer social skills) must be related to the criterion variable (i.e., children's peer acceptance and friendship relationships).

Therefore, Pearson product moment correlation coefficients (Pedhazur, 1997) were computed among all of the following variables of the research: (1) Parenting Practices (i.e., predictors), including: the CPPD—the 5 higher order factors of the CPPD (i.e., authoritarian, inconsistent/rejecting, nurturant, bribing, and time out), the MCTT (i.e., inquire about child's needs/wants, offer help, direct command, using questions to direct child's behavior, command with reason, positive feedback, mother folds paper herself, and physical restraint/force), and the AAPI (i.e., empathy and physical punishment);

(2) Children's Peer Social Skills (i.e., hypothesized mediators), including: negative peer play (i.e., a composite of the variables (a) aggressive—PBQ, (b) difficult—RSSCP, and (c) no share—CPSCS); sociable and hesitant from the RSSCP; anxious from the PBQ; peer involvement from the CPSCS; and social acceptance (i.e., a composite of the variables (a) mother and (b) peer—Pictorial PCS); and (3) peer acceptance and Friendships (i.e., criteria), including: the FNI variables at Time 3 for both girls and boys (i.e., female and male close friends, as well as female and male friends); and the 4 higher order factors of the Friendship Dyad Behaviors (FDB) coding system for the Peer Interaction Task (PIT) including (a) draw talk, (b) block talk, (c) smile, and (d) draw cooperate.

Table 19 presents the results of correlations examining the relationship between parenting practices and children's social skills. All significance levels were one-tailed.

Results of the analysis indicated that rejecting and authoritarian had significant positive correlations with anxious. Using questions had a significant negative correlation with negative peer play, and command with reason had a significant negative correlation with hesitant.

The analysis showed that mothers' use of rejecting and authoritarian parenting practices was related to children's increased anxiety with peers and vice versa. Also, mothers' use of questions was related to children's decreased use of negative peer play behaviors and vice versa. Finally, mothers' use of commands with reasons was related to children's decreased hesitancy with peers and vice versa.

Table 19.

Maternal Parenting Practices in Head Start (Predictor Variables—CPPD, MCTT, AAPI) Correlated With Children's Peer Social Skills in Head Start (Hypothesized Mediating Variables) n = 87

Variable	Neg	Soc	PeerInv	Hes	Anx	SocAccp
Rejecting	-.05	-.03	-.16	-.04	.20*	-.11
Authoritarian	.12	-.15	-.04	.00	.30*	-.16
Nurturant	.02	-.08	.11	.01	-.06	.12
Bribing	-.06	-.04	-.12	.12	.12	-.01
Time Out	-.09	-.03	.00	-.06	.12	-.09
Inquire Needs	.05	.05	.16	.02	.00	.07
Offer Help	-.03	.09	.06	.03	-.06	.12
Direct Command	.02	-.02	-.05	.05	.05	-.01
Using Questions	-.18*	.11	.03	.04	.06	.04
Command/Reason	.03	-.04	.06	-.23*	-.11	-.09
Positive Feedback	.03	-.05	.17	.07	.07	.05
Mother Folds Paper	-.04	.13	.01	-.17	-.10	.09
Physical Restraint	-.06	.08	-.08	-.17	-.06	-.01
Empathy	.04	-.02	-.04	.02	-.05	.03
Physical Punishment	.01	-.12	.03	-.13	.05	-.07

Note. Neg = Negative Peer Play, Soc = Sociable, PeerInv = Peer Involvement, Hes = Hesitant, Anx = Anxious, SocAccp = Social Acceptance.

+$p < .10$. *$p < .05$. **$p < .01$.

Table 20 presents the results of correlations examining the relationship between parenting practices and peer acceptance. All significance levels were one-tailed.

Table 20.

Maternal Parenting Practices (Predictor Variables—CPPD, MCTT, AAPI) Correlated With Children's Peer Acceptance Variables (Criterion Variables—FNI) n = 87

Variables	Female Cl Fr	Female Fr	Male Cl Fr	Male Fr
Rejecting	-.21*	-.04	-.19*	-.17
Authoritarian	-.26*	.08	-.16	-.12
Nurturant	.25*	-.04	.10	.17
Bribing	-.17	-.11	.11	-.04
Time Out	.09	.15	-.19	.12
Inquire/Needs	-.09	.12	.08	.04
Offer Help	.05	.06	-.14	.02
Direct Command	.15	.22*	.14	.17
Using Questions	.10	.21*	.01	.03
Command/Reason	.05	-.16	-.14	-.18
Positive Feedback	.00	.00	-.18	.01
Mother Folds Paper	-.15	-.10	.05	-.11
Physical Restraint	.05	.05	.04	-.11
Empathy	.09	.07	.01	.02
Physical Punishment	-.08	-.05	-.05	-.14

Note. Female Cl Fr = Female Close Friends at Time 3, Female Fr = Female Friends at Time 3, Male Cl Fr = Male Close Friends at Time 3, Male Fr = Male Friends at Time 3. +$p < .10$. *$p < .05$. **$p < .01$.

Results of the correlation analysis indicted that female close friends had a significant and positive correlation with nurturant and negative correlations with rejecting and authoritarian. Female friends had significant and positive correlations with direct command and using questions. Male close friends had a significant and negative correlation with rejecting, and male friends did not have significant correlations with any of the predictor variables.

The results showed that as mothers used rejecting and authoritarian parenting practices children's female close friends decreased. In contrast, as mothers' use of nurturing parenting practices increased, children's female close friends increased. Mothers' use of direct commands and using questions were related to children's increased female friends. Mothers who used rejecting parenting practices had children with fewer male close friends and male friends were not related to any of the parenting practices (i.e., the predictors).

Table 21 presents the results of correlations examining the relationship between children's peer social skills and peer acceptance. All significance levels were one-tailed.

Results of the analysis correlating peer social skills variables with criterion variables showed that female close friends had significant and positive correlations with sociable and peer involvement and negative correlations with negative peer play and anxious. Female friends had a significant and negative correlation with negative peer play. Male close friends had a significant and positive correlation with social acceptance, and male friends had significant and positive correlations with sociable and hesitant.

Table 21.

Children 's Peer Social Skills in Head Start (Hypothesized Mediating Variables) Correlated With Children's Peer Acceptance in Kindergarten (Criterion Variables—FNI) n = 87

Variable	Female Cl Fr	Female Fr	Male Cl Fr	Male Fr
Negative Peer Play	-.26*	-.18*	.07	-.13
Sociable	.31*	.14	.09	.18*
Peer Involvement	.24*	-.01	-.13	.12
Hesitant	.00	.07	.02	.19*
Anxious	-.22*	.16	.10	.01
Social Acceptance	-.04	.15	.18*	.08

Note. Female Cl Fr = Female Close Friends at Time 3, Female Fr = Female Friends at Time 3, Male Cl Fr = Male Close Friends at Time 3, Male Fr = Male Friends at Time 3. +$p < .10$. *$p < .05$. **$p < .01$.

The results showed that children who used sociable skills and were involved with peers had more female close friends, while children who used negative peer play behaviors and were anxious with peers had fewer female close friends. Children who used negative peer play behaviors also had fewer female friends. Children who rated themselves as more socially accepted had more male close friends and children who were more sociable and hesitant with peers had more male friends.

Tests of Mediated Models: Peer Acceptance

As previously discussed, correlations among the predictors (i.e., maternal parenting practices), hypothesized mediators (i.e., children's peer social skills), and the criteria (i.e., peer acceptance and friendships) were conducted as the first phase for testing the mediating

model—Model 2. This model hypothesized that children's peer social skills would mediate in the relationship between parenting practices, and children's peer acceptance and friendship relationships. This section of the research examines the model in relation to peer acceptance.

Correlations for the sample (i.e., n = 87) revealed the following patterns of relationships for potential mediation according to the criteria established by Baron and Kenny (1986): (1) Rejecting and authoritarian were significantly correlated with anxious, (2) rejecting and authoritarian were significantly correlated with female close friends, and (3) anxious was significantly correlated with female close friends. Therefore, as part of the second phase for testing mediation, scores for female close friends (criterion) were regressed on rejecting and authoritarian (predictors), and anxious (hypothesized mediator). Income was held constant throughout the analyses by being entered on the first block for each regression equation. The results of the simple regressions are presented in Table 22 and Table 23.

The regressions for this set of variables (i.e., predictor variable, hypothesized mediating variable, and criterion variable) demonstrated weak, partial mediation at best (i.e., the beta weight for rejecting decreased by only .05, and the mediator only approached significance in the fourth regression) according to the criteria for mediation following Baron and Kenny (1986).

Table 22.

Multiple Regression Predicting Female Close Friends (FNI) From Rejecting Parenting and Anxious Social Skills

Predictors	Criterion	Standardized Beta	df	Cumulative Adjusted R^2	Change In R^2
(1) Income		.03	1,78	-.01	.00
Rejecting	Anxious	.21+	1,77	.02	.04+
(2) Income		-.01	1,78	-.01	.00
Rejecting	Female Cl Fr	-.22+	1,77	.02	.05+
(3) Income		-.01	1,78	-.01	.00
Anxious	Female Cl Fr	-.23*	1,77	.03	.05*
(4) Income		-.01	1,78	-.01	.00
Anxious		-.20+	2,76	.05	.08*[a]
Rejecting	Female Cl Fr	-.17	.....	.....	.....

Note. [a] This change in R^2 reflects the contribution of both the mediator and the parenting practices predictor. Each numbered predictor block represents a separate regression equation.

+$p < .10$. *$p < .05$. **$p < .01$.

The regressions for the next set of variables (i.e., predictor variable, hypothesized mediating variable, and criterion variable) demonstrated weak, partial mediation at best (i.e., the beta weight for rejecting decreased by only .05, and the mediator only approached significance in the fourth regression) according to the criteria for mediation following Baron and Kenny (1986).

Table 23.

Multiple Regression Predicting Female Close Friends (FNI) From Authoritarian Parenting and Anxious Social Skills

Predictors	Criterion	Standardized Beta	df	Cumulative Adjusted R^2	Change In R^2
(1) Income		.08	1,75	-.01	.01
Authoritarian	Anxious	.34**	1,74	.09	.11**
(2) Income		-.04	1,75	-.01	.00
Authoritarian	Female Cl Fr	-.29*	1,74	.05	.08*
(3) Income		-.04	1,75	-.01	.00
Anxious	Female Cl Fr	-.20+	1,74	.02	.04+
(4) Income		-.04	1,75	-.01	.00
Anxious		-.12	2,73	.06	.09*[a]
Authoritarian	Female Cl Fr	-.24*	.....	.....	.....

Note. [a] This change in R^2 reflects the contribution of both the mediator and the parenting practices predictor. Each numbered predictor block represents a separate regression equation.

+$p < .10$. *$p < .05$. **$p < .01$.

Correlations by Gender: Examination of Why Mediation Was Not Supported

Mothers' parenting practices (i.e., CPPD, MCTT, and AAPI) variables were correlated with children's peer social skills, and children's peer acceptance (FNI) for girls (i.e., $n = 40$) and boys (i.e., $n = 47$) separately. These correlations are based on the study sample (i.e., $n = 87$). Separate analyses by gender were conducted as: (1) the partial, weak

mediation described in Table 21 and approached in Table 22 could be due to the fact that mediators may differ for girls and boys (i.e., there may be hidden mediators), and (2) previously completed masters' theses by graduate students Austin (1998), Spears (1998), and Stiles (1998) showed significant main effects for gender for the same Head Start or kindergarten teacher ratings of children's peer social skills that were used in this study.

Table 24 presents the results of correlations examining the relationship between parenting practices and peer social skills for girls. All significance levels were one-tailed.

The results of the correlations between predictors and hypothesized mediators for girls are the following: Rejecting had a significant and positive correlation with anxious and a negative correlation with peer involvement. Authoritarian had significant and positive correlations with negative peer play and anxious, and negative correlations with sociable and peer involvement. Command with reason had a significant and negative correlation with hesitant. Positive feedback had a significant and positive correlation with anxious. Physical restraint had a significant and negative correlation with peer involvement. Empathy had a significant positive correlation with social acceptance. Physical punishment had significant and positive correlations with negative peer play and anxious, and negative correlations with peer involvement and social acceptance.

Table 24.

Correlations for Girls: CPPP, MCTT, and AAPI With Children's Peer Social Skills (n = 40)

Variable	Neg	Soc	PeerInv	Hes	Anx	SocAccp
Rejecting	.05	-.25	-.51*	.07	.34*	-.16
Authoritarian	.30*	-.30*	-.29*	-.11	.31*	-.21
Nurturant	.06	.04	.25	-.08	-.17	.20
Bribing	-.05	.02	-.07	.01	-.02	.06
Time Out	-.04	-.14	-.13	-.10	.09	-.01
Inquire Needs	-.13	.21	.25	.16	-.08	.10
Offer Help	-.06	.19	.19	.14	-.10	.14
Direct Command	.09	.00	.04	-.08	-.01	.04
Using Questions	-.05	.09	.02	.08	.01	.03
Command/Reason	.15	-.04	.10	-.28*	.07	.07
Positive Feedback	.12	-.13	-.02	.10	.34*	.11
Mother Folds Paper	-.13	.10	-.12	-.06	.07	-.03
Physical Restraint	-.02	-.03	-.30*	-.06	.21	-.17
Empathy	.21	.19	.09	-.03	-.19	.27*
Physical Punishment	.29*	-.26	-.28*	-.11	.33*	-.30*

Note. Neg = Negative Peer Play, Soc = Sociable, PeerInv = Peer Involvement, Hes = Hesitant, Anx = Anxious, SocAccp = Social Acceptance.

+$p < .10$. *$p < .05$. **$p < .01$.

The results showed that mothers' rejecting parenting practices were related to girls' increased anxiety and decreased peer involvement. Mothers' use of authoritarian parenting practices was positively related to their girls' negative peer play behaviors and anxiety, and negatively related to sociable skills and peer involvement. Additionally, mothers' commands with reasons were related to girls' decreased hesitant behaviors, and mothers' positive feedback was related to girls' increased anxiety. Furthermore, mothers' use of physical restraints was related to girls' decreased peer involvement, while mothers' empathy was related to girls' increased peer acceptance. Finally, mothers' use of physical punishment was related to girls' increased negative peer play behaviors and anxiety and decreased peer involvement and social acceptance.

Table 25 presents the results of correlations examining the relationship between parenting practices and peer acceptance for girls. All significance levels were one-tailed.

The results of the correlations between predictors and criteria for girls included the following: rejecting and authoritarian had significant and negative correlations with female close friends and male friends. Nurturant had significant and positive correlations with female and male close friends. Bribing had a significant and negative correlation with female friends. Mother folds paper had a significant and negative correlation with male friends, and physical punishment had a significant and negative correlation with female close friends.

Table 25.

Correlations for Girls: CPPD, MCTT, AAPI, with the FNI (n = 40)

Variables	Female Cl Fr	Female Fr	Male Cl Fr	Male Fr
Rejecting	-.30*	-.02	-.22	-.29*
Authoritarian	-.39*	.12	-.23	-.41*
Nurturant	.34*	.01	.33*	.25
Bribing	-.13	-.30*	.13	-.15
Time Out	.12	.20	-.01	.06
Inquire/Needs	-.12	.23	-.06	.10
Offer Help	.04	.03	-.07	.08
Direct Command	.23	.17	.22	.10
Using Questions	-.07	.15	.07	.17
Command/Reason	.01	-.07	-.24	-.13
Positive Feedback	-.20	.02	-.22	-.05
Mother Folds Paper	-.21	.01	-.08	-.30*
Physical Restraint	.04	.07	.15	-.11
Empathy	.04	.25	.08	-.02
Physical Punishment	-.27*	-.19	-.13	-.23

Note. Female Cl Fr = Female Close Friends at Time 3, Female Fr = Female Friends at Time 3, Male Cl Fr = Male Close Friends at Time 3, Male Fr = Male Friends at Time 3. +$p < .10$. *$p < .05$. **$p < .01$.

The results showed that mothers' use of rejecting and authoritarian parenting practices were related to girls' fewer female close friends and friends. However, mothers'

nurturing parenting practices were related to girls' increased female and male close friends. Mothers' use of bribing practices was related to girls' fewer female friends. Finally, mothers' taking over the boat task by folding the boat herself was related to girls' decreased male friends, while mothers' use of physical punishment was related to girls' decreased female close friends.

Table 26 presents the results of the correlations examining the relationship between peer social skills and peer acceptance for girls. All significance levels were one-tailed.

Table 26.

Correlations for Girls: Children's Peer Social Skills with the FNI (n = 40)

Variables	Female Cl Fr	Female Fr	Male Cl Fr	Male Fr
Negative Peer Play	-.16	.14	.10	-.13
Sociable	.37*	.27*	-.02	.25
Peer Involvement	.26*	.30*	-.03	.28*
Hesitant	.07	-.02	-.04	.05
Anxious	-.23	.20	-.27*	-.25
Social Acceptance	.03	.12	.03	-.04

Note. Female Cl Fr = Female Close Friends at Time 3, Female Fr = Female Friends at Time 3, Male Cl Fr = Male Close Friends at Time 3, Male Fr = Male Friends at Time 3. +p < .10. *p <.05. **p < .01.

The results of the correlations between hypothesized mediators and criteria for girls included the following: Sociable had a significant and positive correlation with female close friends and female friends. Peer involvement had a significant and positive correlation with female and male friends. Additionally, anxious behaviors had a significant and negative correlation with male close friends.

The results showed that girls' use of sociable skills was related to increased female close friends and friends. Girls' involvement with peers was related to increased female and male friends. Also, girls' anxious behaviors were related to fewer male close friends.

Table 27 presents the results of correlations examining the relationships between parenting practices and peer social skills for boys. All significance levels were one-tailed.

Table 27.

Correlations for Boys: CPPP, MCTT, and AAPI With Children's Peer Social Skills (n = 47)

Variable	Neg	Soc	PeerInv	Hes	Anx	SocAccp
Rejecting	-.10	.18	.23	-.18	.19	-.06
Authoritarian	.04	-.05	.18	.08	.31*	-.13
Nurturant	.05	-.24	-.11	.13	.04	.04
Bribing	-.14	-.09	-.15	.22	.18	-.09
Time Out	-.03	.05	.08	.03	.21	-.16
Inquire Needs	.13	-.09	.12	-.14	.02	.04
Offer Help	-.01	.01	-.08	-.08	-.04	.11
Direct Command	-.11	.01	-.06	.12	.03	-.05
Using Questions	-.13	.06	-.09	.06	.22	.08
Command/Reason	.02	-.06	-.02	-.17	-.19	-.22
Positive Feedback	.11	-.02	.30*	.09	-.01	.01
Mother Folds Paper	-.03	.15	.10	-.26*	-.17	.16
Physical Restraint	.05	.16	.12	-.30*	-.17	.16
Empathy	.00	-.19	-.19	.08	.04	-.16
Physical Punishment	.12	-.04	.28*	-.13	-.05	.16

Note. Neg = Negative Peer Play, Soc = Sociable, PeerInv = Peer Involvement, Hes = Hesitant, Anx = Anxious, SocAccp = Social Acceptance.

+p < .10. *p < .05. **p < .01.

The results of the correlations between predictors and hypothesized mediators for boys included: Authoritarian parenting practices had a significant and positive correlation with anxious behaviors. Positive feedback and physical punishment had significant and positive correlations with peer involvement. Mother folds paper and physical restraint had significant and negative correlations with hesitant behaviors.

The results showed that mothers' use of authoritarian parenting practices was related to boys' increased anxiety. Also, mothers' use of positive feedback and physical punishment was related to boys' increased peer involvement. Finally, mothers' folding papers and physical restraints were related to boys' decreased hesitancy.

Table 28 presents the results of correlations examining the relationship between parenting practices and peer acceptance for boys. All significance levels were one-tailed.

The results of the significant correlations between parenting practices predictors and peer acceptance criteria for boys included the following: female close friends and female friends had a significant and positive correlation with direct commands. Additionally, female friends had a significant and negative correlation with commands with reasons. Male close friends and male friends had no significant correlation with any of the maternal parenting practice predictors.

The results showed that mothers' direct commands were related to boys' increased female close friends and friends. Also, mothers' use of commands with reasons were related to fewer female friends for boys. Finally, maternal parenting practices were not related to boys' male close friends or friends.

Table 28.

Correlations for Boys: CPPD, MCTT, AAPI, with the FNI (n = 47)

Variables	Female Cl Fr	Female Fr	Male Cl Fr	Male Fr
Rejecting	-.23	-.07	-.17	.06
Authoritarian	-.22	.06	-.17	.14
Nurturant	.09	-.12	.01	.08
Bribing	-.21	.10	.06	.07
Time Out	-.15	.06	-.26	.26
Inquire/Needs	-.01	.04	.16	-.07
Offer Help	.01	.08	-.19	-.06
Direct Command	.29*	.29*	.03	.21
Using Questions	.11	.22	.19	- .06
Command/Reason	.05	-.27*	-.05	-.23
Positive Feedback	.17	-.07	-.06	.15
Mother Folds Paper	-.13	-.15	.10	.05
Physical Restraint	-.05	-.04	.08	-.06
Empathy	.11	-.09	.04	.10
Physical Punishment	.04	.03	.13	.07

Note. Female Cl Fr = Female Close Friends at Time 3, Female Fr = Female Friends at Time 3, Male Cl Fr = Male Close Friends at Time 3, Male Fr = Male Friends at Time 3. +$p < .10$. *$p < .05$. **$p < .01$.

Table 29 presents the results of correlations examining the relationship between peer social skills and peer acceptance. All significance levels were one-tailed.

Table 29.

Correlations for Boys: Children's Peer Social Skills with the FNI (n = 47)

Variables	Female Cl Fr	Female Fr	Male Cl Fr	Male Fr
Negative Peer Play	.04	-.24	-.30*	-.37*
Sociable	.08	.00	.36*	.22
Peer Involvement	-.15	-.34	.05	.10
Hesitant	.10	.18	-.06	.31*
Anxious	.01	.23	.04	.08
Social Acceptance	-.10	.19	.26*	.20

Note. Female Cl Fr = Female Close Friends at Time 3, Female Fr = Female Friends at Time 3, Male Cl Fr = Male Close Friends at Time 3, Male Fr = Male Friends at Time 3. +$p < .10$. *$p < .05$. **$p < .01$.

The significant correlations between the hypothesized mediators and peer acceptance outcomes for boys included the following: negative peer play, sociable, and social acceptance had a significant correlation with male close friends (i.e., negative with negative peer play and positive with sociable and social acceptance). Negative peer play also had a significant and negative correlation with male friends. Furthermore, hesitant behaviors had a significant and positive correlation with male friends.

The results showed that boys' negative peer play behaviors were related to decreased male close friends, while sociable and social acceptance skills were related to increased male friends. Also, negative peer play behaviors were related to fewer male friends for boys. Finally, boys hesitancy was related to more male friends.

Tests of Mediation Models For Girls

Correlations analyses showed different patterns of significant correlations among multiple parenting practices, children's peer social skills, and the four variables measuring children's peer acceptance on the FNI for girls versus boys. Therefore, regression analyses testing mediated models for peer acceptance were conducted separately for girls and boys. Mediation was tested according to the criteria established by Baron and Kenny (1986) for the following significant correlations: (1) rejecting and anxious had a significant correlation with peer involvement, (2) rejecting and authoritarian had a significant correlation with male friends, and (3) peer involvement had a significant correlation with male friends. Therefore, as part of the second phase for testing mediation, scores for male friends (outcome) were regressed on rejecting and authoritarian (predictors), and peer involvement (hypothesized mediator). Income was held constant by entry into the regression equation in the first block. The results of these simple regression analyses are presented in the following tables.

Table 30 presents multiple regression analyses for girls predicting male friends from the predictor and hypothesized mediator. Income is held constant throughout the analyses.

The regressions for this set of variables (i.e., predictor variable, hypothesized mediation variable, and criterion variable) did not demonstrate mediation (i.e., although the beta weight for rejecting decreased by .10, the beta weight for peer involvement decreased by .11, indicating that the 2 variables overlapped in predicting male friends; peer involvement did not approach significance in the fourth regression) according to the criteria for mediation offered by Baron and Kenny (1986).

Table 30.

Multiple Regression for Girls Predicting Male Friends From Rejecting Parenting and Peer Involvement Social Skills

Predictors	Criterion	Standardized Beta	df	Cumulative Adjusted R^2	Change In R^2
(1) Income		-.03	1,35	-.03	.00
Rejecting	Peer Involvement	-.52**	1,34	.22	.26**
(2) Income		-.22	1,35	.02	.05
Rejecting	Male Fr	-.32+	1,34	.10	.10+
(3) Income		-.22	1,35	.02	.05
Peer Involvement	Male Fr	.30+	1,34	.09	.09+
(4) Income		-.22	1,35	.02	.05
Peer Involvement		.19	2,33	.10	.12[a]
Rejecting	Male Fr	-.22	.....	.....	.....

Note. [a] This change in R^2 reflects the contribution of both the mediator and the parenting practices predictor. Each numbered predictor block represents a separate regression equation.

+p < .10. * p < . 05. **p < .01.

Table 31 presents the multiple regression analyses predicting male friends from the predictor and hypothesized mediator. Income was held constant throughout the analyses.

Table 31.

Multiple Regression for Girls Predicting Male Friends From Authoritarian Parenting and Peer Involvement Social Skills

Predictors	Criterion	Standardized Beta	df	Cumulative Adjusted R^2	Change In R^2
(1) Income		-.03	1,35	-.03	.00
Authoritarian.....	Peer Involvement	-.32+	1,34	.04	.09+
(2) Income		-.22	1,35	.02	.05
Authoritarian.....	Male Fr	-.48**	1,34	.22	.22**
(3) Income		-.22	1,35	.02	.05
Peer Involvement.....	Male Fr	.30+	1,34	.08	.09+
(4) Income		-.22	1,35	.02	.05
Peer Involvement		.17	2,33	.23	.24**[a]
Authoritarian.....	Male Fr	-.42*	.....	.....	.....

Note. [a] This change in R^2 reflects the contribution of both the mediator and the parenting practices predictor. Each numbered predictor block represents a separate regression equation.

+$p < .10$. *$p < .05$. **$p < .01$.

The regressions for this set of variables (i.e., predictor variable, hypothesized mediation variable, and criterion variable) did not demonstrate mediation (i.e., although the beta weight for authoritarian decreased by .06, the beta weight for peer involvement decreased by .13; authoritarian remained significant in the fourth regression; and peer

involvement did not remain significant in the fourth regression) according to the criteria for mediation following Baron and Kenny (1986).

Tests of Mediated Models for Boys

Overall, correlations for boys did not met the criteria for testing mediation using regression analyses following Baron and Kenny (1986). Therefore, the peer acceptance variables for boys were not regressed on predictor variables and hypothesized mediation variables for boys.

Tests of Non-Mediated Models: Children's Peer Social Skills

As previously discussed, correlations among maternal parenting practices, children's peer social skills, and peer acceptance and friendships were conducted. Significant results were found that have also been discussed previously. Therefore, the non-mediated model (i.e., Model 1) was tested for prediction. This model hypothesized: (1) the non-mediated relationship of maternal parenting practices on children's peer acceptance and friendships, (2) the non-mediated relationship of maternal parenting practices on children's peer social skills, and (3) the non-mediated relationship of children's peer social skills on peer acceptance and friendship relationships. This section of the research examines the model in relation to children's peer social skills.

As indicated above, correlation analyses showed different patterns of significant correlations among multiple parenting practices and children's peer social skills for girls versus boys (see Tables 23 and 26). Therefore, regression analyses for testing non-mediated models for peer social skills were conducted separately for girls and boys. Again, income was held constant by entry into the first block for each regression equation. The results of these analyses are presented in the following tables.

Girls

In the regressions testing nonmediated relationships between parenting practices and girls' social skills in Head Start, only relationships that were significant in Table 23 were included. Table 32 presents the results of multiple regression analysis predicting negative peer play from authoritarian. Income was held constant by entry into the regression in the first block.

Table 32.

Multiple Regression for Girls Predicting Negative Peer Play

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.03	.85	.00	-.03
2	Authoritarian	.30	.08+	.09+	.03

+p <.10. *p < .05. **p < .01.

Results of the regression analysis showed that negative peer play was positively predicted by authoritarian parenting practices (p < .10). and block 2 (i.e., authoritarian) accounted for 9% of the variance in negative peer play behaviors when income was held constant.

Table 33 presents the results of multiple regression analysis predicting sociable from authoritarian parenting practices. Income was held constant by entry into the regression in the first block.

Results of the regression analysis showed that sociable was not predicted by authoritarian parenting practices. The regression was not significant when income was held constant.

Table 33.

Multiple Regression for Girls Predicting Sociable

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.14	.39	.02	-.01
2	Authoritarian	-.28	.11	.07	.04

+p < .10. *p < .05. **p < .01.

Table 34 presents the results of multiple regression analysis predicting peer involvement from authoritarian, rejecting, physical restraint, and physical punishment. Income was held constant by entry into the regression in the first block.

Table 34.

Multiple Regression for Girls Predicting Peer Involvement

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.00	1.00	.00	-.03
2	Rejecting	-.51	.03*		
	Authoritarian	.00	.99		
	Physical Restraint	-.18	.29		
	Physical Punishment	.09	.70	.29*	.17

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that peer involvement was negatively predicted by rejecting parenting practices (p < .05). Block 2 (i.e., rejecting, authoritarian,

physical restraint, and physical punishment) accounted for 29% of the variance in peer involvement when income was held constant.

Table 35 presents the results of multiple regression analysis predicting hesitant from commands with reasons parenting practices. Income was held constant by entry into the regression in the first block.

Table 35.

Multiple Regression for Girls Predicting Hesitant

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.01	.96	.00	-.03
2	Command/Reasons	-.29	.09+	.08+	.03

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that hesitant was only marginally negatively predicted by commands with reasons parenting practices (p < .10). Block 2 (i.e., commands with reasons) accounted for 8% of the variance in hesitant when income was held constant.

Table 36 presents the results of multiple regression analysis predicting anxious from positive feedback, rejecting, physical punishment, and authoritarian parenting practices. Income was held constant by entry into the regression in the first block.

Results of the regression analysis showed that anxious scores were positively predicted by positive feedback parenting practices (p < .05). Block 2 (i.e., rejecting, authoritarian, positive feedback, and physical punishment) accounted for 29% of the variance in anxious scores when income was held constant.

Table 36.

Multiple Regression for Girls Predicting Anxious

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.08	.64	.01	-.02
2	Rejecting	.08	.72		
	Authoritarian	.15	.50		
	Positive Feedback	.33	.04*		
	Physical Punishment	.26	.23	.29*	.18

+p < .10. *p. < .05. **p < .01.

Table 37 presents the results of multiple regression analysis predicting social acceptance from empathy and physical punishment. Income was held constant by entry into the regression in the first block.

Table 37.

Multiple Regression for Girls Predicting Social Acceptance

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.19	.23	.04	.01
2	Empathy	.12	.53		
	Physical Punishment	-.20	.34	.07	.03

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that social acceptance was not predicted by empathetic or physical punishment parenting practices. The regression was not significant when income was held constant.

Boys

In the regressions testing nonmediated relationships between parenting practices and boys' social skills in Head Start, only significant relationships were included in Table 26. Table 38 presents the results of multiple regression analysis predicting peer involvement from positive feedback and physical punishment. Income was held constant by entry into the regression in the first block.

Table 38.

Multiple Regression for Boys Predicting Peer Involvement

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.07	.64	.01	-.02
2	Positive Feedback	.28	.06+		
	Physical Punishment	.27	.07+	.16*	.14

p. < .10. *p < .05. **p < .01.

Results of the regression analysis showed that peer involvement was only marginally positively predicted by positive feedback and marginally negatively predicted by physical punishment parenting practices (p < .10). Block 2 (i.e., positive feedback and physical punishment) accounted for 16% of the variance of peer involvement when income was held constant.

Table 39 presents the results of multiple regression analysis predicting hesitant from mother folds paper herself and physical restraint. Income was held constant by entry into the regression in the first block.

Results of the regression analysis showed that hesitant was only marginally negatively predicted by physical restraint parenting practices ($p < .10$). Block 2 (i.e., mother folds paper herself and physical punishment) accounted for 13% of the variance of hesitant when income was held constant.

Table 39.

Multiple Regression for Boys Predicting Hesitant

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.02	.90	.00	-.02
2	Mother Folds Paper	-.20	.18		
	Physical Restraint	-.27	.08+	.13*	.72

+p. < .10. *p < .05. **p < .01.

In a correlation analysis for boys, hesitant had a negative correlation with aggressive ($r = -.25$, $p < .05$) and difficult ($r = -.12$, $p = .21$), while a positive correlation with shares ($r = .27$, $p < .05$). Thus, teachers may rate a boy's hesitancy in the classroom with peers as a positive social skill, as it is positively related to sharing with peers. Teachers' positive regard for hesitancy in boys helps to shed light on the counter-intuitive inverse relationship between maternal physical restraint and hesitancy.

Table 40 presents the results of multiple regression analysis predicting anxious from authoritarian parenting practices. Income was held constant by entry into the regression in the first block.

Results of the regression analysis showed that anxious was positively predicted by authoritarian parenting practices ($p < .05$). Block 2 (i.e., authoritarian) accounted for 10% of the variance in anxious scores when income was held constant.

Table 40.

Multiple Regression for Boys Predicting Anxious

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.01	.97	.00	-.03
2	Authoritarian	.33	.04*	.10*	.06

+p < .10. *p < .05. **p < .01.

Tests of Non-Mediated Models: Peer Acceptance

As discussed previously, correlation analyses showed different patterns of significant correlations among multiple parenting practices, children's peer social skills, and the four variables measuring children's peer acceptance on the FNI for girls versus boys. Therefore, regression analyses for testing non-mediated models for peer acceptance were conducted separately for girls and boys. Again, income was held constant by entry into the regression equation in the first block. The results of these analyses are presented in the following tables.

Girls

In the regressions testing nonmediated relationships between parenting practices, peer social skills, and girls' peer acceptance in kindergarten, only relationships that were significant in Tables 25 and 26 were included. For girls, predictors for female close friends included: rejecting, authoritarian, nurturant, physical punishment, sociable, and peer involvement. Due to this large number of variables (i.e., 6) in relation to the sample size of

girls (n = 40) [i.e., recommendations for variable to subject ratio should be approximately 1:10 (Pedhazur, 1997)] the strategy for the regression analyses was to enter the 2 parenting predictors that had the highest significant correlation with the outcome variable and the 2 peer social skills variables that also had the highest correlation with the outcome variable. Therefore, authoritarian and nurturant were the two parenting practices entered into the regression analysis for prediction of female close friends.

Female friends had a significant correlation with the predictor variable, bribing (see Table 25) and the peer social skills variables, sociable and peer involvement (see table 26). Male close friends had a significant correlation with the predictor variable, nurturant (see Table 25), and the peer behavior, anxious (see Table 26). Finally, male friends had a significant correlation with the predictor variables, mother folds paper and authoritarian (see Table 25), and the peer social skill, peer involvement (see Table 26).

Table 41 presents the regression analysis predicting female close friends from authoritarian and nurturant parenting practices, and sociable and peer involvement social skills. Income was held constant by entry into the regression in the first block.

Table 41.

Multiple Regression Predicting Female Close Friends (FNI)—Girls

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.08	.64	.01	-.02
2	Authoritarian	-.16	.37		
	Nurturant	.28	.12		
	Sociable	.43	.03*		
	Peer Involvement	-.09	.65	.33*[a]	.22

Note. [a] df = 4,31

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that female close friends were positively predicted by sociable social skills (p < .05). Block 2 (i.e., authoritarian, nurturant, sociable, peer involvement) accounted for 33% of the variance of female close friends when income was held constant.

Table 42 presents the results of multiple regression analysis predicting female friends from bribing parenting practices, and sociable and peer involvement. Income was held constant by entry into the regression in the first block.

Table 42.

Multiple Regression Predicting Female Friends (FNI)—Girls

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.01	.97	.00	.03
2	Bribing	-.33	.05+		
	Sociable	.19	.35		
	Peer Involvement	.18	.35	.20+	.11

+p < .10. * p < .05. **p < .01.

Results of the regression analysis showed that female friends were only marginally negatively predicted by bribing parenting practices (p < .10). Block 2 (i.e., bribing, sociable, peer involvement) accounted for 20% of the variance in female friends when income was held constant.

Table 43 presents the results of multiple regression analysis predicting male close friends from anxious and nurturant parenting practices. Income was held constant by entry into the regression in the first block.

Table 43.

Multiple Regression Predicting Male Close Friends (FNI)—Girls

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.05	.75	.00	.-.02
2	Nurturant	.29	.08+		
	Anxious	-.21	.19	.15+	.08

+p <.10. *p < .05. **p < .01.

Results showed that male close friends were only marginally positively predicted by nurturing parenting practices (p <.10). Block 2 (i.e., anxious and nurturant) accounted for 15% of the variance in male close friends when income was held constant.

Table 44 presents the results of multiple regression analysis predicting male friends from authoritarian and mother folds paper herself, and peer involvement. Income was held constant by entry into the regression in the first block.

Table 44.

Multiple Regression Predicting Male Friends (FNI)—Girls

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.30	.08+	.09+	.06
2	Authoritarian	-.38	.02*		
	Mother Folds Paper	-.17	.28		
	Peer Involvement	.18	.25	.28**[a]	.29

Note. [a] df = 3,31.

+$p < .10$. *$p < .05$. **$p < .01$

Results of the regression analysis showed that male friends were negatively predicted by authoritarian parenting practices ($p < .05$). Block 2 (i.e., authoritarian, mother folds paper herself, and peer involvement) accounted for 28% of the variance in male friends when income was held constant.

In sum, the results of regressing the peer acceptance variables (i.e., FNI) on the parenting practices variables (i.e., CPPD, MCTT, AAPI) and children's peer social skills for girls revealed modest support for the nonmediated models. These results included the following: (1) female close friends were predicted by sociable ($p < .05$); (2) female friends were marginally predicted by bribing ($p < .10$); (3) male close friends were marginally predicted by nurturant ($p < .10$); and (4) male friends were predicted by authoritarian ($p < .05$).

The results also showed that the total variance explained for peer acceptance by parenting practices and peer social skills was 15% - 33%. These included: (1) female close friends—33%, (2) female friends—20%, (3) male close friends—15%, and (4) male friends—28%.

Boys

In the regressions testing nonmediated relationships between parenting practices, peer social skills, and boys' peer acceptance in kindergarten, only relationships that were significant in Tables 28 and 29 were included. For boys, the variable, female close friends, had a significant correlation with the predictor variable, direct commands, while the variable, female friends was significantly correlated with the predictor variables, direct commands and command with reason. The variable, male close friends, had a significant correlation with the predictor variable, time out, and the peer social skills variables, negative peer play and sociable. Finally, the variable, male friends had a significant correlation with

the peer social skills variables, negative peer play and hesitant. The results of the regression analyses are presented in the following tables.

Table 45 presents the results of multiple regression analysis predicting female close friends from direct commands. Income was held constant by entry into the regression in the first block.

Table 45.

Multiple Regression Predicting Female Close Friends (FNI)—Boys

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.14	.35	.02	-.00
2	Direct Command	.27	.08+	.07+	.05

+p < .10. *p < .05. **p < .01.

Results showed that female close friends were only marginally positively predicted by direct commands parenting practices (p < .10). Block 2 (i.e., direct commands) accounted for 7% of the variance in female close friends when income was held constant.

Table 46 presents the results of multiple regression analysis predicting female friends from direct commands and commands with reasons parenting practices. Income was held constant by entry into the regression in the first block.

Table 46.

Multiple Regression Predicting Female Friends (FNI)—Boys

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.01	.97	.00	-.02
2	Direct Command	.24	.13		
	Command/Reasons	-.20	.20	.13+	.06

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that female friends were not predicted by direct commands or commands with reasons parenting practices. Block 2 (i.e., direct commands, commands with reasons) accounted for 13% of the variance in female friends when income was held constant.

Table 47 presents the results of multiple regression analysis predicting male close friends from time out, and negative peer play and sociable. Income was held constant by entry into the regression in the first block.

Table 47.

Multiple Regression Predicting Male Close Friends (FNI)—Boys

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.01	.97	.00	-.03
2	Time Out	-.29	.06+		
	Negative Peer Play	-.14	.40		
	Sociable	.33	.05+	.23*	.14

+p < .10.*p < .05. **p < .01.

Results of the regression analysis showed that male close friends were only marginally negatively predicted by time out, while marginally positively predicted by sociable (p < .10). Block 2 (i.e., time out, negative peer play, and sociable) accounted for 23% of the variance in male close friends when income was held constant.

Table 48 presents the results of multiple regression analysis predicting male friends from time out, and negative peer play and hesitant. Income was held constant by entry into the regression in the first block.

Table 48.

Multiple Regression Predicting Male Friends (FNI)—Boys

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	.21	.19	.05	.02
2	Time Out	.24	.11		
	Negative Peer Play	-.21	.18		
	Hesitant	.31	.05[b]*	.23*	.19

Note. [b] Exact significance was .047.

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that male friends were positively predicted by hesitant (p < .05). Block 2 (i.e., time out, negative peer play, hesitant) accounted for 23% of the variance in male friends when income was held constant.

In sum, the results of the regression analyses showed less support for nonmediated models for boys than they did for girls. The results for boys included the following: (1) female close friends were marginally predicted by direct command (p < .10); (2) female friends were not predicted; (3) male close friends were marginally predicted by sociable and time out (p < .10); and (4) male friends were predicted by hesitant (p < .05).

The results also showed that, for boys, parenting practices and peer social skills accounted for 7% - 23% of the variance of peer acceptance. This included: (1) female close friends—7%, (2) female friends—13%, (3) male close friends—23%, and (4) male friends—23%.

Predicting Children's Friendship Relationships

During the kindergarten year, children's friendship relationships were examined using the Friendship Dyad Behaviors (FDB) of the Peer Interaction Tasks (PIT). Along with

the FDB, the Friendship Questionnaire (FQ) was administered to determine the friendliness of the target child and his/her playmate. The FQ had a total of 8 questions that asked for mothers' ratings of their child's relationship with the playmate who came to the research site, including their child's preference for the playmate. The two preference questions were as follows: "Does your child prefer to play with this friend more than any other child," and the second question asked: "Does your child prefer to play with this friend the same amount as one other friend." A "yes" on either question was used as the criterion for determining that the playmate was indeed a "friend" of the target child.

Using this criterion resulted in a subsample (i.e., n = 66) of the original study sample who constituted the sample for the analyses of correlations among the predictor variables (i.e., maternal parenting practices), the hypothesized mediating variables (i.e., children's peer social skills), and the criterion variables (children's friendship relationships).

Maternal Parenting Practices (Predictor Variables)—Data Reduction

Before computing correlations among predictors, mediator, and outcomes, the maternal parenting practices variables were correlated to determine whether there was collinearity among predictor variables in the reduced sample (i.e., n = 66). The results are presented in Table 49.

Results of the correlations indicated that rejecting and authoritarian correlated at .63, thus indicating collinearity and possible consideration for forming a composite variable. However, in order to maintain consistency between predictors of friendship and peer acceptance, both rejecting and authoritarian were kept as predictors.

Table 49.

Correlations: Maternal Parenting Practices—CPPD, MCTT, and AAPI (n = 66)

	Rej	Aut	Nur	Bri	Tim	Inq	Off	Dir	Us	Co	Po	Mo	Phy	Em
Ph														
Rej	---													
Aut	**.63**	---												
Nur	**-.52**	**-.49**	---											
Bri	.14	.30	.22	---										
Tim	**.46**	.33	-.06	.04	---									
Inq	-.11	-.16	-.01	-.10	-.25	---								
Off	-.04	-.22	-.09	-.11	-.01	.27	---							
Dir	.07	.31	.07	-.07	.24	-.26	-.18	---						
Us	-.25	-.20	-.11	.08	-.33	.26	.05	.32	---					
Co	-.05	-.05	.13	.05	-.07	-.10	-.01	-.16	-.11	---				
Po	.06	-.05	.11	-.04	.05	.27	.10	-.16	-.06	-.12	---			
Mo	**.35**	.21	-.16	.03	.19	-.08	.08	-.06	-.10	.15	-.17	---		
Phy	**.32**	.22	-.07	-.06	.10	-.14	-.02	.13	-.08	-.07	-.16	**.54**	---	
Em	**-.48**	**-.44**	**.35**	-.19	-.31	.24	.24	-.23	.25	.13	.05	-.07	-.31	---
Ph	**.56**	**.50**	-.31	.19	.10	-.14	-.17	.17	-.20	.01	.10	.10	.31	**-.57**	---

Note. Rej = Rejecting, Aut = Authoritarian, Nur = Nurturant, Bri = Bribing, Tim = Time Out, Inq = Inquiry About Child's Needs/Wants, Off = Offer of Help, Dir = Direct Command, Us = Using Questions to Direct Child, Co = Command/Reason, Po = Positive Feedback, Mo = Mother Folds Paper, Phy = Physical Restraint, Em = Empathy, Ph = Physical Punishment.

Underline = $p < .05$. **Bold** = $p < .01$.

Children's Peer Social Skills (Hypothesized Mediating Variables)—Data Reduction

Children's peer social skills consisted of the following subscales and instruments: (1) difficult—RSSCP, (2) hesitant—RSSCP, (3) sociable—RSSCP (4) peer involvement—CPSCS, (5) no share—CPSCS, (6) aggressive—PBQ, (7) anxious—PBQ, (8) mother—Pictorial PCS, and (9) peer—Pictorial PCS.

In order to determine whether collinearity among these variables was the same or similar for the subsample of n = 66 as it was for the sample of n = 87, correlation analyses were The results of these analyses are presented in Table 50.

Table 50.

Correlations: Children's Peer Social Skills (n=66)

	Agg	Dif	Share	Soc	PeerInv	Hes	Anx	Moth	Peer
Agg	---								
Dif	**.84**	---							
Share	**-.79**	**-.79**	---						
Soc	**-.42**	**-.49**	**.51**	---					
PeerInv	-.04	-.15	.22	**.53**	---				
Hes	-.15	-.06	-.20	-.22	**-.42**	---			
Anx	**.41**	**.35**	-.21	-.26	-.21	.14	---		
Moth	.01	.02	-.07	.09	.08	-.17	-.08	---	
Peer	-.16	-.14	.24	.24	.20	.04	-.02	**.64**	---

Note. Agg = Aggressive, Dif = Difficult, Share = Share, Soc = Sociable, PeerInv = Peer Involvement, Hes = Hesitant, Anx = Anxious, Moth = Mother, and Peer = Peer Acceptance. Underline = $p < .05$. **Bold** = $p < .01$.

The results of the correlations indicated that aggressive, difficult, and share were correlated > .60 and were thus combined into the previously identified composite variable, negative peer play, with share recoded as no share. Correlations among sociable, peer involvement, hesitant, and anxious did not show collinearity. Furthermore, the correlation between the mother and peer subscales of the Pictorial PCS was > .60 so the previously identified composite variable, social acceptance, was included in further analyses.

Children's Friendships Relationships (Criterion Variables)—Data Reduction

The variables for children's friendship relationships consisted of draw-talk, block-talk, smile, and draw-cooperate. Correlations of the variables were computed to determine possible collinearity. The results of the analyses are presented in Table 51.

Table 51.

Correlations: Friendship Dyad Behaviors—FDB (n = 66)

Variables	Draw -Talk	Block -Talk	Smile	Draw - Cooperate
Draw Talk	---			
Block Talk	.27	---		
Smile	**.35**	.16	---	
Draw Cooperate	-.16	-.06	.01	---

Note. Underline = p <.05. **Bold** = p <.01.

Correlations between draw-talk and block-talk, as well as draw-talk and smile indicated low collinearity. Therefore, these variables were not combined into composite variables.

To determine whether gender was related to the friendship criteria, correlations were computed between each of the outcomes and gender. Results revealed no relationship between gender and the friendship criteria. Therefore, separate analyses by gender were not conducted. The Table 52 presents the results of the correlations examining the relationship between gender and the friendship criteria.

Table 52.

ANOVA: FDB and Gender

FDB	Correlation With Gender (1 = male, 2 = female)	Significance
Block-Talk	.01	.95 ns
Draw-Talk	.18	.16 ns
Smile	.13	.29 ns
Draw-Cooperate	.09	.45 ns

+$p < .10$. *$p < .05$. **$p < .01$.

Correlations Among Variables of the Subsample

Correlations were calculated among the maternal parenting practices variables, children's peer social skills, and children's peer acceptance and friendship relationships, for the subsample (i.e., $n = 66$). These correlations were conducted in order to test mediation (see Baron and Kenny, 1986), according to the following criteria: (1) the predictor variables had significant associations with the mediation variables, (2) the predictor variables had significant associations with the criteria variables, and (3) the mediation variables had significant associations with the criteria variables. Results of these analyses are presented in the following tables.

Table 53 presents the results of correlation analysis examining the relationship between maternal parenting practices (predictors) and children's peer social skills. All significant correlations were one-tailed.

Table 53.

Maternal Parenting Practices in Head Start (Predictor Variables) Correlated With Children's Peer Social Skills in Head Start (Hypothesized Mediating Variables) (n = 66)

Variable	Neg	Soc	PeerInv	Hes	Anx	SocAccp
Rejecting	-.09	-.05	-.18	.02	.18	-.07
Authoritarian	.03	-.14	-.03	.07	.35*	-.11
Nurturant	.08	-.02	.21	-.15	-.17	.60
Bribing	-.07	.01	-.13	.10	.18	.09
Time Out	-.14	-.01	.00	-.08	.03	-.06
Inquire Needs	.11	.00	.10	-.01	.00	-.08
Offer Help	.01	.06	.08	.00	-.09	.13
Direct Command	-.01	-.03	-.09	.07	.04	.01
Using Questions	-.17	.09	.00	.08	.10	.03
Command/Reason	.01	-.15	.08	-.21*	-.16	-.10
Positive Feedback	.07	-.04	.18	-.01	.08	.10
Mother Folds Paper	-.07	.18	.02	-.19	.00	.04
Physical Restraint	-.03	.02	-.11	-.10	-.01	.03
Empathy	.04	.00	-.03	.05	-.09	-.01
Physical Punishment	.15	-.19	-.04	-.15	.08	-.15

Note. Neg = Negative Peer Play, Soc = Sociable, PeerInv = Peer Involvement, Hes = Hesitant, Anx = Anxious, SocAccp = Social Acceptance.

+p < .10. *p < .05. **p < .01.

The results of the correlation analysis indicted that authoritarian had a significant and positive correlation with anxious. Also, command with reason was significant and negative correlation with hesitant.

The results showed that mothers' use of authoritarian parenting practices was related to children's anxiety. Also, mothers' use of commands with reasons parenting practices was related to children's hesitancy.

Mothers' Parenting Practices in Head Start (Predictor Variables) Correlated With Children's Friendship Relationships in Kindergarten (Criterion Variables)

Mothers' CPPD, MCTT, and AAPI variables were correlated with children's friendship relationships (FDB) variables for the subsample of n = 66. The results of these correlations are presented in the following table.

Table 54 presents the results of correlation analysis examining the relationship between maternal parenting practices (predictors) and children's friendship relationships. All significant correlations were one-tailed.

Results of the analysis showed that authoritarian had a significant positive correlation with smile. Using questions had a significant positive correlation with draw-cooperate and a significant negative correlation with draw-talk. Also, physical restraint had a significant negative correlation with draw-talk, while empathy had a significant positive correlation with block-talk.

Table 54.

Correlations: CPPD, MCTT, and AAPI Correlated With FDB (n = 66)

Variable	Draw-Talk	Block-Talk	Smile	Draw-Cooperate
Rejecting	.06	-.11	.11	-.07
Authoritarian	.15	.02	.38*	-.06
Nurturant	-.03	.29	-.18	.03
Bribing	.21	.00	.13	-.01
Time Out	.14	.08	-.07	-.16
Inquire/Needs	-.16	-.04	.01	.04
Offer Help	-.04	.10	.08	.10
Direct Command	.12	.09	.03	.01
Using Questions	-.21*	-.12	-.11	.27*
Command/Reason	-.12	-.04	.00	-.11
Positive Feedback	-.05	-.07	.02	.09
Mother Folds	-.16	.05	-.10	.00
Physical Restraint	-.22*	-.13	-.04	-.01
Empathy	.00	.26*	-.10	.18
Physical Punishment	.06	-.16	.11	-.07

+p < .10. *p < .05. **p <.01.

The results showed as mothers' authoritarian parenting practices increased, so did children's smiling. Mothers' use of questions was related to children's increased cooperation during the drawing tasks and decreased talking during the drawing tasks. Also, mothers' use of physical restraints were related to children's decreased talking during the drawing task,

while mothers' empathetic parenting practices were related to children's talking during the block building task.

Children's Peer Social Skills in Head Start (Hypothesized Mediating Variables) Correlated With Friendship Relationships in Kindergarten (Criterion Variables)

Children's peer social skills were correlated with friendship dyad behaviors (FDB) for the subsample (i.e., n = 66). The results of these correlations are presented in the following table.

Table 55

Correlations: Children's Peer Social Skills and Friendship Dyad Behaviors (FDB)

Variable	Draw -Talk	Block -Talk	Smile	Draw - Cooperate
Negative Peer Play	.03	.25*	.18	-.20
Sociable	.01	-.04	-.06	.01
Peer Involvement	.11	.11	.11	.03
Hesitant	.20	-.03	.19	.02
Anxious	-.07	.09	.17	.16
Social Acceptance	-.01	.18	.06	-.17

+p < .10. *p <.05. **p < .01.

The correlation analysis demonstrated minimal results. The only significant correlation was positive between block-talk and negative peer play. This result showed that children' negative peer play behaviors in Head Start were related to their increased talking during the block building task one year later.

Tests of Mediated Models: Friendships

Correlations for the subsample (i.e., n = 66) revealed no patterns of relationships consistent with mediation following the criteria established by Baron and Kenny (1986). Therefore, friendships variables (i.e., the FDB variables) were not regressed on predictor variables or hypothesized mediation variables.

Tests of Non-Mediated Models: Friendships

Correlations for the subsample (i.e., n = 66) revealed only a few significant relationships for regressions. These correlations included: (1) draw-talk was significantly correlated with physical restraint and using questions, (2) block-talk was significantly correlated with empathetic parenting practices and negative peer play behaviors, (3) smile was significantly correlated with authoritarian, and (4) draw-cooperate was significantly correlated with using questions. Therefore, friendship variables (i.e., the FDB variables) were regressed on these maternal parenting practices and children's social skills variables.

Table 56 presents the results of multiple regression analysis predicting draw-talk from physical restraint and using questions parenting practices. Income was held constant by entry into the regression in the first block.

Table 56.

Multiple Regression Predicting Draw-Talk

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.21	.09+	.04+	.03
2	Using Questions	-.21	.09+		
	Physical Restraint	-.23	.05+	.09+	.09

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that draw talk was only marginally negatively predicted by using questions and physical restraint parenting practices ($p < .10$). Block 2 (i.e., using questions and physical restraint) accounted for 9% of the variance in draw-talk when income was held constant.

Table 57 presents the results of multiple regression analysis predicting block-talk from empathy and negative peer play behaviors. Income was held constant by entry into the regression in the first block.

Table 57.

Multiple Regression Predicting Block-Talk

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.03	.84	.00	-.02
2	Empathy	.25	.04*		
	Negative Peer Play	.23	.06+	.12*	.08

+p < .10.*p < .05. **p < .01.

Results of the regression analysis showed that block-talk was positively predicted by empathetic parenting practices (p .< 05)and marginally by negative peer play behaviors (p <. 10). Block 2 (i.e., empathy, negative peer play) accounted for 12% of the variance in block-talk when income was held constant.

Table 58 presents the results of multiple regression analysis predicting smile from authoritarian parenting practices. Income was held constant by entry into the regression in the first block.

Table 58.

Multiple Regression Predicting Smile

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.14	.27	.02	.00
2	Authoritarian	.37	.00**	.13**	.12

+p < .10. *p < .05. **p <.01.

Results of the regression analysis showed that smiling was highly positively predicted by authoritarian parenting practices (p < .01). Block 2 (i.e., authoritarian) accounted for 13% of the variance in smiling when income was held constant.

Table 59 presents the results of multiple regression analysis predicting draw-cooperate from using questions. Income was held constant by entry into the regression in the first block.

Table 59.

Multiple Regression Predicting Draw-Cooperate

Block	Predictors	Standardized Beta	p	R^2 Change	Cumulative Adjusted R^2
1	Income	-.08	.50	.01	-.01
2	Using Questions	.29	.02*	.08*	.06

+p < .10. *p < .05. **p < .01.

Results of the regression analysis showed that draw-cooperate was positively predicted by using questions (p < .05). Block 2 (i.e., using questions) accounted for 8% of the variance in draw-cooperate when income was held constant.

The results of the regression analyses showed some support for nonmediated models of friendship. These included the following: (1) draw-talk was marginally predicted by using questions and physical restraint (p < .10); (2) block-talk was predicted by empathy

($p < .05$) and marginally by negative peer play ($p < .10$); (3) smile was predicted by authoritarian ($p < .01$); and (4) draw-cooperate was predicted by using questions ($p < .05$).

The results also showed that parenting practices and peer social skills accounted for 8% - 13% of the variance in friendships. This included: (1) draw talk —9%, (2) block-talk—12%, (3) smile—13%, and (4) draw-cooperate—8%.

Final Correlations: Peer Acceptance and Friendship Relationships

Correlations between peer acceptance variables (FNI) and friendship relationship variables (FDB) were conducted. These analyses tested the independence of the concepts of quantity of peer acceptance and quality of friendships as proposed by Mendelson, et al. (1994a, 1994b). Results of the analyses are presented in the following tables.

Table 60.

Correlations: FNI and FDB (n = 87)

	Draw -Talk	Block -Talk	Smile	Draw - Cooperate
Female Close Friends	-.04	-.04	-.07	.16
Female Friends	.03	.18*	-.09	.00
Male Close Friends	-.05	-.15	-.07	.05
Male Friends	.20*	-.10	.04	.15

+$p < .10$. *$p < .05$. **$p < .01$.

Results showed significant correlations between the FNI and the FDB. Female friends were positively correlated with block-talk and male friends were positively correlated with draw-talk. The results showed that as female friends increased, talking during the block building tasks increased, as male friends increased, talking during the drawing tasks increased.

In order to examine the influence of gender, separate correlations were conducted between the FNI and the FDB for girls and boys. Results are presented in the following tables.

Table 61 presents the results of correlations examining the relationship between peer acceptance and friendships for girls. All significance levels were one-tailed.

Table 61.

Correlations for Girls: FNI and FDB (n = 40)

	Draw-Talk	Block-Talk	Smile	Draw-Cooperate
Female Close Friends	.21	-.04	.02	.08
Female Friends	.06	.41*	.11	-.09
Male Close Friends	.14	-.02	-.12	.12
Male Friends	.15	-.20	-.04	.24

+p < .10. *p < .05. **p < .01.

Results of the correlation analysis for girls indicated one significant correlation between the FNI and the FDB for girls. The quantity of female friends was positively related to block-talk. The results showed that for girls, as female friends increased, talking during the block building task increased.

Table 62 presents the results of correlations examining the relationship between peer acceptance and friendships for boys. All significance levels were one-tailed.

Results showed significant relationships between the FNI and the FDB for boys. As the number of male close friends increased, talking during the blocks and drawing tasks decreased.

Table 62.

Correlations for Boys: FNI and FDB (n = 47)

	Draw-Talk	Block-Talk	Smile	Draw-Cooperate
Female Close Friends	-.06	-.12	-.06	.22
Female Friends	.06	-.05	-.16	.02
Male Close Friends	-.29*	-.29*	-.15	.11
Male Friends	.21	.09	.06	.14

+p < .10. *p < .05. **p < .01.

Summary

This chapter has presented the data reduction procedures for maternal parenting practices (predictor variables), children's peer social skills (hypothesized mediating variables), and peer acceptance and friendships (criterion variables). Correlational analyses were conducted to determine significant relationships among predictors, hypothesized mediators, and criterion variables. These analyses were used to identify the variables that were entered into regression analyses to determine possible mediation following Baron and Kenny (1986) and for prediction. No mediation was found for peer acceptance as results were marginal, at best. Mediation was also not found for friendships. Some support was found for the non-mediated models.

CHAPTER 5

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This chapter presents the significant hypothesized relationships among maternal parenting practices, children's peer social skills, and children's peer acceptance and friendship relationships of the nonmediating model. There is also a separate discussion of the marginally significant hypothesized relationships among the variables of this model. Both significant and marginally significant hypothesized relationships among the variables of the mediating model are addressed. Then, conclusions of the research are presented, followed by a discussion section. Finally, recommendations for future research, parent training, and nursing practice are discussed.

Hypothesized Relationships:

Research Models

Model 1 hypothesized the following: (A) the nonmediated relationship of responsiveness of maternal parenting practices (i.e., CPPD, MCTT, and AAPI) to children's peer acceptance (i.e., FNI) and friendship relationships (i.e., FDB); (B) the nonmediated relationship of responsiveness of maternal parenting practices (i.e., CPPD, MCTT, and AAPI) to children's peer social skills (i.e., RSSCP, CPSCS, PBQ, and Pictorial PCS); and (C) the nonmediated relationship of children's peer social skills (i.e., RSSCP, CPSCS, PBQ, Pictorial PCS) to children's peer acceptance (i.e., FNI) and friendship relationships (i.e., FDB).

Model 2 hypothesized the following: (D) the mediated relationship of children's peer social skills (i.e., RSSCP, CPSCS, PBQ, Pictorial PCS), between responsiveness of maternal parenting practices (i.e., CPPD, MCTT, AAPI), and children's peer acceptance (i.e., FNI) and friendship relationships (i.e., FDB).

Summary of the Research Thus Far

Children's peer and friendship relationships are important in promoting their social development and sense of well being (Hartup, 1979/1989). Parental behaviors also influence children's social development as children are keen observers of their parents' behaviors and model these behaviors in social relationships (Bandura, 1989). Research suggests that responsive parenting practices (Bowlby, 1969/1982; Ainsworth et al., 1978) are linked to children's increased social competence with peers (Baumrind, 1967).

Recall the discussion in Chapter 4 that determining peer and non-peer contexts for maternal parenting practices was not possible after the principal components factor analyses, as these contexts were combined on the components following the analyses. Therefore, the purpose of the research was to examine nonmediated and mediated relationships of the responsiveness of parenting practices in Head Start related to children's peer social skills in Head Start, and peer social competence and friendship relationships in kindergarten. Two models guided the research. Model 1 proposed examining the nonmediated relationship of the responsiveness of maternal parenting practices and children's peer social skills on children's peer acceptance (Asher & Coie, 1990; Hart et al., 1990; Ladd, 1992; Mize & Pettit, 1997) and friendships (Mendelson et al., 1994a, 1994b; Stocker, 1994). Model 2 proposed examining children's peer social skills as mediating in the relationship between the responsiveness of maternal parenting practices and children's peer acceptance and friendships (Pettit et al., 1991; Pettit et al., 1996)

It was hypothesized that children's peer social skills would mediate in the relationship between mother's responsive and unresponsive parenting practices and children's peer acceptance. The hypothesis was based on research in child development that supported mediation related to peer acceptance (Pettit et al., 1988; Pettit et al., 1991).

The sample consisted of 87 mothers and their children from north central Oklahoma. The multi-measure/multi-trait method was used for data collection and included videotaped parent-child interactions, computer-presented parenting dilemmas, videotaped child-friend interactions, and questionnaires for mothers, teachers, and children. Maternal parenting practices were assessed during the children's Head Start year using the Computer-Presented Parenting Dilemmas (CPPD), Maternal-Child Teaching Task (MCTT), and the AAPI. Children's peer social skills were also assessed during the Head Start year using the RSSCP, CPSCS, PBQ, and Pictorial PCS. Children's relationships with peers and friendships were assessed the next year during kindergarten using the Friendship Network Inventory (FNI) that measured peer acceptance and the Friendship Dyad Behaviors (FDB) that measured friendship qualities.

Data analysis included principal components analyses, correlation analyses as the first phase of testing mediation following Baron and Kenny (1986), regression analyses, and ANOVA. The research consisted of 15 parenting practices predictors, 6 children's peer social skills mediators, and 4 peer acceptance criteria, and 4 friendship criteria in the analyses. Therefore, 360 potential combinations of mediators were examined. Of this number, only two sets of variables for peer acceptance were eligible to test mediation. These two sets were tested for the total research sample and both predictor beta weights decreased by only .05, while only one mediator approached significance. These two sets of variables that were tested for mediation represents a very low probability that does not exceed what would be expected by chance.

When data for males and females were examined separately, correlations for boys showed no patterns for testing mediation, and for girls showed only two sets for testing mediation. For the first set, the beta weight for the predictor decreased by .10, while the mediator beta weight decreased by .11. For the second set, the predictor beta weight

decreased by .06, but the mediator did not remain significant. As discussed previously, testing these two sets of variables for mediation represents a very low probability that does not exceed what would be expected by chance. Contrary to the hypothesis for testing mediation, evidence for mediation was weak as only one weak, partial regression consistent with mediation was found. No correlations supporting mediation were found for friendships. Therefore, the mediated model was not supported.

For the non-mediated model, regression analyses were conducted for prediction. Results for peer social skills showed that for girls, rejecting parenting practices predicted peer involvement, and positive feedback predicted anxious behaviors. For boys, parents' authoritarian parenting practices predicted anxious behaviors. Results for peer acceptance showed that for girls, sociable skills in Head Start predicted female close friends in kindergarten. Also for girls, authoritarian parenting practices predicted male friends in kindergarten. For boys, parenting practices and peer social skills in Head Start did not predict female and male close friends or friends in kindergarten. Results for friendships showed that draw-talk was not predicted by parenting practices or peer social skills. Block-talk was predicted by parents' empathy but not peer social skills. Smile was not predicted by parenting practices or peer social skills, and draw-cooperate was predicted by parental use of questions but not peer social skills. There was some support for all three hypotheses of the non-mediation model. The variance accounted for in peer acceptance by parenting practices and peer social skills was 7% - 33%. The variance accounted in friendships by parenting practices and peer social skills was 8% - 13%. Thus, the overall variance accounted for in peer acceptance was almost three times the amount of overall variance accounted for in friendships.

Correlations between peer acceptance and children's friendship relationships suggested significant moderation by gender. Girls' increased talking during the block

building task was related to more female friends. Boys' decreased talking during the both the drawing and block building tasks was related to more male close friends. Thus, there were significant gender differences between children's peer acceptance and quality of friendships. For girls, increased peer acceptance was related to increased friendship behaviors (i.e., talking), so that as girls had more friends, they also had more talking. For boys, increased peer acceptance was related to decreased friendship behaviors, so that as boys had more close friends, they had decreased talking.

Conclusions

In the discussions of the results of the data reduction of the parenting practices variables in Chapter 4, it was noted that parenting practices in the peer and non-peer contexts distinctions were not possible due to their combined loadings on the components following the principal components factor analyses for the parenting practices variables. Therefore, the discussion of the conclusions in this chapter consists of discussions of responsive and unresponsive maternal parenting practices only, without the discussions of parenting practices in the peer and non-peer contexts.

Model 1

Model 1 hypothesized (A) the nonmediating relationship of responsiveness of maternal parenting practices to children's peer acceptance and friendships. Maternal parenting practices predicted children's peer acceptance, separately, for girls (i.e., $\underline{n} = 40$) and boys (i.e., $\underline{n} = 47$). For girls, mothers' use of authoritarian parenting practices predicted fewer male friends. For boys, female and male close friends and friends were not predicted by parenting practices. Cohn (1990) found that boys of responsive parents were more likely to be accepted by peers, while boys of unresponsive parents were more likely to be rejected by peers. Overall for girls, more unresponsive maternal parenting practices (e.g.,

authoritarian) predicted decreased peer acceptance (e.g., male friends). In other words for girls, increased unresponsive parenting practices predicted decreased opposite-sex friends.

For friendships, mothers' empathy predicted increased talking during the block building-task. Authoritarian parenting practices predicted increased smiles, and maternal use of questions predicted more cooperation during the drawing task. Overall for friendships, responsive parenting practices (e.g., empathy and the use of questions) predicted positive friendship relationships (e.g., increased talking during block building and more cooperation during the drawing task). Park and Waters (1989) found that children of responsive parents, who used harmony and responsiveness to their children's needs, had more quality friendships. Research by Youngblade and Belsky (1992) also found that responsive parenting practices, including early positive mother-child interactions, were related to positive friendships.

Model 1 hypothesized (B) the nonmediating relationship of responsiveness of maternal parenting practices to children's peer social skills. Maternal parenting practices predicted children's peer social skills for separately for girls (i.e., $\underline{n} = 40$) and boys (i.e., $\underline{n} = 47$). For girls, mothers' use of rejecting parenting practices predicted less involvement with peers, while mothers' positive feedback predicted increased anxiety. Similar results were found by Turner (1991), as girls of unresponsive parents were found to have more dependent behaviors as social skills. For boys, authoritarian parenting practices predicted more anxious behaviors.

Thus for girls, unresponsive maternal parenting practices (e.g., rejecting) predicted decreased use of positive social skills (e.g., less involvement with peers), and for boys, unresponsive maternal parenting practices (e.g., authoritarian) predicted increased use of

negative social behaviors (e.g., anxious behaviors) On the other hand, research by Bhavnagri and Parke (1991), responsive parenting practices, that include positive parental management of children's play activities, were associated with children's development of positive peer social skills.

Overall, these results suggested an interesting possibility for mothers' and children's behaviors. For girls, mothers may have used positive feedback in response to their children's increased anxious behaviors.

Model 1 hypothesized (C) the nonmediating relationship of children's peer social skills to children's peer acceptance and friendships. Results showed that children's peer social skills predicted children's peer acceptance for girls (i.e., $\underline{n} = 40$) For girls, sociable predicted more female close friends. Overall trends suggested that girls' use of positive peer social skills predicted children's increased peer acceptance. Boys' peer social skills were not predicted by maternal parenting practices. Pettit, et al. (1996) found that children with higher levels of social skills were more accepted by peers. In research by Black and Hazen (1990), children with positive communication skills with peers were rated as popular with their peers. In contrast to the current study, these researchers did not find differences in relationships between social skills and peer acceptance according to gender.

Model 2

Model 2 hypothesized the mediation of children's peer social skills in the relationship between responsiveness of maternal parenting practices and children's peer acceptance and friendship relationships. The first phase of the criteria for mediation (Baron & Kenny, 1986) revealed significant correlations among rejecting maternal parenting practices, anxious peer social skills, and female close friends. The second phase of

mediation for the research sample (i.e., n = 87) did not find mediation, as only one analysis demonstrated weak, partial mediation at best. Children's anxious behaviors weakly mediated in the relationship between rejecting maternal parenting practices and children's fewer female close friends. Even though anxious behaviors remained significant, the beta weight for rejecting parenting practices decreased only a small amount. Therefore, there was only weak evidence to suggest the mediation of children's anxious behaviors in the relationship between maternal rejecting parenting practices and children who had fewer female close friends. In contrast, Pettit, et al. (1996) suggested that children's aggression meditated in the relationship between family characteristics (i.e., parental interest in children's peer experiences) and peer acceptance.

Mediation was not found for a second set of relationships for the research sample (i.e., n = 87). The first step of the procedures for mediation (Baron & Kenny, 1986) revealed significant correlations among authoritarian maternal parenting practices, anxious peer social skills, and female close friends. The second phase of mediation was not demonstrated. The beta weight for authoritarian only decreased a small amount and authoritarian parenting practices remained significant . Therefore, there was no evidence to suggest that children's anxious peer social skills mediated in the relationships between mothers' authoritarian parenting practices and children's female close friends. Thus, maternal authoritarian parenting practices influenced children's female close friends, children's anxious social skills did not.

Regression analyses to determine mediation were only conducted for girls, as there were no significant patterns of relationships for boys. Mediation was not found for the first set of relationships for girls: peer involvement did not mediate in the relationship between

rejecting maternal parenting practices and male close friends. The beta weight for rejecting maternal parenting practices decreased by a large amount, as did the beta weight for peer involvement, suggesting overlap between these variables. Also, peer involvement did not continue to approach significance. Therefore, there was no evidence to suggest that girl's peer involvement mediated in the relationship between mothers' use of rejecting parenting practices and girls' male close friends.

For the second set of variables for girls, mediation was not found. Decreased peer involvement was not found to mediate in the relationship between authoritarian maternal parenting practices and male close friends. The beta weight for authoritarian maternal parenting practices only decreased a small amount, peer involvement did not continue to approach significance, and authoritarian maternal parenting practices remained significant. Therefore, there was no evidence to suggest that girls' decreased peer involvement mediated in the relationship between mothers who used authoritarian parenting practices and girls who had fewer male close friends.

Discussion

In the following discussion of the research, parenting practices variables, children's peer social skills variables, and peer acceptance and friendship variables are related to the hypotheses of the research models. The parenting practices variables are discussed in terms of responsive and unresponsive parenting practices, with the peer social competence variables related to these parenting practices. Recall that responsive and unresponsive parenting practices are noted for all of the CPPD and MCTT items in chapter 3, as well as on the Chart of Variables in Appendix A. All of the variables, their categories, and subscales/ratings are delineated in the Chart of Variables (see appendix A).

The AAPI was also used to measure responsive and unresponsive parenting practices with the two subscales: (1) physical punishment (Unresponsive) and (2) empathy (Responsive). Recall from the discussion in chapter 3 that empathy was reverse scored from lack of empathy to empathy, in order to describe mothers' comforting practices as a responsive parenting practice. Empathy would be appropriately described as a responsive parenting practice as Bavolek (1984) discussed parental empathetic awareness of the child's needs as parental understanding of the child's mental condition, as well as their feelings and ideas. This description is similar to responsive parenting practices as discussed in chapter 1. It is also consistent with other conceptualizations of empathy (Feshbach, 1989). Bavolek (1984) also reverse scores the lack of empathy items. Thus higher scores on his empathy subscales are associated with lower abuse.

The correlations of the empathy subscale of the AAPI with the CPPD and MCTT subscales (see Table 11—Correlations: Predictor Variables—CPPD, MCTT, and AAPI) revealed that empathy had a significant ($p < .01$) and negative association with rejecting and authoritarian parenting practices (i.e., CPPD— unresponsive parenting practices), as well as a significant ($p < .05$) and negative association with time out, direct commands, and mother folds the paper herself parenting practices (i.e., MCTT—unresponsive parenting practices). In contrast, the empathy subscale had a significant ($p < .01$) and positive association with nurturant (i.e., CPPD—responsive parenting practice) and a significant ($p < .05$) and positive association with inquires about child's needs/wants (i.e., MCTT—responsive parenting practice). Therefore, empathy (i.e., as a reverse code of lack of empathy) was deemed acceptable as a responsive parenting practice.

All three of the hypotheses of Model 1 had some support. For hypothesis A, unresponsive parenting practices (e.g., authoritarian) predicted decreased peer acceptance (e.g., male friends—opposite sex friends). Responsive parenting practices (e.g., empathy) predicted children's increased friendships (e.g., increased talking during the block building tasks). Research by Mize and Pettit (1997) suggested that children of responsive parents who used warmth in their interactions were more accepted by peers. Similarly, Pettit, et al. (1996) found that children whose parents relied on harsh discipline were less accepted by peers. Stocker (1994) showed that responsive, warm parenting practices were related to children's warmth in friendships.

Hypothesis B was supported as, responsive parenting practices(e.g., positive feedback) predicted more negative social skills (e.g., anxious behaviors for girls) and, unresponsive parenting practices (e.g., authoritarian and rejecting) predicted children's increased negative social behaviors (e.g., authoritarian predicted anxious behaviors for boys) and decreased social skills (e.g., rejecting predicted less peer involvement for girls). Research by Kochanska (1992) suggested that responsive parental disciplining practices were associated with children's use of increased peer social skills. Similarly, Weiss, et al. (1992) found that unresponsive parental harsh discipline was related to children's negative peer social skills in the form of aggression.

As discussed previously, an interesting result was found for mothers' and girls behaviors. Mothers' responsive parenting practice (i.e., positive feedback) may have been in response to their daughters' negative peer behaviors (i.e., anxious behaviors).

Finally, hypothesis C was supported. For girls, peer social skills (e.g., sociable skills) predicted children's peer acceptance (e.g., more female close friends—same sex close

friends). Research by Asher and Coie (1990) also found the children's social skills, including helpfulness and cooperation, were associated with peer acceptance. Ladd (1992) suggested that children's social skills, such as involvement, were associated with their ability to have, keep, and make friends.

Model 2 was not supported as only weak, partial mediation was found for one set of patterns of relationships. This was for children in the research sample (i.e., $\underline{n} = 87$), where children's anxious social skills were found to weakly, partially mediate in the relationship between rejecting parenting practices and children's fewer female close friends. None of the other sets of relationships tested for mediation supported the hypothesis. In contrast, research by Pettit, et al. (1991) demonstrated that children's peer social skills mediated in the relationships between family interactions and peer interactions, although these were positive skills, family interactions, and peer acceptance. It is important to note that Pettit and his colleagues used hierarchical regression analyses (i.e., partialized results) not simultaneous regression analyses.

No tests for mediation were conducted for children's friendship relationships. As discussed previously, no significant patterns of correlations were found for the research sample (i.e., $\underline{n} = 87$) among the maternal parenting practices variables, children's peer social skills variables, and children's peer acceptance and friendship relationships variables.

In sum, Model 1 (i.e., the non-mediated model) showed some support for all three hypotheses. The revised model indicated some significant variable support for each construct. The following figure presents the revised Model 1 with the significant variable(s) listed under the appropriate construct.

Model 1: Nonmediated Model and Variables

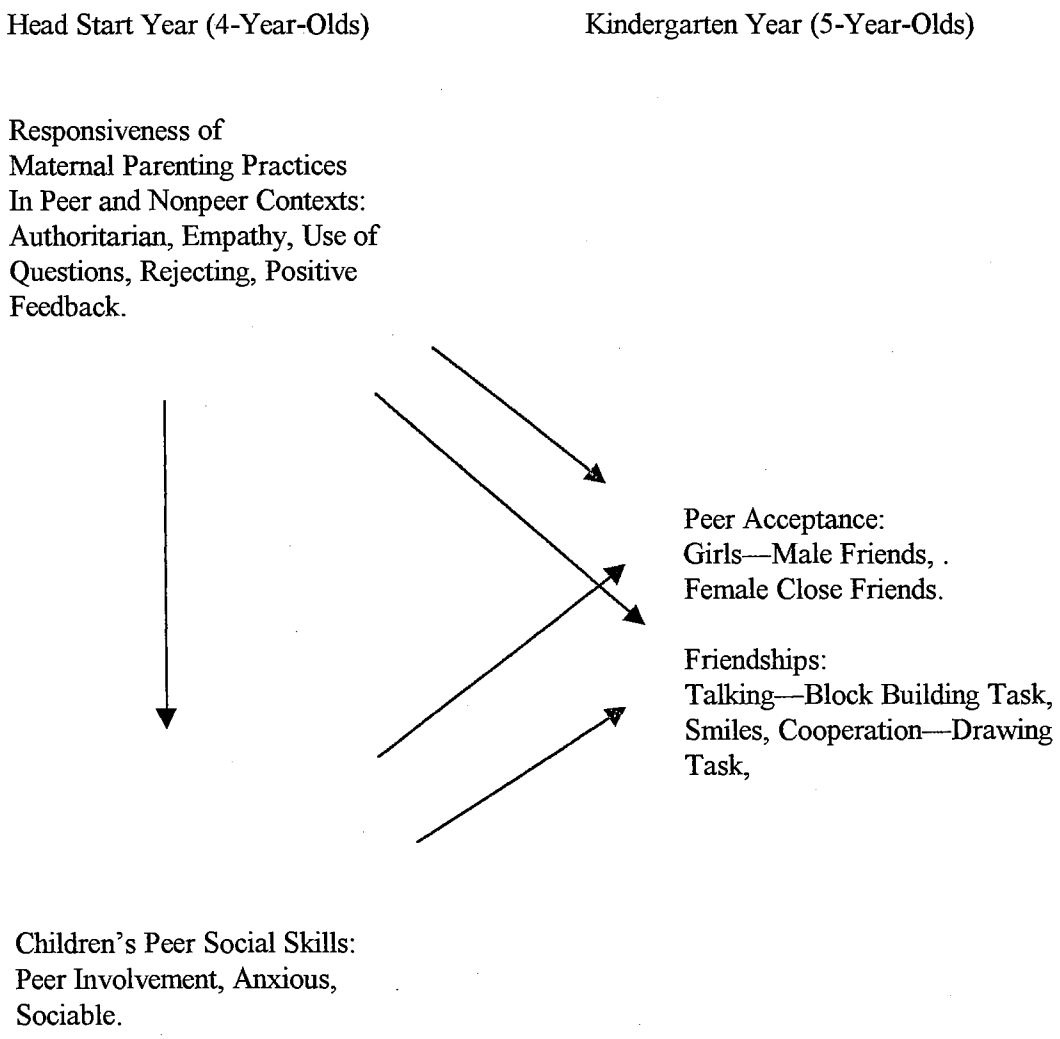

Figure 12. Model 1: Nonmediated Model and Variables

Marginally Significant Results—Model 1

Hypothesis A was supported separately for girls and boys. For girls, maternal bribing predicted fewer female friends, while nurturant parenting practices predicted more male close friends. For boys, direct commands predicted increased female close friends and time out predicted fewer male close friends.

In other words, unresponsive parenting practices predicted fewer same sex friends while responsive parenting practices predicted more opposite sex close friends, for girls. For boys, unresponsive parenting practices predicted more opposite sex close friends and fewer same sex close friends. For both girls and boys, unresponsive maternal parenting practices predicted fewer same sex peer acceptance.

Hypothesis B was supported separately for girls and boys. Maternal authoritarian parenting practices predicted more negative peer play, while command with reason predicted less hesitancy. For boys, maternal positive feedback predicted more peer involvement, as did physical punishment. Also, physical restraint predicted decreased hesitancy.

In other words, unresponsive maternal parenting practices predicted more negative social skills, while responsive maternal parenting practices predicted decreased negative social skills for girls. For boys, responsive parenting practices predicted more peer social skills, although unresponsive maternal parenting practices also predicted increased peer social skills. Also, unresponsive parenting practices predicted decreased negative peer social behaviors for boys.

Hypothesis C was supported separately for girls and boys. Children's peer social skills was not marginally significant in predicting peer acceptance for girls. For boys,

sociable skills predicted more male close friends and hesitant behaviors predicted more male friends.

In other words, peer social skills predicted more same sex close friends, while negative social behaviors predicted more same sex friends, for boys. Thus, peer social skills predicted closer peer acceptance.

Support of Theory

The results of the research have supported the theoretical and conceptual frameworks of the study. Bandura's Social Cognitive Theory (1989) suggested that children's social competence is influenced through learning social behaviors from parents, as well as by peer interactions. Also, Ainsworth, et al. (1978), Baumrind (1967/1978), and Bowlby (1969/1982) suggested that parental responsiveness influences children's social competence. Responsive parenting practices include behaviors such as pleasure in the parenting role, love, warmth while disciplining and comforting, sensitivity, while unresponsive parenting practices include behaviors such as frustration, anger, harshness, and insensitivity (Baumrind, 1978; Bowlby, 1969/1982)

Maternal responsive and unresponsive parenting practices were found to predict children's peer social skills, peer acceptance, and friendships. Responsive maternal parenting practices in the form of mothers' use of empathy predicted increased talking during the block building task. Unresponsive maternal parenting practices such as authoritarian behaviors predicted fewer male friends for girls. Mothers' unresponsive parenting practices such as rejecting behaviors predicted less peer involvement for girls, while for boys , mothers' use of authoritarian practices predicted more anxiety.

Children's peer social skills also influence their peer acceptance. Girls use of sociable skills predicted more female close friends.

In sum, responsive maternal parenting practices predicted increased social competence. Unresponsive maternal parenting practices predicted decreased social competence. Also, children's peer social skills were found to predict children's social competence.

Recommendations

Future Research

In the future, research needs to examine the influences of fathers' parenting practices on children's peer social skills, peer acceptance, and friendship relationships. In the past, the literature in child development exploring parental responsiveness related to children's peer social skills, (Fagot, 1997; LaFreniere & Sroufe; 1985; Cassidy,1996; Turner, 1991), peer acceptance (Cohn, 1990), and friendship relationships (Park & Waters, 1989; Youngblade & Belsky; 1992; Kerns, 1994) has examined these relationships when the "parent" was the mother. Therefore, a gap has been left in the literature exploring paternal parenting practices related to children's social competence. Future research needs to include this paternal perspective in order to inform the child development, as well as the family, literature.

Research also needs to replicate the current study exploring the mediating influences of children's peer social skills in the relationship between parenting practices, and children's peer acceptance and friendship relationships using simultaneous regression analyses. The current study used simultaneous regression analyses to examine possible mediation, where as previous research has used hierarchical regression analyses (Pettit et al., 1988; Pettit et

al., 1991) Therefore, further studies of mediation need to be conducted using simultaneous regression analyses to inform the child development and family literature.

Future research needs to explore the influence of parenting practices on children's peer social skills, peer acceptance, and friendships with other populations of children. A limitation of this research included the selection of the sample of Head Start children from the central United States. However, the socioeconomic background of the current sample was somewhat unique, as the literature has mainly reported results from middle-class families (Bhavnagri & Parke, 1991; Ladd & Golter, 1988; Mize et al., 1995; Putallaz, 1987; Denham et al., 1991). Research needs to continue examining parenting practices, children's peer social skills, and peer acceptance and friendships in low-income populations of children from other areas of the United States, as well as children with handicaps (i.e., physical and mental), from other ethnic groups (i.e., Hispanic and Asian), and from other socioeconomic backgrounds. Thus, future research would broaden the child development and family literature by studying these other groups of children.

Research needs to also explore the influence of parenting practices, children's peer social skills, and peer acceptance and friendships separately for girls and boys. Research related to peer acceptance (Asher & Coie, 1990; Ladd, 1990; Pettit et al., 1996) and friendships (Mendelson et al., 1994a, 1994b; Stocker, 1994) has been conducted mainly on either populations of boys or groups of children where the analyses combined girls and boys. Conducting research on separate samples of girls and boys, or analyzing the results of groups of children by gender would inform the child development and family literature. The results from the current study will inform the child development and family literature related to gender differences, as responsive and unresponsive maternal parenting practices and

children's peer social skills predicted peer acceptance and friendships separately for girls and boys.

In the future, research that explores parenting practices related to children's peer social skills, peer acceptance and friendships also needs to be extended into the global community. Literature exploring parental responsiveness in Holland (van den Boom, 1988; Van Ijzendoorn et al., 1995), England (Turner, 1991), and Canada (Grusec & Kuczynski, 1980) has been reported. Literature also exploring children's peer acceptance and friendships has been reported from other countries such as Australia (Sanderson & Siegal, 1995). Gaps in the international literature include examining the combinations of these variables (i.e., parenting practices, children's peer social skills, and peer acceptance and friendships) in studies. International colleagues in the child development and family disciplines should also collaborate in exploring the variables. These international studies would then inform the literature in the child development and family disciplines from a global perspective.

Future research needs to continue exploring the combination of variables examined in the current research, including parenting practices, children's peer social skills, and peer acceptance and friendships. In the past, research has examined parenting practices related to children's peer social skills (Bhavnagri & Parke, 1991; Kochanska, 1992; Roberts & Strayer, 1987; Weiss et al., 1992), parenting practices related to children's peer acceptance and friendships (DeWolf et al., 1992; Dishion, 1990;Ladd & Golter, 1988; Mize et al., 1995; Mize & Pettit, 1997; Pettit et al., 1996; Stocker, 1994), and children's peer social skills related to peer acceptance and friendships (Asher & Coie, 1990; Ladd, 1990; Mendelson et al., 1994 a, 1994b; Pettit et al., 1996; Rotenberg & Sliz, 1988; Slomkowski & Dunn, 1996). But no research has been conducted on the influences of maternal parenting

practices on children's peer social skills, peer acceptance, and friendship relationships. The current research will uniquely inform the literature, as the combination of these variables has not been previously reported.

Previous research has explored parent responsiveness related to children's peer social skills, peer acceptance, and friendships from a non-peer context (Bhavnagri & Parke, 1991; Kochanska, 1992; Ladd, & Golter, 1988; Dishion, 1990). Research needs to be conducted that explores parent responsiveness in the peer context. Research has also been conducted on overall parenting practices in peer and non-peer contexts related to children's peer social skills (Hart et al., 1990; Roberts & Strayer, 1987) and peer acceptance (Dishion, 1990; DeWolf, 1992). However, no research has explored overall parenting practices in the peer context related to children's friendships. As previously discussed, the peer and nonpeer context distinction was not made in the results of the current research, as both contexts loaded on several of the same factors in the component factor analyses. This finding suggested that separating the two contexts may be a false dichotomy. Therefore, further exploration of these contexts would inform the child development and family literature.

Research has also explored parental disciplining practices in peer and non-peer contexts related to children's social skills (Hart; 1990) and peer acceptance (Pettit et al., 1988). There are gaps in the research related to parental disciplining practices in peer and non-peer contexts related to children's friendship relationships. Parental comforting practices in the non-peer context related to children's peer social skills (Roberts & Strayer, 1987) and friendships (Stocker, 1994) have also been explored. Additionally, research has explored parenting practices in the peer context related to children's peer acceptance (Mize & Pettit, 1997; Pettit et al., 1996) Research needs to examine parental comforting practices in the peer context related to children's peer social skills and friendships, and parental comforting practices in the non-peer context related to children's peer acceptance.

Future research needs to be conducted that explores unusual findings related to parenting practices and peer acceptance for girls . Research needs to explore responsive parenting practices (i.e., positive feedback) that predicted negative social behaviors (i.e., anxiety). Research should also explore unusual findings related to parenting practices and children's friendship relationships. Studies should examine unresponsive parenting practices (i.e., authoritarian) that predicted children's increased qualities of friendships (i.e., increased smiling). They should also examine responsive parenting practices (i.e., using questions) that predicted decreased qualities of friendships (i.e., decreased talking during drawing tasks). The current research found these counterintuitive results possibly because mothers may be using the parenting practices in reaction to their children's behaviors. Therefore, studying the direction of these results would be important in future research.

Parent Training

The research suggested that overall maternal responsive parenting practices (e.g., empathy) predicted children's increased peer acceptance (i.e., more female friends). Research by LaFreniere and Sroufe (1985) also showed that parents who used responsiveness in caring for their children had children who were more accepted by peers. Therefore, parents should be taught in parenting classes that responsive parenting practices, including and empathy, need to be used when caring for children of all ages to increase their children's peer acceptance, especially with female friends. Also, parents who have female infants or young children should be taught that unresponsive parenting practices (i.e., rejecting, authoritarian) will decrease their daughters peer acceptance with close friends.

Parents also need to learn that parenting practices influence children's friendship relationships. Parenting classes should teach that responsive parenting practices (e.g., using questions) are associated with children's qualities of friendships (i.e., cooperating during drawing tasks). Also, responsive parenting practices in the form of empathy are associated

with children's friendship qualities in the form of talking during block building tasks. Parents should learn that responsive parenting practices will promote children's friendship relationships. Research by Park and Waters (1989) also found that responsive parenting practices in the form of harmony and responsiveness to children's needs were associated with children's friendships.

Parents should also be taught that for girls, rejecting parenting practices predicted less peer involvement. For boys, parents should be taught that authoritarian parenting practices predicted more anxiety. Turner (1991) also found that unresponsive parents had girls with more dependent social skills and boys with poor social skills, including aggression. Parents need to learn that responsive and unresponsive parenting practices influence girls' and boys' peer social skill development. Therefore, they should be encouraged to develop the responsive parenting practices (e.g., empathy) and to reduce the negative parenting behaviors (e.g., rejecting and authoritarian).

Parents should also learn that for girls, sociable skills predicted more female close friends. Black and Hazen (1990) found similar results as children with good communication skills with peers were more popular with peers. Therefore, parenting classes should teach that positive social skills for girls their peer acceptance. Parents should be taught to encourage their children's development of positive social skills by parental role modeling, instruction, and positive family interactions.

Nursing Practice

The research suggests that nurses should be aware of the following results: (1) responsive parenting practices are associated with children's increased peer social skills, peer acceptance, and friendship relationships; (2) unresponsive parenting practices are associated with children's decreased peer social skills, peer acceptance, and friendship relationships; (3) rejecting parenting practices predict decreased peer involvement for girls;

(4) authoritarian parenting practices predict increased anxious behaviors in boys; (5) sociable skills predict female close friends for girls; (6) authoritarian parenting practices predict fewer male friends for girls; (7) parental use of empathy predicts more quality friendships (i.e., talking during block building tasks); (8) parental use of questions predicts more quality friendships (i.e., cooperating during drawing tasks); (9) female and male friends are related to talking during drawing and block building tasks; (10) female friends are related to increased talking during block building tasks for girls; and (11) male close friends are related to decreased talking during drawing and block building tasks for boys.

Nursing practice should incorporate the results of the research into practice. Nurses have a multitude of opportunities to teach and model for parents the importance of responsive parenting practices related to children's peer social skills, peer acceptance, and friendship relationships. The opportunities for teaching and modeling are especially numerous in the hospital environment. Nurses practice in areas such as women's health where parents are encountering their newborn infants, perhaps for the first time. Nurses are in an excellent position to teach parents that responsive parenting practices are related to children's positive peer social skills, peer acceptance, and friendships. LaFreniere and Sroufe (1985) reported that responsive parenting practices in the form of sensitivity in caring for young children were related to children's acceptance by peers.

Nurses also practice in neonatal units where premature and high risk infants receive intensive medical and nursing care. These infants are very vulnerable to stress and responsive parenting practices are important to the survival of the babies. Therefore, nurses are in the position again, to teach and model the importance of responsive parenting practices and that the children's future social skills, and peer and friendship relationships may be influenced by these responsive behaviors. Fagot (1997) found that parents who used responsive parenting practices had children who demonstrated positive social skills with

peers. Also, Cohn (1990) showed that children of responsive parents were more accepted by peers. Park and Waters (1989) suggested that children of responsive parents had more friendships of higher quality.

It is important that nurses teach parents about the importance of peer acceptance in children's development of social competence. Parents need to know that peer acceptance relates to their children's interactions with same-sex and opposite-sex close friends and friends. In other words, they need to know that having female and male close friends and friends are important in their children's peer acceptance, and thus their overall social competence.

Additionally, nurses practice on pediatric units in general hospitals, or in children's hospitals where parents frequently inquire about children's development. If their children are hospitalized for acute illnesses and are otherwise physically and mentally healthy, nurses are in an excellent position to teach parents that responsive parenting practices influence children's peer social skills, peer acceptance, and friendship relationships. Research by DeWolf, et al. (1992) showed that responsive discipline practices (e.g., less power assertion) were associated with children who were preferred by peers.

In addition to children who are on pediatric units for acute illness, children who have chronic illness, such as cancers, as well as heart and lung diseases are frequently on these units. The parents of these children have many questions about their children's development. They are particularly concerned that their children's chronic conditions will delay or inhibit their children's abilities to form friendships, or that their peers will shun them. Nurses should teach parents that responsive parenting practices (i.e., empathy) are associated with qualities of friendships (i.e., talking during friendship activities). Also, parents' responsive parenting practices, such as empathy, are associated with children's ratings of themselves as higher on social acceptance. Therefore, parents' responsive

parenting practices are associated with children's peer social competence. Research by Youngblade and Belsky (1992) found that responsive parenting practices in the form of positive parent-child interactions were related to friendship relationships.

A final area of nursing that should consider the importance of responsive parenting practices related to children's peer social skills, and peer acceptance and friendships relationships should be nursing research. Nurses should explore the impact of teaching and modeling responsive parenting practices for parents and the influence on children's peer social skills, peer acceptance and friendships in relation to children's overall health. Studying the influence of responsive parenting practices, children's positive peer social skills, and children's peer acceptance and friendships on children's health and healing would be an important area of research for to nurses examine. Nurses have access and opportunities to research these variables in relation to children's health and healing and the research is not available in the nursing literature. This would be an excellent opportunity for nurses to inform the nursing literature.

Summary

This chapter presented a review of the models and a summary of the research. The conclusions were then presented with a discussion of support for the nonmediated model of the research, as well as a discussion of non-support for the meditated model of the research. Support for the theoretical and conceptual frameworks was presented. Finally, recommendations for future research, parent training, and nursing practice were discussed.

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Appendix A

Chart of Variables: Context, Subscales, Method, Measure, Time, Items, Reliability, and Reference

VARIABLE CATEGORIES	CONTEXT	SUBSCALE/ RATINGS	METHOD	MEASURE	TIME[a]	ITEMS	RELIABILITY	REFERENCE
PREDICTOR VARIABLES								
Responsive Parenting	**Peer Context**	Distant Monitoring	Computer	CPPD-Peer Monitoring	HS	3	.67[b] .69	Hubbs-Tait, Culp & Culp (1998)
		Pleased	Computer	CPPD-Peer Monitoring	HS	2	.68[b] .76	Hubbs-Tait, Culp & Culp (1998)
	Non-Peer Context	Warmth	Computer	CPPD-Child Distress	HS	3	.75[b] .80	Hubbs-Tait, Culp, Culp, Steele, & Fore (1998); Hubbs-Tait, Culp & Culp (1998)
		Non-Punitive Reasoning	Computer	CPPD-Non-Compliance	HS	3	.55[b] .56	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998)
		Inquiry About Child's Needs/Wants	Videotape	MCTT-Behavior Code (P6)	HS	1	.96[c]	Steele & Miller, 1998
		Offer of Help	Videotape	MCTT-Behavior Code (P7)	HS	1	.98[c]	Steele & Miller, 1998
		Using Questions to Direct Child	Videotape	MCTT-Behavior Code (C2Q)	HS	1	.99[c]	Steele & Miller, 1998

		Command With Reason	Videotape	MCTT-Behavior Code (C5)	HS	1	.93[c]	Steele & Miller, 1998
		Positive Feedback	Videotape	MCTT-Behavior Code (F2)	HS	1	.98[c]	Steele & Miller, 1998
Unresponsive Parenting	**Peer Context**	Permissive-Neglectful Response to Hitting	Computer Presented	CPPD-Peer Monitoring	HS	4	.63[b] ·19	Hubbs-Tait, Culp & Culp (1998)
		Power Assertion to Hitting	Computer Presented	CPPD-Peer Monitoring	HS	3	.71[b] ·70	Hubbs-Tait, Culp & Culp (1998)
		Joining in (Children's Play)	Computer Presented	CPPD-Peer Monitoring	HS	2	.62[b] .66	Hubbs-Tait, Culp & Culp (1998)
	Non-Peer Context	Hostile/ Punitive	Computer Presented	CPPD-Child Distress	HS	8	.89[b] ·.71	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998); Hubbs-Tait, Culp, Culp, Steele, & Fore (1998)
		Distract	Computer Presented	CPPD-Child Distress	HS	3	.75[b] .78	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998); Hubbs-Tait, Culp, Culp, Steele, & Fore (1998)

		Authoritarian/ Ignore	Computer Presented	CPPD-Child Distress	HS	3	.70[b] .71	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998); Hubbs-Tait, Culp, Culp, Steele, & Fore (1998)
		Permissive/ Bribe	Computer Presented	CPPD-Child Distress	HS	3	.74[b] .76	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998); Hubbs-Tait, Culp, Culp, Steele, & Fore (1998)
		Authoritarian/ Time Out	Computer Presented	CPPD-Child Distress	HS	4	.71[b] .53	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998); Hubbs-Tait, Culp, Culp, Steele, & Fore (1998)
		Power Assertion	Computer Presented	CPPD-Child Noncompliance	HS	7	.75[b] .75	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998)
		Punitive Reasoning	Computer Presented	CPPD-Child Noncompliance	HS	2	.78[b] .76	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998)
		Bribe	Computer Presented	CPPD-Child Noncompliance	HS	3	.63[b] ..66	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998)
		Ignore	Computer Presented	CPPD-Child Noncompliance	HS	4	.56[b] .56	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998)
		Time Out	Computer	CPPD-Child Noncompliance	HS	3	.56[b] .57	Holden & Richie (1991); Hubbs-Tait, Culp, & Culp (1998)

		Mother Folds Paper Herself	Videotape	MCTT-Behavior Code (E1)	HS	1	.78[c]	Steele & Miller, 1998
		Direct Command	Videotape	MCTT-Behavior Code (C1)	HS	1	.97[c]	Steele & Miller, 1998
		Physical Restrain/Force	Videotape	MCTT-Behavior Code (I2)	HS	1	.79[c]	Steele & Miller, 1998
		Physical Punishment	Mother Report	AAPI	HS & K	6	.80[b] .79	Bavolek, 1984, 1989
		Lack of Empathy (Empathy)	Mother Report	AAPI	HS & K	8	.84[b] .85	Bavolek, 1984, 1989
CRITERION VARIABLES								
Children's Peer Social Skills		Difficult	Teacher Rating Scale	RSSCP	HS	4	.89[b] .89	Howes (1988)
		Hesitant	Teacher Rating Scale	RSSCP	HS	4	.78[b] .79	Howes (1988)
		Sociable	Teacher Rating Scale	RSSCP	HS	4	.77[b] .79	Howes (1988)

		Peer Involvement	Teacher Rating Scale	CPSCS	HS	4	.82	Levine, Elzey, Lewis (1969)
		Shares	Teacher Rating Scale	CPSCS	HS	5	.89	Levine, Elzey, Lewis (1969)
		Hostile/ Aggressive	Teacher Rating Scale	PBQ	HS	11	.94[b] .95	Behar (1977)
		Anxious/ Fearful	Teacher Rating Scale	PBQ	HS	9	.74[b] .76	Behar (1977)
		Peer Acceptance	Child Rating Scale	Pictorial PCS	HS	6	.62[b] .66	Harter & Pike (1984)
		Maternal Acceptance	Child Rating Scals	Pictorial PCS	HS	6	.73	Harter & Pike (1984)
Children's Peer Acceptance		Nominations (Quantity)	Teacher Checklist	FNI	K	4		Ladd & Price (1987)
Children's Friendships		Peer Interaction Task (PIT) (Quality of Behaviors)	Observer Rating Scale	Friendship Dyad Behaviors (FDB)	K	7	Blocks[c] Con/Turn .920 Smile .822 Touch .743 Share .788 Show .956 Ask .805 Comply .623	Fore, Hubbs-Tait, Miller (1998)

						9	Drawings[c] Con/Turn .952 Imitate .986 Smile .899 Touch .919 Share .951 Show .833 Ask .973 Tell .852 Comply .998	
		Friendship Preferences (Quantity of Friendships)	Mother Survey	Friends Questionnaire (FQ)	K	8		Hubbs-Tait, Fore (1998)

Note. [a]HS = Head Start and K = Kindergarten. [b]Internal Consistency Reliability (N=167) and the numbers directly under these reliabilities indicate internal consistency reliabilities for n=87 (the study sample). [c]Interrater Reliability

Appendix B

DIRECTIONS

General directions to coders: You will code mothers' utterances from the 5-minute videotape with a transcript of the tape in hand. The videotape will give you the context of the mother's verbalizations and will enable you to judge the tone and intent of the mother's communication.

There are two types of codes that you will assign to each of the mother's statements: 1) maternal behavior codes and 2) maternal operational demand codes. Maternal behavior codes consist of Perspective Taking, Egocentrism, Structuring, Control, Intrusive Control, and Feedback. Maternal operational demand codes are divided into three levels, each level corresponding to the degree of demand by the mother for representational thought by the child: low, medium and high.

Codes for maternal behavior are to be recorded in the left hand margin of the transcript. Codes for maternal operational demand are to be recorded in the right hand margin of the transcript.

Where statements are separated by a single slash, a double slash, three dots (. . .), or a # sign, code each statement separately. Exceptions to this rule include cases in which a # sign separates a direct command from an "okay?" (coded as C2, qualified command), ***or in which a # sign separates two statements that when joined would result in a higher level MOD than either statement considered alone (e.g., Sequencing --level 2), or in which a # sign separates a reason from a command (C5 command with reason).***

Where statements are separated by an "and," a "but," or an "or," and each statement includes a verb, code each statement separately. Do NOT separate statements if doing so would result in coding a lower level of maternal operational demand (e.g., two level 1 codes as opposed to one level 2 or level 3 code).

Coding Maternal Behavior

Directions: Each utterance of the mother one of the following codes in the left margin of the transcript: "Maternal Perspective Taking" (P codes), "Maternal Egocentrism" (E codes), "Maternal Control" (C codes), "Maternal Intrusive Control" (I codes), "Maternal Structuring of Task" (S codes), "Maternal Feedback" (F codes), or "Not Relevant" (Z), "Unintelligible" (X), or "None of the above" (N).

P Codes - Maternal Perspective Taking

Do not code if a statement is made in a sarcastic or sneering tone of voice.

P1) Statement of awareness of child's feelings or state, e.g., "You're angry because the boat doesn't fold right."

P2) Inquiry about the child's feelings or state (Emotions), e.g., or "Are you excited because we have only one more edge to fold?"

P3) Statement of awareness of child's perceptions, thoughts, or motives, e.g., "You want it to fold up but it keeps going down."

P4) Inquiry about the child's perceptions, thoughts, or motives (Cognitions), e.g., "Did you turn it that way because you want the sail to go down?" "Do you see that there are two folds now?" "Do you see which part of the paper makes the sail and which part makes the bottom of the boat?" ***"Are you ready?" "Remember how we did the last boat?"***

Rule for discriminating P4 from P2: When the inquiry is about anything COGNITIVE (including perceptions, reasons for feelings, motivations for behavior), code P4. When the inquiry is about anything EMOTIONAL, code P2.

Rule for discriminating P4 from C4: When the verb "see" is used to refer to or focus on the child's PERCEPTION/THINKING, code P4. When the verb "see" is used to refer to or focus on the child's LOOKING, code C4.

P5) Repetition with more information - The mother simplifies a statement she has made or offers additional information when the child doesn't understand her or doesn't respond to her. For example, the mother says, "Fold the paper in half" then modifies her statement, "start with the point on the left side and bring it over to the point on the right side." The second statement would be coded as repetition with more information. Because a repetition can be a command, an informative feedback, a qualified command, etc., please indicate the relevant C, I, or F code in parentheses. "Start with the point on the left side and bring it over to the point on the right side" would be P5 (F1). *Code P5 whenever the mother has said a word and then offers a definition of the word.*

The key to deciding whether a statement is a P5 as opposed to an E2 is whether the mother is adding more information. Where the mother adds a noun or a verb (or a noun or a verb phrase), the mother is clearly adding more information ("Turn it over this way" after "This way" is a P5; "Along the fold" after "Run your finger along here" is a P5; "Push it over to the edge" after "it needs to be up to this edge" is a P5). In cases where the information is ambiguous, such as "Open it up like this" after "Open it up," a P5 is coded only if the mother also adds nonverbal information (e.g., pointing to the boat on the board; however if the mother is actually holding or folding the paper to show the child, code E1-M or E1-S).

P6) Inquiry about child's needs/wants - "Do you want me to hold the paper? " "Do you need me to turn the paper?"

P7) Offer of help - "I'll hold this, so it won't get away from you."

P8) Making relevant to child by appealing to the past - Past experiences that are referred to must have taken place more than 30 minutes previous to the time on the tape. If P8 can be coded for the same statement as another code, put the P8 in parentheses, after the other code (i.e., other code predominates).

P9) Expression of interest in or concern about child's nontask needs - Mother makes statement or asks question about child's needs, wants, state, etc. that is about a nontask issue. For example, "Are you cold?" "Do you need to blow your nose?" "Are you sleepy?"

E Codes - Maternal Egocentrism

E1) Mother folds paper herself - In direct noncompliance with task instruction, the mother takes over the task and folds the paper to make the boat herself ***or turns the paper or opens the paper herself.*** Count as one instance of this behavior each fold, ***or turn, or opening of the paper*** made by the mother. E1 is a nonverbal behavior and will not appear in the transcript. Thus, you must attend carefully to the videotape in order to code E1 correctly. Code E1 in parentheses next to code(s) for verbal behavior. Indicate with an arrow when E1 continues for more than one utterance. The arrow should stop when E1 stops.

E1 - M: Mildly Egocentric. The mother folds the paper and holds the paper so that her child can or will crease it. The mother creases the paper for the child or re-creases the paper after the child has already creased it.

E1 - S: Strongly Egocentric. The mother holds the paper, folds the paper, and then creases it all by herself.

E2) Mother repeats previous instructions - After the mother has given the child an instruction and the child has not responded, the mother merely repeats the same statement (may be coded if made in a sarcastic or sneering tone). This applies when the mother is repeating instructions for the same step of the task, even though 5 or 6 statements by the mother intervene between the two identical instructions. If more than 6 statements, do not code E2. Do not code, "Wait, wait, wait, wait" or "No, no, no, no, " as E2's. They are C1's. ***However, "Wait" "Wait, wait, wait, wait" would be coded as a C1 followed by an E2(C1). If the mother added another "# Wait," code E2 (C1) again.*** Because the repetition can be a command, an informative feedback, a qualified command, etc., please indicate the relevant C, I, or F code in parentheses: E2 (C1).

S Codes - Maternal Structuring of the Task

S1) Structuring - Comments by the mother that refer to the rules, ***instructions, and/or steps*** of the boat task. ***The comments about rules refer to expected actions, for example the verbs should, supposed to, have to and need to often appear in structuring comments.*** For example, "Remember, I am not supposed to fold the paper for you." "The lady told us we had to make this shape first and then we get to make the triangle." ***The comments about steps refer to the next step that is supposed to take place on the task. Such key words as next, now, and first, often appear in structuring comments that refer to the steps of the boat task. "Okay, now we're done with the first part. " "The second picture is next. " Not every statement that begins with "next," "first," or "now" should be coded as referring to the steps of the task. When the mother is simply telling the child what to do next in terms of the little details of building the boat, don't code structuring: For example, "now you need to fold it down," would be coded as C1-C.***

Structuring comments are comments made by the mother that indicate "moves" or transitions between pictures or stages of boat construction. Comments that refer to detailed steps within pictures or stages are not structuring comments.

All structuring codes are parenthetical. That is, code structuring in parentheses next to the primary code of C, E, F, I, P. Thus, "Now we have to do the second boat," would be coded as C1-C (S).

C Codes - Maternal Control

C1) Direct command - Command *(in an imperative tone of voice!)* to the child that both directs behavior and is direct in that there are no qualifiers. For example, "Fold the paper." "Turn the paper the other way." "Just fold it." "Just rub your finger down the side." ***Statements by the mother that include "have to" or "gotta." are coded C1 (e.g., "You gotta fold it down").*** If the mother says "No," in response to a child's behavior (e.g., reaching), code as C1, ***unless the mother's tone of voice is one of encouragement or telling a story (e.g., "No # If you fold it that way, the bottom of the boat won't be straight.").*** If the mother says "No," in response to a question, code as F1, ***unless the mother is being abrasive or negative in some other way ("No!" in a nasty tone of voice).*** If the mother says, in response to a behavior, "No, that's not the way," code as F1. ***The general rule for discriminating F1 from C1 is: If the mother is describing the child's ongoing activity (engaging in narrative, telling a story) code her statement as an F1 ("You fold it across there" in a sing-song or narrative voice to describe the child's action is an F1). If the mother is telling the child what to do, code her statement as a C1. ("Take the corner and fold it" in a sing-song voice or a narrative voice is an F1 in an imperative voice, it is a C!).***

C1-C) Complex direct command - Command to the child that directs behavior but is grammatically more complex than a simple interjection (see simple verb phrases in C1). The grammatical complexity may be indicated by a word designating time or sequence such as "first" or "then." The grammatical complexity may be indicated by the insertion of the verb indicating the command into a prepositional phrase. Examples of complex direct commands: "You need to fold it down." "First, you fold the paper." "Then, you turn it this way." "Now fold it up." ***"Go ahead and fold it." "Try to fold it."***

C2) Qualified command - Command to the child that is accompanied by a qualifier such as "okay?" "maybe" "let's" "can" or in which the mother uses the third person plural, "we". For example, "Fold the left side first, okay?" "Now let's fold up the bottom." "You can fold the left side first, then the right." "We bring this side down." When a command is both complex and qualified, code C2, qualified command. Note that "okay?" is a qualifier when used as a tag question at the end of a command, such as in, "Fold it up, okay?" Commands introduced by "okay," (e.g., "Okay, fold it up") are direct commands, like "Just fold it." ***When "see?" is used in a tag question at the end of a command instead of "okay?," code C2: "Now bring this corner, see?" If you think that a C2 may be an F1, code it as a C2.***

C2-Q) Using questions to direct the child's behavior - "Would you like to fold the left side now?" "Why don't you bring up the bottom part next?" "Can you fold the right side?" "What about the right side?" ***If something sounds like a question, but is not in question form, it may be changed to a question during coding based on intonation, but must be discussed by both coders prior to comparing codes for a particular transcript.***

C3) Bargains or cajoles - Directing the child's behavior by offering specific positive and realistic consequences for the behavior. "Finish it up quickly and then we can have our snack." Excessive, inappropriate, or unrealistic bribes should not be coded (e.g., "Do the next side and I'll get you that dress that you wanted.")

C4) Attention directive - Command that directs visual attention, such as, looking, seeing. For example, "Look at the first one." ***All C4's should be identifiable as C1's by their grammatical structure. Any statement that is an attention directive but not a direct command should be coded as whatever the other code is. Thus, if the mother is making a statement that also qualifies as a C1-C, a C-2, or a C-5, code the other code instead. Code as C4: "See the triangle," and "Look at the next one." "See, this is the way we do it," would be F1.***

If the mother says "See" followed by command, code a command. "See, fold it down," would be coded as C1. " See, can you fold it down?" would be coded as C2-Q.

C5) Command with reason - Command in which the arbitrary nature of the mother's demand is diminished by her use of justification or explanation. For example, "Come back to the table 'cause we have to finish." "Leave the papers up there because we need to look at 'em." "Leave the other boat alone so that we can finish this one." ***"A command with a pause followed by a reason is coded as one continuous C5 statement. Thus, "Fold it this way. # So they'll be even" would be coded C5. Reasons do not have to be initiated by "so" or "because". "Come back to the table to finish the boat" and 'Come back to the table, we have to finish" would both be coded as C5.***

I Codes - Maternal Intrusive Control

Two of the following behaviors are not verbal, and, thus, they will not appear in the transcript. Thus, you must attend carefully to the videotape in order to code these reliably.

I1) Verbal threats - Directing the child's behavior with verbal threats of negative physical consequences, e.g., "If you don't get that done right now, I'll beat your butt!" "There won't be any supper tonight if you can't do that next part." Do not code statements about realistic consequences: "The longer it takes you, the longer it will be until we have that snack."

I2) Physical restraint/force - Physically restrains child from folding paper, moving, etc. Physically forces child to fold paper, touch paper, touch felt board, etc. Can also be used to code ***pulling*** the paper away from the child ***or preventing the child from folding the paper.*** Code I2 in parentheses next to code(s) for verbal behavior. Indicate with an arrow when I2 continues for more than one utterance. The arrow should stop when I2 stops.

I3) Physical punishment - Spanking, hitting, pinching, slapping or any other behavior that is intended to result in pain. Code I3 in parentheses next to code(s) for verbal behavior.

I4) Physical threat - Threatening gesture, such as shaking fist at child, making threatening face at child and stepping closer to the child. If painful physical contact is continuous with the threatening gesture, code physical punishment instead. Code I4 in parentheses next to code(s) for verbal behavior.

F Codes

Feedback

F1) Informative feedback/Information - Feedback that provides the child with information that may be helpful to him/her in constructing the boat. This feedback must NOT be a command. For example, "If you turn it the other way, it will work." Other examples include, "You're getting it too close," and "You've folded it too far." A command followed by informative feedback would receive two separate codes for the two independent clauses. Thus, "Turn it the other way; then, it will work," would be coded as a C1, F1.

F2) Positive feedback - Positive reinforcement or encouragement of the child's behavior, efforts, attempts, etc. For example, "Good!" "That's right."

Not Relevant

Z) If mother is speaking to herself or the camera person, the mother's utterance should be coded as a (Z) for zero relevancy or not relevant.

Unintelligible

X) If mother's verbalizations are unintelligible or if she trails off without completing the statement, then code as X (same as transcription symbol for unintelligible verbalizations). *If the mother's statement includes X's, code as X. If the mother rephrases her unintelligible statement and adds more information, code the second statement as a P5.*

None of the Above

N1) If P codes, E codes, S codes, C codes, I codes, F codes, 0 codes and X codes do not apply to a maternal statement, code it as N1, NOT any of the other codes.

Rating Maternal Mental Operational Demand (MOD)

Mental Operational Demand is a construct that summarizes how demanding a mother's statements are of representational thought from her child. There are three levels of mental operational demand.

For each maternal statement that you have coded with a "maternal behavior" code (pages 1 to 3 of this manual), you should also code one level and type of MOD. If the mother's statement includes two MODs, code the higher-level MOD.

For repeated MODs, code either an E2 (MOD) or a P5 (MOD) to discriminate repetitions from new MODs.

If the mother's statement is unintelligible or not relevant, do not code a level for MOD.
Not Relevant

Z) If mother is speaking to herself or the camera person, the mother's utterance should be coded as a (Z) for zero relevancy or not relevant.

Unintelligible

X) If mother's verbalizations are unintelligible or if she trails off without completing the statement, then code as X (same as transcription symbol for unintelligible verbalizations).

Level 0: NO OPERATIONAL DEMAND. Level 0 statements do not demand any referential or representational abilities on the child's part.

"Don't do that!"
"Let's make picture #1 first."
"That's hard!"

Level 1: LOW MENTAL OPERATIONAL DEMAND. Level 1 statements require referential language abilities on the part of the child, not representational.

The following are some level 1 MODs and examples of maternal statements for each category. The demand is on the child to:

1. **Label** - Getting the child to name an individual object, location, event, or action. No inference is required from the child.

"What are we going to make?" "What color is this boat?"
"Can you tell me the name of this?"

2. **Observe** - Getting the child to attend, observe, examine, using any of the senses. This category includes parental demonstrations that require the child to observe. The form of the demand is verbal and the parent's action is a demonstration.

"Do you see the paper in number 1?" "Look at number 2."
"Look what happens to the boat, when I fold the paper this way."

3. **Demonstrate** - Getting the child to show through action or gesture how something is done, when the outcome is clearly observable by the child. The parent asks the child to demonstrate. If the parent does the demonstrating the operational demand on the child is to observe (see 2 above).

"Show me how to fold it."

4. **Produce Information** - Asking a yes-no question to get the child to produce, process, confirm or reject information about labeling, location, materials, events; the information requested is associational.

"Is this called a boat?" "Is that even?"
"Did you fold the paper up?"

Level 2: MEDIUM MENTAL OPERATIONAL DEMAND. Some representational abilities are required. However all representations are clearly dependent upon immediate observable information and require very little mental transformation.

The following are some level 2 MODs and examples of maternal statements for each category. The demand is on the child to:

1. **Sequence** - Ordering events in time, as in the steps to complete the boat task. Key terms are "next," "last," "first," "start," "begin," "after," ***"second," "before." One of these key sequencing terms must be included in the mother's statement in order for sequencing to be coded ("and" is not a sequencing term).*** Do NOT code sequencing, if the mother only points to the first picture and says to do it first ***(code 0)*** or if the mother says ***"We're supposed to do*** picture #1 first" (code 0 and code S1, Structuring, under Maternal Behavioral Codes). ***Sequencing can occur within or between stages. Remember, "then" is not a sequencing word.***

"First, we'll make picture #1, then we'll make picture #2." "What picture did you make after #1?"
"What picture do we make next?" "Which picture did you make first?"
"After you make picture #3, what will you make?" ***"What's next?"***
"Do you have to open up the paper before you make the next fold?"

Even if the statement that begins "first" and the statement that begins "then" are separated by a # sign, one slash, a double slash, or three dots, do NOT code the statements separately but combine them together as a "Level 2 - Sequence."

2. **Estimating/Enumerating** - Seriation, ordinal counting (1, 2, 3, 4) or estimating that requires similar numerical ability..

"Count the steps on the board." "Count the steps we have finished."
"How many steps are on the board?"

The following four types of level 2 demand all follow the general rules for "Compare" according to Sigel, p. 29.

3. **Describe similarities** - Noting and comparing common observable features. These comments require *perceptual* analysis - comparing features of objects, events, pictures, etc. Note that all objects to be compared are present and observable.

Rule for discriminating describe similarities and produce information: describe similarities demands comparison of perceptual features, produce information does not.

"Is your boat like #5?" "Is the fold in the right place?" (assumes that it is!)
"Is the bottom folded up like #4?"

4. **Describe differences** - Noting and comparing observable differences in feature. As in "describe similarities," these comments require perceptual analysis. Note that all objects to be compared are present and observable.

"Is your boat different from #5?" "Is the fold in the right place?" (assumes that it is not!)
"How is your paper different from #2?"
"How is this boat different from the one you made the first time?"

5. **Infer similarities** - Identifying nonobservable similarities. At least one of the objects, events, pictures must not be present for reference. Thus, infers similarities requires some conceptual analysis. The child is asked to compare at least one not present (or not yet present) object or event with an object or event that may or may not be present. ***Statements with "Remember" are coded as Infer Similarities, unless they are commands (e.g., NOT, Remember, fold it down!).***

"Fold your piece of paper the same way as #1 is folded." (Note, #1 is visible on the display board; the child's paper has not yet been folded, so only one item is observable.)

6. **Infer differences** - Identifying nonobservable differences. At least one of the objects, events, pictures must not be present for reference. Thus, infers differences requires some conceptual analysis. The child is asked to compare at least one not present (or not yet present) object or event with an object or event that may or may not be present.

"How is your paper different from #3 on the board?"

Level 3 - HIGH MENTAL OPERATIONAL DEMAND. Level 3 statements require representational abilities.

The following are level 3 MODs and examples of maternal statements for each category. The rule of thumb for is that questions make level 3 demands, declarative or exclamatory statements do not. Exceptions to this rule occur when the mother makes an evaluative statement, for which the child's response indicates that he has carried out a similar evaluation, such as when the child agrees or disagrees with the mother's evaluation. The demand is on the child to:

1. **Propose alternatives** - Getting the child to provide other options, different ways of carrying out the task at hand (but without any negative evaluation implied). Key terms are "other," "another," "different from before."

"What other way could you fold the paper?" "Do you know another way to make a boat?"

2. **Evaluate consequences** - Appraising the quality of a product or outcome. Appraising feasibility. Appraising the aesthetic quality of personal liking. Thus, the demand on the child is to carry out these activities. "Can we" questions and "Can you" questions that use a collective meaning for "you" are classified as evaluate consequences. When the "you" is directed to the child, code either *evaluate competence* or *evaluate performance* (see below).

"Will the boat look right if you fold the top down?"
"Is this boat easy to make?"
"Can we make this boat?"
"This is hard to make." *Code only when the child responds indicating that he agrees or disagrees with this statement.*

3. **Evaluate own competence** - Appraising own abilities. The demand is on the child to appraise his/her own abilities. Note that questions make the demand on the child. Mother's statements that express her evaluation of the child's competence do not demand that the child think about his/her own abilities.

"Do you think you can make a boat like this one?" "Can you fold it like this?"
"I can make a paper boat, can you?" "Do you know how to make a boat?"
"Can you show Sissy how to make this when you get home?" ***"Do you understand?"***
"Do you know how to fold the paper to make the next picture?" ***"Do you need me to help you?"***
"Are you ready?" Code only when the child responds (verbal response or head nod/shake) that he/she agrees or disagrees with this statement.

4. **Evaluate own performance** - Appraising the quality of the performance or the effort expended on a task. The demand is on the child to assess his/her performance. Do not code praise and encouragement such as, "That's neat," or "Very good!"

"Did you work hard on that boat?" "Was that hard work?"

5. **Infer cause and effect relationships** - Predicting outcome on the basis of causal relationship; explanation of events.

"We can make a boat [effect] by folding this paper [cause]?
"If you fold the bottom up, what will that make?"

6. **Plan** - Arranging conditions to carry out a set of actions in an orderly way; figuring out how to carry out a task; carrying out the task. The child must be involved in the decision or carrying out of the task.

"If you want the paper to fold here, what should you do?"
"How can you make a boat with this paper?"
"Now, what do we do?"

7. **Evaluate other's competence** - Appraising abilities of others. The demand is on the child to appraise the ability of the mother or someone else that she mentions. Note that questions make the demand on the child.

Rating Maternal Affective Tone

Directions to coders: After you have coded the above verbalizations and behaviors, replay the videotape, paying careful attention to maternal affect. At the end of playing the tape, rate the occurrence of four types of affect, each on a 5-point scale:

1 - the group of behaviors never occurred
2 - the group of behaviors occurred infrequently (2 - 3 instances)
3 - the group of behaviors occurred moderately often (4 - 5 instances)
4 - the group of behaviors occurred frequently and sometimes together (e.g., smiling and laughing; smiling and positive tone of voice or warm words of praise)
5 - the group of behaviors occurs very frequently both alone and in combination (smiling and laughing; smiling and positive tone of voice or warm words of praise)

Positive affect: The mother is happy, smiling, or laughing. Her body movements may reflect joy or other positive affect. The mother's tone of voice is positive, warm, and affectionate. Tone of voice, facial expression, voice, and body movement that are indicative of positive affect may occur independently or together.

1	2	3	4	5
Consistently NOT positive (may be negative, neutral, or flattened)	Infrequently positive in face or voice (2 or 3 instances)	Sometimes positive in face or voice (4 or 5 instances)	Frequently positive in face and/or voice (more than 5 instances of face or voice or both)	Frequently positive in face and voice (more than 5 instances; face and voice together show positive affect at least once)

Hostile/Angry/Aggressive affect: The mother is hostile, angry, and/or aggressive. Her face may be angry, mad, furious, annoyed, disgusted, or contemptuous. The mother's tone of voice is negative. Tone of voice, facial expression, voice, and body movement that are indicative of hostile affect may occur independently or together.

1	2	3	4	5
Consistently NOT hostile	Infrequently hostile in face or voice (2 to 3 instances)	Sometimes hostile in face or voice (4 or 5 instances)	Frequently hostile in face and/or voice (more than 5 instances of face or voice or both showing hostility/anger)	Frequently hostile in face and voice (more than 5 instances; face and voice together show hostility/anger at least once)

Flattened/Depressed/Sad affect: The mother is completely inexpressive emotionally or shows sadness/depression. In situations in which you might expect either positive or emotion or anger to be expressed, there is nothing. There is little or no variation in affective tone from moment to moment. There is also diminished body movement that would express positive or hostile affect. Sadness and depression may be expressed in face (downward turn of mouth) or voice (tired, melancholy tone) or both.

1	2	3	4	5
Consistently NOT depressed	Infrequently depressed in face or voice (2 to 3 instances)	Sometimes depressed in face or voice (4 or 5 instances)	Frequently depressed in face and/or voice (more than 5 instances of face or voice or both showing depressed affect)	Frequently depressed in face and voice (more than 5 instances; face and voice together show depressed affect at least once)

Involved affect: The mother is engaged in and enthusiastic about the task or about the child. This category is indicative of more than positive affect. The mother is energetic. She does not have to be effervescent (bubble) but her energy is contagious.

Consistently NOT engaged or enthusiastic	Infrequently engaged or enthusiastic (2 to 3 instances)	Sometimes engaged or enthusiastic (4 or 5 instances)	Frequently engaged and/or enthusiastic (more than 5 instances; engagement and enthusiasm together at least once)	Frequently engaged and enthusiastic (more than 5 instances; engagement and enthusiasm together at least twice)

Rating Maternal Warmth

Please rate each mother after you have coded the first five minutes of videotape of the boat task. The question that you are answering is "How warm is the mother toward her child?" "This includes, but is not limited to, positive affect toward her child, responding to the child's bids for affection, maintaining physical proximity when appropriate, affectionate physical contact or a warm verbal tone or style (Iannotti, 1985, p. H9)." The scale is as follows:

5. Mother is very warm. Clearly shows her affection for her child.
4. Mother is warm. Frequently shows warmth and affection but is also likely to respond with a neutral tone.
3. Mother is average. Shows occasional warmth but generally responds in a matter-of-fact manner.
2. Mother is cool. Mother is somewhat distant to child. May show occasional warmth but in a mechanical or awkward manner. Generally conveys a slightly negative tone toward the child.
1. Mother is very cool. Mother is distant. Doesn't seem to care about her child. Conveys a negative affect toward child or the sense that the child is a burden or an imposition on her life.

Circle one of the following:

1	2	3	4	5
Very cool	Cool	Average	Warm	Very warm

Rating Maternal Awareness of Child's Motives, Emotions, or Thoughts

Please rate each mother after you have coded the first five minutes of videotape of the boat task. The questions that you are answering are: 1) To what extent "did the mother demonstrate an understanding of her child's perspective as evident in his/her feelings, thoughts, or motives?" 2) How sensitive was the mother "to the child's changing emotional state?" 3) How responsive was the mother to the child's needs, even when they were poorly expressed (Iannotti, 1985, p. H9)?" The scale is as follows:

5. Mother is very aware of her child's presence in the room and what her child is feeling and thinking. Frequently anticipates problems in communication and adjusts her verbalizations or suggests solutions to problems the child is having. Mother ***rarely*** demonstrates egocentric behaviors ***(i.e., up to two)*** toward her child.

4. Mother is aware of her child's perspective and anticipates problems. Mother makes adjustments in her behavior and suggests adjustments for her child. There are occasional ***(up to four)*** egocentric lapses, however, that may include ambiguous communications or ignoring the perspective of her child.

3. Mother is moderate or average in awareness. Mother is aware of child's presence and child's perspective but also exhibits more than occasional egocentric behavior ***(five to eight)***. This may include stating things in an egocentric manner, forgetting the child's perspective, or displaying gestures or objects outside the child's field of vision.

2. Mother is below average in awareness. Although she may be aware of child's perspective, she usually seems unaware and ignores the child's point of view. She uses ***more than eight*** egocentric statements ***or behaviors***, presents materials outside the child's field of vision, uses vocabulary unsuited to the age or developmental level of the child, and/ or repeats statements (to which the child has not responded) without changing the content.

1. Mother is very unaware. Mother seems very self-centered and unaware of child's needs, feelings, thoughts or motives. She frequently presents tasks in an ambiguous manner; she repeats without variation, she refers to objects outside the child's visual field, and/or she uses words or concepts that are not appropriate for the child's developmental level. ***Thus, the total number of egocentric statements/behaviors is more than eight.***

Circle one of the following:

1	2	3	4	5
Very unaware	Unaware	Average Awareness	Aware	Very Aware

Rating Maternal Overcontrolling

Please rate each mother after you have coded the first five minutes of videotape of the boat task.

3. Mother is not appropriate because she is very overcontrolling and anticipates problems that do not appear to exist. The pacing of the task and the solution of the task are controlled by the mother with little input or influence by the child. The mother intervenes frequently (e.g., 4 or 5 times during the entire task) and physically when the child could have continued on his own without making any mistakes. The mother cannot keep her hands off of the boat. She allows the child to make folds but then does them again or runs her fingers over his/her folds, imitating (or fixing) the child's behavior in her own way, thus negating the child's efforts.

2. Mother is somewhat overcontrolling and anticipates some problems which do not exist. Thus the mother may tell the child what to do when he/she does not need help, but not as frequently as in the above examples (e.g., 1 to 3 times during the task). The mother does not take over the task physically (i.e., folding the paper or fixing the child's folds), or only folds the paper twice, but does direct the child's behavior verbally when he doesn't need her help (following the 1 to 3 times rule above).

1. Mother is not overcontrolling, either being uninvolved or giving clear and relevant directions to which the child is capable of responding. The mother's interventions are effective in helping the child reach the goal or the mother never intervenes. If the mother intervenes, she does so only when the child will take an incorrect step and intervenes so that the child's solution will be correct and the mother can praise the child.

Circle one of the following:

1	2	3
Not	Somewhat	Very
Overcontrolling	Overcontrolling	Overcontrolling

Rating Maternal Undercontrolling

3. Mother is not appropriate because she is very undercontrolling and remains uninvolved despite the child's needs. She doesn't pick up cues from the child. She does not anticipate any problems that the child might be having. She does not prevent errors from occurring. The mother does not provide sufficient instruction or structure to guide the child to make correct folds and/or shapes. Some mothers may praise the child's work, even when folds and/or shapes are obviously wrong and will not result in anything that approximates the boat. If the mother makes the boat herself, she not undercontrolling, even if she has provided little to no instruction for the child.

2. Mother is somewhat undercontrolling in that she does not always intervene when the child signals clearly that he/she needs help. She prevents the child from making some mistakes but is not attentive enough to prevent other mistakes. The mother's lack of involvement is not as extreme as in the above category.

1. Mother is not undercontrolling, either being overcontrolling or giving clear and relevant directions to which the child is capable of responding. The mother's interventions are effective in helping the child reach the goal or the mother's interventions are intrusive and overcontrolling. If the mother does not provide a lot of structure or instructions, it is because the child needs no help and is completing the task accurately on his/her own. If the mother makes the boat herself, she is categorized as a 1 on undercontrolling.

Circle one of the following:

1	2	3
Not	Somewhat	Very
Undercontrolling	Undercontrolling	Undercontrolling

Rating the quality of the boat

Please rate the quality of the final boat, after the child has completed it on the following three point scale:

3. Boat is precisely folded. The final boat matches or closely matches the fifth and final step of the boat folding task that is fixed to the flannel board.

2. Boat is recognizable but imprecise. The final "boat" resembles a boat, but has points of dissimilarity or imprecision. The point at the top may be missing. Alternatively the sides and/or bottom may be folded at the wrong angles, but the three-sided nature of the

1. Boat is unrecognizable as a boat. The final "boat" does not resemble the final step of the boat folding task. The "boat" may be a folded wad of paper or it may be a crumpled wad.

Appendix C

Introduction to the Friendship Network Inventory

The purpose of the Friendship Network Inventory is to identify the number and type of positive social relationships experienced by children. There are three categories of positive social relationships that you are asked to identify: close friends, friends, and acquaintances. You are asked to identify which children are close friends, friends, and acquaintances of the children in the research study. Thus, you are looking at both sides of the relationship -- from the perspective of both children, the two children could be considered to be close friends, friends, or acquaintances. Children who do not know each other or who do not get along are classified as "not acquainted."

Close friends and **friends** are children who play with each other positively (although negative behaviors also occur). Friends play together more than nonfriends. Friends smile and laugh together more than nonfriends. They cooperate, collaborate, and help each other more than nonfriends.

Acquaintances are children who know each other and interact but who do not play together very often and show few of the signs of having a special friendship. They don't smile, laugh, help cooperate, or play together as much as children who have moved beyond acquaintance into friendship. Acquaintances do have a positive relationship. On the Friendship Network Inventory, children who are acquaintances are children who are not friends but do get along with each other.

Children who are classified as **Not Acquaintance** are children who either do not know each other or who do not get along with each other.

The categories are summarized as follows:

Close friends - companions who prefer the child most as playmates; companions who smile and laugh with the particular child the most; companions who associate most with the particular child.

Friends - companions who the child plays with, but not as much as close friends; companions who smile and laugh with the child, but not as much as close friends.

Acquaintances - more distant companions who play occasionally with the child and who get along with the child.

Not Acquaintances - classmates who do not know the child or who do not get along with the child.

FRIENDSHIP NETWORK INVENTORY - 2

Identification of Friends in the Middle of the School Year

Teacher completing inventory: _____

Child in OSU Transition to School Project: _____

Date form completed: _____

Please place a check mark next to the name of each child below to indicate whether he/she is currently (i.e., the months of January and February) a close friend, a friend, an acquaintance, or not an acquaintance (i.e., a stranger or the two children do not get along with each other) of the child named above. For each row, there should only be one check mark (unless the child whose name is indicated in that row has transferred into or out of the school). Please add names of new children and indicate when they transferred into the school at the bottom of the checklist.

Children's Names	Gender	Close Friend	Friend	Acquain-tance	Not Ac-quaintance	Transfer out (date)	Transfer in (date)
Example #1	M	✓					
Example #2	F				✓		
Example #3	M			✓		moved 12/97	
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
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19.							
20.							
21.							
22.							
23.							
24.							
25.							

Appendix D

FRIENDSHIP DYAD BEHAVIORS

1. Conversational Turns (i.e., talk-response-talk, if a pause, but the response or talk is related to the subject then it counts, or if xxx's but subject can be determined then it counts, includes vocalizations, interactions should be meaningful, overlapping statements that are responses should count together, joint discussion in context of each other, affirm each other's conversation—count through mother's interruptions, don't count if not sure they are talking to each other or responding to each other.)

never	1	2-4	5-7	8-9	10+
0	1	2	3	4	5

(actual frequency counts from transcript and tape total 5 minutes)

2. Imitation (i.e., mimicking each other, saying the same words or nonsense words, includes, real words or phrases, not sentences, and nonsense words, non-conversation—in fun, repeating each other (talk-repeat) (xxx words?—ignore these) (count pairs of talk-repeat—or round low if the mimicking is an odd number of words)

never	1	2-4	5-7	8-9	10+
0	1	2	3	4	5

(transcripts including tapes for total of 5 minutes)

3. Smile/Laugh/Giggle (i.e., directed toward each other in response to each other's behaviors, not toward the mother or the camera, if smiling singular—ok, but if smiling to mother or camera—no, be conservative, hits only for non-descript smiles—one hit per child, intentional smiling related to each other or each other's actions, happiness is part of the affect, stop counting when mother or camera are involved, the intent is toward each other or the joint task, stop counting when they tilt their head down and smiling is not exactly clear, when in doubt don't count random smiling, smiling should imply friendliness.)

never	1	2-4	5-7	8-9	10+
0	1	2	3	4	5

(includes seconds and hits--count the same way as touching and show)

4. Touching (i.e., hand, arms, shoulders, leaning across and looks like touching, arms and shoulders in the same space—even when they cannot be seen, clothing crossing clothing, clothing touching the other child, movement into each other's personal space and looks like touching)

see scale
(includes seconds and hits)

5. Share/Offer/Draw and Build Together (i.e., share block container, hands are in the container at the same time-- >1 second on the timer, stacking blocks on top of each other's blocks and block has to stay, drawing on each other's paper, offer the pencil to the other, place pencil down close to the other, pencil has to stay off of their own paper, 1 lay down and move hand away and pick up equals 1 share, share is a comply/exchange, each exchange is 1 if both lay down a pencil, each pair of pencil lay downs if 1 hit, an single lay down is 1 hit if the other child doesn't pick it up for >30 seconds—cooperative behavior.)

never	1	2-4	5-7	8-9	10+
0	1	2	3	4	5

(hits only)

6. Show/Look at Work/Joint Attention (i.e., look at each other's drawings or block building, point, label, both attending to overall block building task and drawing task, count off when not attending to each other when attending to mother, camera, or environment separately from each other, score is obtained by subtracting the number of seconds not attending to each other from 60 seconds for each minute—so that if children did not attend to each other for 5 seconds for that minute then the score will be 55.)

See scale
(includes seconds and hits)

7. Ask/Answer Questions (i.e., only between the child dyad—not mother. If a child asks mother and other child answers, then it counts, one ask/answer turn.)

no	yes
0	1

(Transcripts)

8. Tell Mother About Friend/Target Child (i.e., mentions name or talk about Friend/Target Child)

no	yes
0	1

(Transcripts)

9. Comply/Cooperate/Exchange/Trade (i.e., hand each other objects, hand-to-hand)

never	1	2-4	5-7	8-9	10+
0	1	2	3	4	5

(hits only)

Appendix E

Footnote

[1]Ladd and Golter (1988) discuss less parental monitoring or less supervision as the following: (a) direct: the parents were present or participated in their children's activities with peers; (b) indirect: the parents would oversee and were aware of their children's activities with peers, but were not consistently present or did not participate in the activities; and (c) unmonitored: the children's activities appeared to be unsupervised or unmonitored. Ladd (1992) later referred to direct monitoring as intrusive supervision, where parents joined in the play with their children and peers. Ladd (1992) hypothesized that this type of parental monitoring may interfere with the development of social skills. Indirect monitoring was later referred to as less direct supervision and included parental watching from a distance or intermittent checking on the children's activities. Less direct supervision was proposed to promote the development of social skills (Ladd, 1992). These terms are defined and discussed here because they constitute yet another use and different definition for direct and indirect parenting.

Appendix F

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
HUMAN SUBJECTS REVIEW

Date: 08-28-96 **IRB #: HE-97-009B**

Proposal Title: HOW SCHOOLS AND FAMILIES PROMOTE THE SUCCESSFUL TRANSITION OF CHILDREN FROM HEAD START TO THE PUBLIC SCHOOL CLASSROOM

Principal Investigator(s): Laura Hubbs-Tait, Anne M. Culp, Rex E. Culp

Reviewed and Processed as: Modification and Continuation

Approval Status Recommended by Reviewer(s): Approved

ALL APPROVALS MAY BE SUBJECT TO REVIEW BY FULL INSTITUTIONAL REVIEW BOARD AT NEXT MEETING, AS WELL AS ARE SUBJECT TO MONITORING AT ANY TIME DURING THE APPROVAL PERIOD.
APPROVAL STATUS PERIOD VALID FOR DATA COLLECTION FOR A ONE CALENDAR YEAR PERIOD AFTER WHICH A CONTINUATION OR RENEWAL REQUEST IS REQUIRED TO BE SUBMITTED FOR BOARD APPROVAL.
ANY MODIFICATIONS TO APPROVED PROJECT MUST ALSO BE SUBMITTED FOR APPROVAL.

Comments, Modifications/Conditions for Approval or Disapproval are as follows:

Signature: Thomas C. Collins

Date: August 19, 1998

Interim Chair of Institutional Review Board
and Vice President for Research

OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD

DATE: 11-24-98 **IRB #: HE-99-044**

Proposal Title: MOTHERS' PARENTING PRACTICES AND CHILDREN'S PEER SOCIAL SKILLS AS PREDICTORS OF CHILDREN'S FRIENDSHIPS AND PEER ACCEPTANCE

Principal Investigator(s): Laura Hubbs-Tait, Carolyn V. Fore

Reviewed and Processed as: Exempt

Approval Status Recommended by Reviewer(s): Approved

Since the data are archival in nature relative to them already having been collected under an approved master project, and this application is for the sole purpose of gaining an IRB approval letter with Ms. Fore's name on it to satisfy Graduate College dissertation acceptance guidelines, this application is approved as an exempt submission.

Signature: Carol Olson Date: November 24, 1998

Carol Olson, Director of University Research Compliance
cc: Carolyn V. Fore

Approvals are valid for one calendar year, after which time a request for continuation must be submitted. Any modification to the research project approved by the IRB must be submitted for approval. Approved projects are subject to monitoring by the IRB. Expedited and exempt projects may be reviewed by the full Institutional Review Board.

VITA

Carolyn Vass Fore

Candidate for the Degree of

Doctor of Philosophy

Dissertation: MOTHERS' PARENTING PRACTICES AND CHILDREN'S PEER SOCIAL SKILLS AS PREDICTORS OF CHILDREN'S PEER ACCEPTANCE AND FRIENDSHIPS

Major Field: Human Environmental Sciences

Biographical:

Education: Bachelor of Science in Nursing, University of Kentucky, College of Nursing, May 1972; Master of Science in Nursing, University of Kentucky, College of Nursing, August 1979. Completed the requirements for Doctor of Philosophy, Oklahoma State University, August 1999.

Experience: Faculty, College of Nursing, University of Kentucky, August 1979-1987. Faculty, Anna Vaughn School of Nursing, Oral Roberts University, 1988-1997. Faculty, Rogers State University, Health Sciences Division, Nursing, 1999.

Professional Memberships: American Nurses Association, Sigma Theta Tau, Kappa Omicron Nu, Association for the Care of Children's Health.

Scholarly Productions: Hubbs-Tait, L., Culp, A. M., Culp, R. E., Steele, M. A. M., Fore, C. V. (1998). Relationship of children's behavior problems to mothers' responses to misbehavior and distress. Poster presentation at the biennial National Head Start Conference, Washington, DC.