Order Number 9008333

The relation between maternal child-rearing styles and the development of aggression in children

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The University of North Carolina at Greensboro, 1989

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THE RELATION BETWEEN MATERNAL CHILD-REARING STYLES AND THE DEVELOPMENT OF AGGRESSION IN CHILDREN

By

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A Doctoral Dissertation
Submitted to the Faculty of The Graduate School at
The University of North Carolina at Greensboro
In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Philosophy

Greensboro
1989

Approved by

Dissertation Chairperson

APPROVAL PAGE

This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

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6/26/89

Date of Acceptance by Committee

12/19/88

Date of Oral Exam

TRYON, ADELINE S. C. The Relation Between Maternal Child-Rearing Styles and the Development of Aggression in Children. (1989)
Directed by: Dr. Susan Phillips Keane. Pp. 113.

The purpose of this investigation was to enhance the theoretical understanding of the social development of popular and aggressive first grade boys. Recent models of social development have recognized the embeddedness of children within a variety of social contexts (e.g., Dodge, 1985; Hartup, 1979), and have emphasized the importance of discovering how the different social contexts of children are related to one another and how each may influence children's development.

This study examined the relation between maternal empathy and child-rearing styles, and the relation of these family factors to first grade boys' empathy and social status in the classroom. Twenty popular and 17 aggressive first grade boys and their mothers served as subjects.

Several hypotheses were investigated. Discriminate analyses supported the overall model that maternal empathy, household level of education, and children's perspective-taking could be used to predict correctly the social status of 100% of the subjects. Higher levels of maternal empathy were associated with reports of more inductive and less power-assertive child-rearing styles, and higher levels of household education. Mothers of popular children were more empathic than mothers of aggressive children. On

observational measures of mother-child interactions, mothers of popular boys were observed to use more inductive statements than mothers of aggressive boys.

The results are discussed in terms of their implications for three areas: (1) Building a predictive model of the development of first grade boys' social status; (2) Earlier detection of children at risk for poor social skill development by identifying high risk parent populations; and, (3) Promoting preventative intervention through parent education.

Acknowledgements

I would like to thank the following people for their contributions to this work: Dr. Susan Phillips Keane, who has helped to shape my thinking about research and clinical issues over the last five years, and who assisted me in every area of this dissertation; Dr. Ernest Lumsden, who has given me his support and encouragement in the pursuit of my interests; Dr. Anthony DeCasper, who has simulated my thinking about children's development; Dr. Jackie White, who has contributed to the development of my research and analysis skills; Dr. Carol MacKinnon, whose parent-child seminar provided the basis for this research; Jane Runion, who provided hours of valuable aid in data collection; my parents, Pat and Ralph Cutting, and family, who have provided me with unending support and encouragement throughout this entire project and throughout my entire graduate career; and finally, my husband Ron Boykin, who has been patient and supportive throughout.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

Overview

The purpose of the present paper is to enhance the theoretical understanding of the social development of popular and aggressive children. Recent models of social development have recognized the embeddedness of children within a variety of social contexts (i.e., Dodge, McClasky, & Feldman, 1985; Hartup, 1979), and have emphasized the importance of discovering how the different social contexts of children are related to one another and how each may influence children's development. In particular, social systems theory (Sameroff, 1983) has stressed the importance of learning about how both the family and peer systems may have an impact on each other and on the developing child, in both a unidirectional and reciprocal manner.

Traditionally, the links between the different social systems of children have begun to be established in at least two ways. Descriptive research has sought to delineate the central dimensions of each system and systematically relate the dimensions to one another, while experimental research has manipulated one dimension of one

system and documented the impact within and across systems (MacDonald & Parke, 1984). This paper falls within the first catagory and aims at describing and systematically establishing the links between maternal empathy and child rearing styles, and how these family dimensions may be related to children's development of empathy and positive or negative relationships in peer systems.

Historically, only scant attention has been paid to the contribution of the family system to the development of the different social skills exhibited by children who are accepted versus rejected by their classroom peers. Instead, much of the descriptive research has focused on describing the social skills of children who are not well accepted by their classroom peers, and comparing them to the skills exhibited by socially accepted (or popular) children. These studies have been important in documenting the skill deficits of socially rejected children since poor peer relationships in childhood have been related to later adjustment difficulties, such as low school acheivement, and poor social adjustment (Oden & Asher, 1977; Roff, Sells, & Golden, 1972). More recently, the literature has expanded to include examinations of the differing social skills required for social success in a variety of different social contexts (e.g., Dodge et al., 1985; Tryon & Keane, 1985), so that the specific situations that are

most problematic for socially rejected children can be identified for use in skill assessment and skill training programs.

When parental contributions to the development of children's social skills have been explored, different styles of maternal child-rearing have been related to different patterns of children's behavior (e.g., Baumrind, 1967; Baumrind, 1973; Feshbach, 1974; Hoffman & Saltzstein, 1967; Mondell & Tyler, 1981; Sears, 1961; Sears, Whiting, Nowlis, & Sears, 1953). The results of these efforts have led to the identification of a few particularly salient patterns of child-rearing behavior that are associated with aggressive behavior patterns in socially rejected children. The purpose of this paper was first, to highlight the child-rearing styles that appeared most closely related to the development of aggression versus popularity in children, and second, to describe specific relationships both within the parent system, and between the parent and child systems, that were hypothesized to account for the processes that link particular child-rearing styles to the development of aggression and popularity in children.

Parental Child-Rearing Styles

In a landmark study completed by Baumrind in 1973, one global pattern of child-rearing appeared to be most

prominently related to the development of aggression in children: the authoritarian child-rearing style. To identify patterns of child-rearing behavior that were associated with different patterns of social behavior in children, Baumrind first rated the behavior of all of the children enrolled at the Child Study Center for instrumental competence. That is, children were observed in their classrooms and rated for the degree to which they were socially responsible, independent, achievement oriented, and vivacious. Then, parent-child teaching and play interactions were observed and parental behaviors were identified and correlated with the different child behaviors that had been observed in the classroom.

In general, relative to the other parents studied, parents who were detached and controlling and somewhat less warm in their interactions with their children were called authoritarian. These parents were rated high on the use of coercive methods of controlling their children, and were observed to exhibit little nurturance or sympathy in their interactions. The authoritarian parents were more inclined to value obedience in their children and the maintenance of authority in their relationship with their child as opposed to encouraging the development of their child's autonomous behavior. They tended to use ridicule and power-assertive techniques in combination with punitive statements to

control their child's behavior. Additionally, the parents tended to discourage verbal give and take between themselves and the child. Thus, household rules were reportedly not discussed in advance with their children nor were they arrived at via bargains struck with their children. As Baumrind (1973) reported, the authoritarian parents' controlling demands of their children were clearly disproportionately higher than their acceptance of their child.

Baumrind's results led her to conclude that the daughters of the authoritarian parents tended to be less independent, less purposive in their behavior, and less achievement oriented than the daughters of parents who used firm yet nurturing methods of child-rearing. Similarly, the sons of authoritarian parents tended to be more hostile and resistive in their interactions, and were less achievement oriented and had lower self-esteem than sons of parents who used firm but warm parenting techniques, or authoritative techniques. These findings pointed to the importance of examining the specific components of the authoritarian child-rearing style, and the impact that each component had on children's development of prosocial versus aggressive behavior patterns.

When examining the different components of authoritarian child-rearing styles, a number of studies

singled out and investigated the consequences of maternal punitiveness as it related to the development of aggression in children. For instance, an early study by Sears and his colleagues (1953) focused on nursery school children and defined punitiveness as the degree of physical pain or discomfort generated by the mother when the child acted in an aggressive or asocial manner. In Sears' definition, physical punishment was a key variable defining punitive child-rearing styles. Sears et al. found a positive relationship between mothers' punitiveness and overt aggression in boys. However, for girls, a curvilinear relationship was observed such that girls with both high and low punitive mothers were less aggressive than girls with moderately punitive mothers. It is possible that the curvilinear relationship observed for girls may have reflected the degree to which the daughters identified with their mothers (Sears et al., 1953). Indeed, the literature on identification suggests that the extent to which a child incorporates the standards of his/her parent determines whether punishment by a parent will instigate more aggressive behavior in the child or serve to reduce it (e.g., Gewirtz & Stingle, 1968).

Becker and his colleagues (1962) reported similar findings when they examined kindergarten children. Boys' aggressive behavior in school was directly related to their

mother's use of physical punishment while girls' aggression showed the same curvilinear relationship with punishment that Sears and his colleagues (1953) observed. Allinsmith (1960) extended these findings to a group of junior high school boys. When parental discipline primarily took the form of physical punishment, the boys were likely to express aggression directly. However, when the parents expressed their punishment in non-physical ways, the children were less likely to express overt aggression.

Studies that have examined the independent contributions of both mothers and fathers on the development of children's moral behavior, such as the tendency to accept responsibility, resist temptation, and amount of guilt experienced following failures to resist temptation (e.g., Hoffman, 1975), have generally found significant correlations between maternal tendencies toward inductive versus power-assertive child discipline styles and child behaviors, but no significant correlations between father-child behaviors. This finding may reflect traditional families where fathers have typically been role models and mothers have been diciplinarians. While it will be important to continually monitor the impact of fathers' interactions on children's behavior as their roles become more integral to the family interactions, especially given the recent increases in maternal employment outside the

home, the current literature suggests that the style of maternal interactions accounts for the majority of variance observed in young children's social behavior.

The several studies that have examined the relation between maternal child-rearing styles and children's behavior, have used different methodologies which makes it difficult to compare the results across studies. Many investigators have used lengthy in-home observational coding systems (e.g., Baumrind), while others have used parents' reports of child-rearing styles (e.g., Grusec & Kuczynski, 1980; Sears et al., 1953). While the observational method is lengthy and expensive, once parents acclimate to being observed, observation is generally touted as a more valid method of assessing behavior than relying on self-reports. Self-report data, while still vulnerable to the influences of reactivity, is generally much easier and less costly to collect, and hence more readily obtainable than observational data. Given the different methods used in the literature, it would be helpful to know whether mothers actually practice the child-rearing methods that they report using on self-report inventories.

The Development of Aggression in Children

Given the empirical relationship between physical punishment, punitive child-rearing styles, and child

aggression, the question arose as to how this relationship could be explained. Historically, at least three hypotheses have been examined in the literature. The first suggests that physical punishment is frustrating and thus instigates anger and aggression via the frustration-aggression model (i.e., Dollard, Miller, Doob, Mowrer, & Sears, 1939). The second hypothesis suggests that the physically punitive parent is setting a model of aggressive behavior for the child, which in effect sanctions aggression as well as shows the child how to be aggressive (e.g., Bandura and his colleagues' work in social learning theory). And, finally, the third hypothesis suggests that the child's aggression often occurs in the context of heated parent-child discussions. The child escalates his aggression in response to parental demands, evoking hostile and punitive parental threats for non-compliance. The heated exchange continues to escalate until finally the parent withdraws the demand and, in effect, negatively reinforces the last and most aggressive act of the child (e.g., Patterson, Dishion & Bank, 1984).

Anecdotal results have provided some support for the first hypothesis. For instance, indirect evidence was offered by Dollard et al's (1939) observation that parental punishment of direct aggression was frustrating to the child and stimulated further aggression against the

punishing agent. In 1960, Allinsmith manipulated the amount of frustration in stories read to boys and noted that boys, whose parents used physical punishment at home, gave more aggressive responses to the stories than boys who hadn't experienced physical punishment.

The second two hypotheses have been supported by carefully conducted correlational studies and experimental manipulations. In support of the modelling hypothesis, Bandura's (1965) data suggest that children can and do learn how to be aggressive by observing aggressive models. Additionally, his data suggest that some children may learn contextual cues about when to engage in the newly learned behavior, depending on their level of development. Bandura's latter finding is supported by Collins and his colleagues (1974) investigation of the effects of children viewing T.V. violence. Collins et al's results suggest that younger children may remember only isolated aggressive acts that they observe while more socially advanced children can remember the consequences and finally the context in which aggression occurs (Collins, Berndt, & Hess, 1974).

The third hypothesis, that children's aggressive behavior is negatively reinforced by punitive or hostile parents has received substantial support from the work by Patterson and his colleagues. When observing coercive

family members interact, Patterson and his colleagues (1984) have repeatedly reported the finding that aggressive children are negatively reinforced for their aggressive behavior when their parents allow them to avoid complying with demands by withdrawing the demands that are met with incidents of child aggression. In a simplified version of the typical interaction, the child responds to his/her parents' demands with noncompliant/aggressive behavior. The child's aggressive behavior is then met with escalated parental demands, and hostile/punitive threats for child non-compliance. The parent-child interaction continues to escalate in an increasingly coercive manner until finally the parent withdraws the demand, providing negative reinforcement for the child's last and most aggressive behavior.

The above hypotheses and their empirical support have helped researchers begin to understand how child-rearing styles are generally related to the development of aggression in children. Howvever, the data are not particularly germane to advancing our understanding of why some parents use authoritarian child-rearing techniques versus others, nor to specifying why particular child-rearing techniques are linked with children's development of aggression in specific peer group situations.

Empathy

These gaps in understanding leave open the possibility that a more comprehensive model of the development of childhood aggression could be established by examining the relation of parental empathy to parents' use of particular child-rearing styles, and the subsequent development of their children's empathy and aggression in the peer group situation. Empathy typically refers to a vicarious emotional response to a situation experienced by another person, which may result from a concern for others and depend on a person's perspective-taking ability (e.g., Feshbach & Feshbach, 1969). The role of parental empathy in the development of children's aggression appears to have received only scant attention in the literature, and yet may help to illuminate the processes underlying why some parents use authoritarian child-rearing styles, and why particular child-rearing styles influence the development of aggression in children. For instance, it is not hard to imagine that a parent deficient in perspective-taking and empathy skills might be relatively insensitive to her child's needs for explanation and reasoning to foster his development of social competence. Instead, it is plausible that this same parent might be relatively more responsive to her own needs, and thus emphasize and value obedience rather than verbal give and take in her child (e.g., Dumas

& Wahler, 1985). In this example, then, the parent's lack of empathy and perspective-taking could be associated with, or even account for, her use of a relatively more power-assertive than inductive child-rearing style.

According to Baumrind's (1973) descriptions of other types of child-rearing styles, inductive methods were relatively unrelated to the development of aggression in children. In her studies, induction refered to the parents' use of explanations or reasons, their appeals to the child's pride or desire to be grown up, and their appeals to the child's concern for others, in order to control their child's behavior (Baumrind, 1973; Hoffman, 1970).

In some studies, parental use of induction has been empirically related to children's development of prosocial interaction skills associated with moral development, such as empathy and perspective-taking (e.g., Hoffman, 1970). Kolvin and his colleagues (1977) found that parents of rejected children relied more on physical punishment and deprivation of privileges and less on inductive disciplinary techniques than did other parents. Theoretically, parental use of induction could be related to first, the development of children's understanding of their parent's perspectives and actions, and later to a more generalized concept of perspective-taking and empathy

that the children could use to modulate their interactions with peers. Indeed, it has been suggested that conflict resolution, whether with family or with peers, depends on being able to generate solutions that are acceptable to both parties that are in conflict, a skill that is suggested to depend on perspective-taking abilities (e.g., Goldstein & Glick, 1986). When Putallaz (1987) examined mother-peer, mother-child, and child-peer interactions, she found that mothers of higher status children appeared to be more positive and focused on feelings when interacting with their children than mothers of lower status children. Moreover, Putallaz observed that the behaviors mothers exhibited with their children was highly related to the manner in which their children acted both with them and with peers.

Induction, or an emphasis on empathy and perspective-taking, is notably absent from the definitions of authoritarian child-rearing styles (Baumrind, 1973). Thus, children raised by parents who use authoritarian child-rearing styles may have more limited opportunities to learn the prosocial skills of empathy and perspective-taking than children raised by parents who use inductive child-rearing methods. Then later, when the children raised with authoritarian child-rearing styles encounter conflict situations with peers, they may find it

difficult to take the perspective of their peers and thus be less likely (than children raised with inductive methods) to solve the conflict using prosocial methods. In this regard, then, examining the relation of parental empathy to parental practices of different child-rearing styles may help us to understand more fully why parents use particular child rearing styles, and more specifically, it may help us to understand why power-assertive parenting styles have been associated with the development of aggressive behavior patterns in children.

Feshbach and Roe (1968) have noted that perspective-taking abilites are well developed in six and seven year-old first grade boys from middle-class backgrounds with above average IQs. Their assessment of perspective--taking was obtained by showing children eight series of three slides depicting children in different situations. Each of the eight slide series was accompanied by a narrative story void of any affective labels. The children were asked both how they felt after viewing each series (to assess empathy), and how they imagined the person depicted in the story felt (to assess perspective-taking skills. While all of the boys demonstrated accurate perspective-taking skills in response to all eight slide series, they averaged 90% on their empathy matches to the series. Thus, a comparison between

the abilities of popular and aggressive boys at this same age may reveal interesting differences in perspective-taking skills that relate to differences in maternal empathy and child-rearing practices.

Peer Interactions

Theoretically, it is quite plausible that a child may use aggressive methods of problem solving when s/he is unable to empathize with and adopt the perspective of another individual with whom s/he is interacting, particularly if aggressive behaviors have been modelled in the home. Thus, a lack of empathy in children may be linked to children's display of aggressive behavior patterns in peer groups; several studies have provided support for this proposition. For instance, Feshbach and Feshbach (1969) examined the correlations between children rated as aggressive by their teachers and the children's responses on measures of empathy and found that boys with high empathy were significantly less aggressive than boys with low empathy. Indeed, Feshbach (1964) suggested that observing the consequences of an aggressive act tends to elicit distress responses in an empathic observer, even if he himself is the instigator of the aggression. Thus, Feshbach appears to support the notion that empathy may serve to modulate aggressive behavior, and in fact suggests that empathy may even serve to inhibit aggressive

behavior. Further support comes from Eron and his colleagues' (1974) data which suggest that children who are concerned about interpersonal relations and who are well practiced in interpersonal skills tend not to engage in aggressive behaviors. Indeed Eron and Heussman's (1984) 22 year longitudinal study suggests that a child's failure to learn prosocial behavior is predictive of later aggression.

The formulation emerging from the literature reviewed thus far suggests that within the parental system, parental levels of empathy, or perspective-taking, may be related to the particular child-rearing styles that they use with their children. Specifically, low levels of parental empathy may be related to power-assertive/authoritarian child-rearing styles, while high levels of parental empathy may be related to inductive child-rearing styles. Between the parental and child systems, the literature leads nicely to the speculation that particular parental child-rearing styles may be linked not only to specific observable child behaviors, such as aggression, but also to more subtle behaviors such as perspective-taking and empathy. Specifically, parental child-rearing styles that are inductive may be related to the development of perspective-taking abilities in children, while child-rearing styles that are power-assertive or authoritarian may be related to poor empathy or

perspective-taking abilities in children. Within the child's system, children's empathy or perspective-taking ability may be related to the specific social interaction behaviors that they use with their school peers and that influence their social status, as popular or aggressive within the classroom. High empathy and perspective-taking skills in children may be related to prosocial interactions and popular peer status, while low empathy and perspective-taking skills may be related to aggressive peer status.

Socioeconomic Status Level

Several other variables in the literature have also been empirically documented as having an impact on parents' practice of child-rearing methods, and the development of children's social status, and thus were important to consider in this investigation. For instance, parents' socioeconomic level (Spivack & Shure, 1974), and spouse conflict in intact versus single parent homes (Hetherington, Cox, & Cox, 1978) are both empirically documented as influencing the variables of primary interest in the present investigation. In regard to the influence of socioeconomic status, Spivack and Shure (1974) have characterized children's social competence as the ability to provide solutions to interpersonal conflict situations and have found that preschoolers from lower socioeconomic

levels are less able to name alternative solutions to peer-related and mother-related problems than children from middle socioeconomic level families. The ability to generate solutions to interpersonal problems has been viewed as a skill that is related to children's perspective-taking ability, and Spivack and Shure (1974) viewed the children's inability to problem-solve as a direct indicant of lower social competence in lower socioeconomic children. Thus, socioeconomic level appeared to be an important variable to consider.

Supportive Families

Similar relationships have been noted when the social competence of children from supportive intact families has been compared to the competence of children from single parent families. In general, children from supportive intact families are more likely to be viewed as socially competent by their classroom teachers than are children whose parents have recently experienced a controversial separation or divorce (Hetherington et al., 1978). The households in which separation or divorce has occurred are characterized by greatly increased disorganization as well as by marked changes in management of children, including inconsistency of discipline, diminished communication and nurturance, and lower expectations of mature behavior from the children (Hetherington, et al., 1978).

Hetherington and her colleagues (1982) followed a group of families during several years following divorce and found that during the first year after a divorce, mothers tended to become more authoritarian, increasing their number of direct commands and prohibitions and decreasing their responsiveness and affection giving. Children's ability to cope with the separation and divorce, as well as the intensity of the children's distress have been differentially related to their sex: boys have been found to suffer for longer periods of time than girls and to exhibit more behavioral problems and difficulties in their relationships with their mothers and other adults and peers (Hetherington, 1979).

One moderating variable that may serve to buffer the deleterious effects of divorce on children is the amiability of the parents toward one another (and the subsequent lack of custody disputes) (Kelly & Wallerstein, 1976). Thus, intact versus single-parent family status and presence of spouse conflict appeared to be important variables to consider when investigating parental child-rearing styles and their impact on children's social development in the present study.

Day Care

Some researchers have also suggested that placement of children in day care facilities, and length of time in

day care, influence children's social development in the peer group situation (Belsky & Steinberg, 1978). Although the literature has been controversial, some research suggests that the social behavior of day care-reared children resembles that of insecurely attached home-reared children. In these studies, the day care-reared children have been viewed as somewhat less socially competent and outgoing in their peer interactions than are children reared at home who are securely-attached in their maternal relationship (Belsky & Steinberg, 1978).

Other research has suggested that the day care experience does not singularly account for incompetent social development in children, and that the important determinant appears to be the quality of time spent with parents when at home rather than merely the amount of time spent at home (Roupp, 1979). Alternatively, the amount of parental involvement in the out-of-home experiences of their children has been cited as moderating any potential deleterious effects of out-of-home experiences (Bronfenbrenner, 1975).

Other researchers suggest that there are no harmful effects associated with placing children in day care (Rutter, 1982). Part of the reason why research findings are so inconclusive in the area of day care may be that the widespread use of out-of-home care for young children is a

relatively recent phenomenon and therefore few longitudinal studies have been conducted (Zigler & Finn, 1984). Given the controversial findings in this area, the impact of day care experience on the social development of children was important to consider in this investigation.

Summary of the Literature and Formulation of Hypotheses

To summarize the literature, then, authoritarian mothers tend to use power-assertive child-rearing techniques to control their children's behavior. Furthermore, since these mothers rarely use inductive reasoning and explanations, the opportunity for their children to learn empathy and perspective-taking skills may be severely limited, especially when compared to children reared with inductive methods. Thus, in addition to providing models of aggressive behavior for their children to imitate, highly punitive mothers' child-rearing methods may actually interfere with their children's ability to learn the prosocial interaction skills, which children may need to modulate their aggressive behavior with peers. Patterson's (1984) data suggest that not only do parents in coercive families negatively reinforce their children's aggressive behavior, but they also fail to reinforce the prosocial behaviors that their children do exhibit, making the prosocial behaviors less likely to occur in the future.

General Hypotheses

The general hypotheses that emerged from the literature reviewed form the basis for a more comprehensive model of the development of children's social status within their peer groups than has previously been available. First, within the maternal system, it was hypothesized that a relative lack of maternal empathy was related to the use of power-assertive child-rearing styles, and that high levels of maternal empathy were related to the use of inductive child-rearing styles. While it was hypothesized further that highly punitive mothers used power-assertive child-rearing techniques because they lacked the empathy and perspective-taking skills that provided other mothers with the impetus to use inductive child-rearing methods, this latter causal hypothesis was not tested in this study. Second, between the maternal and child systems, it was hypothesized that power-assertive child-rearing styles were related to low perspective-taking and empathy skills in children, and that inductive child-rearing styles were related to high perspective-taking skills in children. Within this second hypothesis, it was further hypothesized that the power-assertive child-rearing styles precluded children from learning empathy and perspective-taking skills (because of the lack of parental modelling and teaching of perspective-taking skills), and instead

provided children with aggressive models to imitate. However, this latter causal hypothesis was beyond the scope of the present investigation. Third, within the child system, it was hypothesized that low empathy levels in children were related to aggressive peer status within the classroom, and that high empathy levels (or perspective-taking skills) were related to popular peer status within the classroom.

This study, then, proposed to examine the relation between maternal empathy and child-rearing styles, and the relation between these parental factors and the development of their boys' empathy skills and aggressive versus popular social status within the school peer system.

The additional variables of parental socioeconomic status level, spouse conflict in intact versus single-parent families, and child's attendance of day care were also examined in this study to glean a fuller understanding of the different sources of variance that impact on the development of prosocial versus aggressive behaviors in first grade boys.

Only boys were examined in this investigation because more boys than girls are rejected by their peer groups (Coie, Dodge, & Coppotelli, 1982), and because the relationship between child-rearing styles and children's behavior appears to be different for girls than for boys

(Baumrind, 1973).

Unique Contributions

This study differed from previous investigations by examining maternal empathy as a possible way to understand and link the use of particular child-rearing styles with children's development of empathy and peer social status. In this way then, this investigation proposed a specific model of how several factors within both the family and peer systems are related to one another. It also differed from previous investigations by examining boys' aggressive versus popular social status as it was established within the children's peer system (as opposed to the children's behavior as rated by an observer). Thus, this study was aimed at expanding the implications of maternal child-rearing styles from the family system to a second social context of the child -- the school peer group. This expansion brought the current study and its implications into the clinical realm, since children who are viewed as aggressive by their peers have been shown to be at risk for later adjustment problems and referrals to mental health centers. And finally, this study addressed the question of whether mothers' reports of their child-rearing styles matched the actual methods that they used when observed interacting with their child.

Experimental Hypotheses

Specifically, it was hypothesized that mothers with low levels of empathy would be more likely to report and demonstrate power-assertive child-rearing techniques, than mothers with high levels of empathy. Similarly, it was hypothesized that mothers with high levels of empathy would endorse and display inductive child-rearing styles more frequently than mothers with low levels of empathy.

Additionally, it was hypothesized that differences in child-rearing styles would account for a greater amount of the variance in children's levels of empathy than would maternal levels of empathy. More specifically, it was hypothesized that inductive child-rearing styles would be most strongly related to high levels of empathy and perspective-taking in children while power-assertive methods were hypothesized to be most strongly related to low levels of empathy in children.

Finally, it was hypothesized that when all variables were examined as predictors of children's social status, children's levels of empathy and perspective-taking would account for the greatest amount of variance in social status while maternal child-rearing styles and maternal empathy would account for successively smaller amounts of variance. The hypotheses formed the basis of the predictive models outlined below.

Predictive Models

Maternal Empathy	Child-Rearing Style	Child Empathy	Child's Social Status
Hi ----->	Inductive ---------->	Hi -------->	Popular
Lo ----->	Power-Assertive --->	Lo -------->	Aggressive

CHAPTER II

METHOD

Subjects

The Greensboro Public School System was contacted and invited to participate in this study of mother-child relationships. After receiving initial consent from the Greensboro School System, the principals and first grade teachers at ten elementary schools were contacted by a Public School Administrator and asked if they would be willing to have their students participate in short individual interviews about children's friendships in the hallway outside each of their classrooms. Five principals and 21 teachers agreed to participate. All of the 21 teachers sent Parental Consent Forms home through their students. Teachers who had at least 12 of their students return consent forms to participate in the interviews were given the opportunity to choose an educational gift from an EDU-PLAY catalog (of up to a $6.00 value) for use in their classroom, as a token of the investigator's appreciation of their cooperation.

One hundred and sixty-three of the approximately 320 first grade children received parental consent to be

interviewed and were screened for their sociometric peer status using Richard and Dodge's (1982) version of the Coie, Dodge, and Coppotelli (1982) Peer Sociometric Nomination Inventory (described below; see Appendix A).

Forty-one aggressive and 32 popular first grade boys (N = 73) were identified as potential subjects. The social status of these children was never revealed to any principal, teacher, parent or child. After identifying the 73 boys as potential subjects in the classroom setting, each of their mothers was contacted and the boys were invited to the UNC-G psychology department with their mothers to participate in this study. Ten of the aggressive boys' families were unavailable for contact; two had moved, three had no phone, and five were away. Five of the popular boys' families were similarly unavailable; four families were away, and one family's phone had been disconnected. All of the remaining boys' mothers were contacted. To increase the incentive for mothers and their children to participate, all of the mothers contacted were told that children who completed the study would receive $2.00, and mothers who completed the study would receive $5.00.

Forty-six mother-child dyads, comprised of 27 aggressive boys and 21 popular boys, were scheduled for interviews and given reminder calls the night before their

scheduled appointments. Eight aggressive mother-son dyads had at least one "No Show" for a scheduled appointment; two of the eight had two No Shows, and one dyad had three No Shows. Only one of the eight aggressive dyads with a No Show eventually became a subject. One popular mother-son dyad had one No Show and subsequently dropped out of the study.

In sum, seventeen of the original 41 identified aggressive boys (41%) came to UNC-G to participate as subjects with their mothers, and 20 of the original 32 identified popular boys (63%) came to UNC-G to participate as subjects with their mothers. The mothers and children were informed that if, for any reason or at anytime, they wanted to discontinue their participation in the study, they could do so without penalty. Each of the 37 children who completed the study received a two-dollar bill ($2.00), and all of the 37 mothers who completed the study received $5.00.

The average educational level of the head of the household in families with an aggressive boy was two years of college, and in families with a popular child the average was one year of graduate school. Using the Hollingshead Index of Social Position (1957), the average occupational role of families with an aggressive child was clerical/sales workers, technicians and owners of

little businesses. The average occupational role of families with a popular child was business managers, proprietors of medium sized businesses, and lesser professionals (e.g., non-CPA accountants, teachers, librarians, pharmacists). The average SES level, using the Hollingshead index, was 84.24 (S.D. = 8.1) for families with an aggressive boy, and 81.8 (S.D. = 7.33) for families with a popular boy. Seventy-eight percent of the mothers interviewed were employed outside the home, and 81% were married and living with their spouse. Mothers' reports of marital conflict (on a 10-point scale, where 10=high conflict) were very similar in both groups of children's social status (mean aggressive conflict = 3.13, mean popular conflict = 3.05). Fifty-five percent of the popular boys and 76% percent of the aggressive boys had attended day care. Twenty-five percent of the popular boys and 53% of the aggressive boys were black.

Procedure

After arriving at UNC-G, each parent and child was given a brief description of the experimental rationale and procedure, and asked to sign a Parental and Child Participation Consent Form indicating their understanding of the procedures and consent to participate. All participants were informed that the information collected in this study would be kept strictly confidential and used

only for the purposes of the research described herein.

A female Ph.D. candidate in Clinical Psychology interviewed each mother individually to obtain the information necessary for the Parental Discipline Measure (see Appendix B). Each mother was also asked to complete Hogan's Empathy Scale (see Appendix C) and a demographic information sheet (see Appendix D). The presentation order of the parent interview, empathy scale, and demographic information sheet was counter-balanced across subjects within status groups. While each mother was being interviewed, her child was escorted into a testing room by a trained female research assistant where the child was administered the Affective Situation Test for Empathy (see Appendix E). Each of the measures is described in detail below.

Each mother-son dyad was also asked to participate in a 10-minute structured Parent-Child Interaction Task that was videotapped for later coding of maternal child-rearing styles. The presentation order of the questionnaires versus the observational measure was counter-balanced across mother-child dyads within status groups.

The dependent variable in this investigation was children's social status -- popular or aggressive. The independent variables investigated in this study were: Maternal Empathy, Maternal Child-Rearing Style, Children's

Empathy and Perspective-Taking, Head of the Household's Education Level, and Child's Enrollment in Day Care.

Children's Measures

Each child was administered a version of the Peer Sociometric Nomination Inventory (see Appendix A; Richard & Dodge, 1982) and the Affective Situation Test for Empathy (see Appendix E; Feshbach and Roe, 1968).

The Peer Sociometric Nomination Inventory. The Peer Sociometric Nomination Inventory has been used extensively in research studies to catagorize children into social status groups. It has been found to be reliable when used with elementary school-aged children (Asher & Hymel, 1981). Roff et al. (1972) reported that the test-retest reliability correlation for positive nominations among elementary students was .52 over a 1-year period, and .38 for negative nominations over the same time period. When Busk, Ford, and Schulman (1973) tested the reliability of positive nominations over an 8-week period in fourth graders, they found it to be .76.

The inventory consists of five questions that ask children to nominate three children whom they like the most (from the roster of children in their classroom who have parental consent to participate), three children whom they like the least, and two each that fit the descriptions read to the children of classmates who are shy, aggressive and

popular.

The questions were asked to each participating child individually by one of several trained graduate students in a private area in the hallway outside each child's classroom. The confidentiality of each child's responses was stressed. The responses of each child were tabulated within each classroom to obtain each participating child's total number of nominations in each catagory. The nomination totals were then used to calculate each child's social status for each classroom.

Within each classroom, children were considered Popular if they received more than the median number of Popular nominations, at least three more nominations as liked by peers than disliked, and less than the median number of Shy and Aggressive nominations. The literature on longitudinal outcome studies (Roff et al., 1972) suggests that these criteria are useful in distinguishing a group of well adjusted children whom Richard and Dodge (1982) referred to as cooperatively popular. Coie et al. (1982) used Pearson correlations and found that the major correlates of liked most nominations for 94 third, 112 fifth, and 105 eigth graders were the descriptions "supports peers," "attractive physically," "cooperates with peers," and "leads peers."

Using the same inventory, children were considered

Aggressive if they received more than the median number of Aggressive nominations, at least three more nominations as liked least by peers than liked most, and less than the median number of Shy and Popular nominations (Richard & Dodge, 1982). Coie et al. (1982) found that the major correlates of the liked least nominations were the descriptions "disrupts the group," "aggresses indirectly," "starts fights," "gets into trouble with teacher," and "acts snobbish." Thus, this measure appears to be a valid indicator of children's social status within the classroom.

Of the 163 children interviewed, the boys who best fit the criteria of Popular or Aggressive using this measure were contacted through their mothers and asked to participate as subjects in this investigation.

The Feshbach Affective Situation Test for Empathy (FASTE). The Affective Situation Test for Empathy (Feshbach & Roe, 1968) was administered to each child individually at UNC-G. This measure was normed on 46 first-grade children from middle-class backgrounds with above average IQs (average IQ =121) whose ages ranged from 6 years, 2 months to 7 years, 7 months (Feshbach and Roe, 1968). Feshbach and Roe found that the average empathy score for boys when an exact match was required was 4.58, and 7.42 when only a general affective match was required. Additionally, Marcus, Tellen, & Roke (1979) report that

children's empathy is positively correlated with observers' ratings of children's cooperative and sharing behavior in the classroom, and Barnett and his colleagues (1980) report that it is positively correlated with teacher ratings of children's sensitivity and responsiveness to feelings of others, and low levels of aggression.

The FASTE consists of a series of slide sequences, paired with narrative material, that was presented to each child individually. Each series consists of three slides depicting seven-year-old white boys in one of four affective situations: Happiness, Sadness, Fear, and Anger. There are two slide series for each affective situation. The following themes are used for each of the four affects: (1) Happiness: birthday party, winning a television contest; (2) Sadness: a lost dog, social rejection; (3) Fear: child lost, frightening dog; (4) Anger: the toy snatcher, false accusation. Accompanying each slide sequence is a short narration, matched for number of words over all of the affects, describing the events depicted in the slides. The narrations were constructed by Feshbach and Roe so that the use of specific or general affective labels were completely avoided, and the following narration, accompanying the male sadness slide sequence, typifies the series.

Slide I: Here is a boy and his dog. This boy goes everywhere with his dog, but sometimes the dog tries to run away.

Slide II: Here the dog is running away again.

Slide III: This time the boy cannot find him, and he may be gone and lost forever.

The presentation order of affective slide series was counter-balanced across children. Each child's direct verbal response to the question "Tell me how you feel," was recorded verbatim after each slide series, by pen and paper, and used as the primary index of empathy. In order for empathy to be scored, the feeling reflected in the child's response had to be a specific match with the affective situation observed. For instance, after seeing the male sadness slides and hearing the narration presented above, the child would be asked, "How do you feel?". If the child responded using the word "sad," then he received a score of one. Never did children use more advanced synonyms, such as melancholic. Only occassionally did children say they felt "bad" rather than sad. The latter example was considered a non-specific match to the depicted emotion, according to Feshbach's scoring instructions, and considered separately. Thus, for scoring purposes, children received a score of 1 for each specific match with the depicted emotion in the slide series; and, since there

were two sequences for each of four affects, the total empathy score (over four affects) could range from 0 to 8. Each child was also asked "how do you think the child in the slide feels?" in order to assess each child's recognition and accuracy of labelling the depicted children's feelings, a necessary prerequisite for an empathic response, according to Feshbach and Feshbach (1972). Each child's response to the latter question was used as an index of their perspective-taking ability, and was scored in a manner identical to the procedure described for scoring empathy.

Construction of Additional FASTE Slides. The literature suggests that an empathic response is in part dependent on the observer's perceived similarity to the person depicted in the observed situation (Klein, 1971). However, the FASTE contains slides of white children only. Therefore, the primary investigator of this study made a set of dupicate FASTE slides depicting black seven year old boys in similar situations to those used by Feshbach and Roe. To make these duplicate slide series, all black seven year old boys attending summer camp at the Greensboro YMCA were invited to model for photographs and given permission slips to take home to their parents. Six boys received parental permission to serve as photographic models for this project and were photographed in scenes created to be

as similar as possible to those depicted in Feshbach and Roe's Test. Directly prior to each photograph being taken, all of the models were shown a copy of the Feshbach slide that was being duplicated. The YMCA received a posterboard of the boys' pictures and a cake as a token of the investigator's appreciation of their assistance.

To test for similarity of the new duplicate slides to Feshbach's original slides, five clinical psychology graduate students at UNC-G were asked to view all 48 slides with one of Feshbach's slides presented first, and the new duplicate slide presented second. After viewing each pair of slides, the graduate students were asked to rate the similarity of the two slides on a scale of 1 (totally dissimilar) to 10 (totally similar). The individual raters' scores ranged from 3 - 10. The individual slide scores were collapsed across raters resulting in an average similarity score for each of the 24 pairs of slides. The average similarity scores ranged from 6.2 to 9.6. The average similarity score for each series of three slides ranged from 7.2 to 9.1. The overall average similarity for all slides was 8.34. Based on the graduate students' ratings, the duplicate slides were considered similar to the orignial slides provided in Feshbach and Roe's measure, were paired with the original FASTE narations and questions, and used as the primary

index of empathy and perspective-taking for all black subjects in this investigation.

Mother's Measures

Each mother was administered the Empathy Scale developed by Hogan (1969), The Parental Discipline Measure developed by Hoffman and Saltzstein (1967), and a cover sheet of demographic information regarding child's placement in day-care, spouse conflict in single-parent versus intact families, and head of the household's level of education and occupation. Education level and occupation were later combined as an indicant of family socioeconomic status level according to the procedures outlined by Hollingshead (1957).

Hogan's Empathy Scale. Hogan's Empathy Scale consists of 38 self-report items pooled from the CPI (California Personality Inventory, Gough, 1986). The 38 items are presented in a forced choice true/false format, and each response is scored as 0 or 1. Thus, it is possible to score up to 38 points. The higher the number of points, the more empathic behavior a respondent is said to exhibit. Normative data have been collected on a variety of populations and reveal that for a basic normative sample of 1000 female adults, the mean empathy score is 20.77 with a standard deviation of 4.99 (Hogan, personal commuunication 3 March 1987). The empathy scale was built

to predict Q-sort-derived empathy ratings, and in the samples used in its original development (N=211), the average correlation between the scale and empathy ratings was .62.

Parental Discipline Measure. Hoffman and Saltzstein's Parental Discipline Measure has been used in several studies (e.g., Barnett, King Howard, & Dino, 1980; Hoffman & Saltzstein, 1967) to categorize parents' child-rearing styles as Inductive, Power-Assertive, or Love-Withdrawal. When developing this measure, using interviews with 204 middle class parents of seventh graders, Hoffman and Saltzstein reported that parental reports of frequent use of power-assertion was associated with weak moral development in children, and induction was associated with advanced moral development. Barnett et al. (1980) report that parental use of induction is significantly correlated with high empathy scores in five year old girls (when using Feshbach and Roe's child empathy measure). To assess this measure's validity, an observational measure of mother-child interactions was administered and scored for parental discipline style according to the behaviors defined by Hoffman and Saltstein's measure. The interaction task is described below.

Hoffman and Saltzstein's measure consists of six

open-ended questions about how parents would handle six hypothetical situations with their children. The measure was administered to each child's mother individually in structured interviews with a trained interviewer. Each mother was asked to imagine six concrete situations: one in which her son delayed complying with her request to do something, a second in which her son was careless and destroyed something of value, a third in which he talked back to her, a fourth situation in which he did not do well in school, a fifth in which she saw her son and his friends making fun of another child, like calling the child names, and a sixth in which she was in a restaurant with her son at a table next to a handicapped person and as the man left, her son said (in a voice loud enough to be heard by the man) "Why does that man walk so funny?" Following each situation, each mother was asked to tell the interviewer how she imagined she would handle that situation if it happened with her son, and exactly what she would say or do to him in the situation. Each mother's responses were recorded verbatim by pen and paper for each situation.

Following two situations (numbers 1, and 3), was a list of 10 - 14 different child-rearing practices. Each list was presented to the mother after she had completed telling the interviewer how she would handle the particular situation. The mother was ask to look over the list first,

and then rate the absolute frequency of her use of each practice, and then to indicate the first, second, and third practice she most frequently used with her son. The initial rating of each child-rearing practice was used to make sure the mother thought about all of the items on the list before ranking them. Then, her three ranked choices were weighted, and the scores of items were summed across the two situations for each of the power-assertive and inductive catagories.

The practices included on the lists represent the three main discipline catagories measured by Hoffman and Saltzstein's inventory. The first category, Power Assertion, includes physical punishment, deprivation of material objects or privileges, the direct application of force, or threat of any of these. The main identifying theme is that in using these techniques, the parent seeks to control the child by capitalizing on her physical power or control over material resources (Hoffman, 1960; Hoffman and Saltzstein, 1967). The second category, Love Withdrawal, includes techniques whereby the parent more or less openly withdraws love by ignoring the child, turning her back on the child, refusing to speak to the child, or isolating the child. And finally, the third category, Induction Regarding Parents, includes sharing with the child the consequences of the child's action for the

parent. Included are such specifics as telling the child that his action has hurt the parent, that an object he damaged was valued by the parent, that the parent is disappointed, etc.

Hoffman and Saltzstein's measure was designed to include a list of discipline practices following each of the six hypothetical situations. Original scoring instructions (discussed below) were based on the use of information obtained from mothers' endorsement of items on these lists. The measure was requested from the authors on April 20, 1987. After phoning the authors twice, the measure was received on June 15, 1987 with only two discipline lists intact. The author reported that the other discipline lists could not be located. Thus, an alternative scoring strategy was developed based on each mother's responses to the open-ended questions ("What would you say or do to your son if this situation had just occurred?") that followed each of the six hypothetical situations. Hoffman's original scoring instructions are presented following the instructions developed for coding maternal responses to the open-ended questions.

Hoffman's six open-ended questions were scored as follows for each individual respondant. First, the responses to each question were separated into individual thought units. Each thought unit was then scored as Power

Assertive, Inductive, or Other. Proportions of Power Assertive and Inductive statements were then obtained by dividing the total number of thought units in any one catagory, by the total number of thought units given to the question being scored (e.g., 3 power assertive units/7 total thought units, and 2 inductive units/7 total thought units). This procedure was then repeated for each of the six open-ended questions. All of each respondant's power-assertive proportions were summed, and all inductive proportions were summed. Given the six open-ended questions, then, a respondant could obtain a summed proportion score ranging from 0 to 6 in each of the two catagories.

The two proportions for each individual respondant were then collapsed into one overall score called Style-oe. Style-oe was obtained by subtracting the sum of Inductive proportions from the sum of Power Assertive proportions resulting in one score for Style-oe ranging in potential from +6 (totally Power Assertive) to -6 (totally Inductive). The actual range of the Style-oe data collected for this investigation was +2.83 through -5.00. No one obtained a Style-oe score of zero.

A reliability check on coding of thought-units was conducted for 27% of the mothers' responses (N = 10). Initial overall percent agreement was .76. Thought-units

on which coders disagreed were then circled, and the coding definitions were reviewed with the reliability checker. She was then ask to review and reconsider her coding choices for the circled thought-units. Discussion revealed that the coder had been scoring thought-units with regard to inferred maternal affect rather than strick definitional catagories. This error resulted in the reliability checker coding several thought-units which fit the strict definition of Induction (e.g., information giving/seeking), as Power-Assertive. Take for example the maternal response, "Are you supposed to talk to your mother like that?" This question fits the strick definition of Induction (i.e., information seeking), although it has definite overtones of negative affect. After instruction to code strictly according to categorical definitions, coding agreement was again assessed. The average percent agreement for all categories was 92%. Percent agreement for the individual categories of power-assertive, inductive, and not-scored was 94%, 93%, and 96%, respectively. The corresponding Kappa coefficients were: power-assertive, .86; inductive, .86; and not scored, .81.

Hoffman's Forced-Choice coding system entailed examining each mother's lists of child-rearing practices that followed the two situations and weighting each mother's first choice practices with a three-point value,

each second choice practice with a two-point value, and each third choice with a one-point value. All points in each of the power-assertive and inductive categories for both situations were then summed within catagories. For each situation, it was possible that a mother could endorse and rank three items, all of which were exemplars of one catagory (inductive, for example), or the other catagory, or neither, or a mixture of both. In this regard, then, a mother could have a score ranging from 0 to 6 for either child-rearing catagory for each of the two situations, resulting in a potential total inductive or power-assertive score of 0 to 12.

For each mother, the total scores obtained in each of the two child-rearing categories were combined to create a continuous indicant of "Forced-Choice Child-Rearing Style," by subtracting the total Inductive score from the total Power-Assertive score. This measure of forced-choice child-rearing style had the potential range of +12 (indicating total endorsement of power-assertive child-rearing practices) to -12 (indicating total endorsement of inductive child-rearing practices). In the population of mothers interviewed for this study, the actual range of forced-choice child-rearing practices was 9 to -4. A score of zero was obtained three times; twice because the mother had equal scores in each category, and

once because the mother endorsed items that fell into neither category.

To assess the similarity of information obtained using Hoffman's forced-choice coding system (based on maternal rankings of the child-rearing practices), and that obtained using the open-ended response coding system, the results of the two coding procedures were compared using a Pearson's Product Moment Correlation. A significant positive correlation of 0.3457 ($N = 37$, $p = .0361$) was obtained between the two scoring methods. Given the satisfactory correlation, the results from the open-ended responses were chosen for use in the main analyses since they were available for all six situations included in the measure.

Mother-Son Interaction Task. The Observational Measure of Mother-son Interactions consisted of a sequence of three tasks totaling ten minutes: Draw-a-Family on an Etch-a-Sketch (4-minutes), Free-Play (5-minutes), and Clean-Up (1-minute), all of which are described below. These particular tasks were selected for investigation based on previous observational methods used to study parent-child interactions and parental teaching strategies (H. Hopps, 11 November 1987). They were designed specifically for this study to obtain an observational sample of the different strategies mothers use when

interacting with their sons under a variety of different task demands. Additionally, the interaction task was planned as one way to assess the validity of the self-reported child-rearing styles obtained from mothers on Hoffman and Saltzstein's Parental Discipline Measure. It was hypothesized that drawing a family on an Etch-A-Sketch would be sufficiently difficult to elicit maternal teaching strategies, information-giving, and/or child-control strategies. This potential was believed to be heightened by the fact that there were several colorful toys within the child's view that were not supposed to be used until the mother and child heard a knock on the laboratory door from the experimenter. Thus, the presence of the toys could be conceptualized as an opportunity to observe a mother's ability to maintain her son's attention to the task at hand, and/or a child's ability to resist temptation. Free-play was designed as a 5-minute sample of mother-son interactions in a low-conflict setting, and Clean-up was designed as a 1-minute sample of mother-son interactions in a potentially high-conflict situation requiring the mother to regain control over her son's compliance with her instructions to clean-up. During the Clean-up task, the investigator was interested in learning about the different strategies mothers used to get their sons to clean up the room (e.g., requests, explanations,

directives, threats, etc.).

The interaction task was videotaped for later coding of maternal child-rearing behaviors. The mothers and their sons were told that the investigator was interested in learning about the way that first grade boys like to play. They were informed that they would have 10-minutes during which time a videotape of their interactions would be made so that the investigator could have a record of what they did during the 10 minutes. Privately, the mother was told that she should try to act as naturally as possible with her son, and that she should make sure that he engaged in the following three activities during the 10 minutes: draw a picture of a family on the Etch-A-Sketch with the mother using the left knob and the child using the right knob until she heard the first knock on the door (4-minutes), free-play with any of the available toys until she heard the second knock on the door (5-minutes), and clean up after himself before the experimenter returned at the end of the 10 minutes (1-minute).

The videotaped interactions were coded later by trained observers who rated the frequency of occurrence, during 5-second intervals, of each of nine parental behaviors. The behaviors selected for coding were chosen based on consensual aggreement about their definitiveness of the child-rearing styles examined in Hoffman and

Saltzstein's Parental Discipline Measure. The behaviors and their definitions, and the Parental Discipline styles that they represent are presented in Table 1. Examples of several catagories are also included.

The videotapes were coded with the aid of a personal computer programed to enter behavior codes in real time. The nine behaviors of interest were keyed into the computer as numbers 1 through 9 with 0 being used to score uncodable utterances. The three interaction tasks were keyed into the computer as A, B, and C. Typing P signalled the end of the 10-minute task and prompted the computer to calculate frequencies of each behavior for each task and each mother.

Reliability checks of behavioral coding were made on one-fourth of all subjects and all behaviors. Reliability was determined using Cohen's Kappa to consider both the accuracy of the absolute frequency of behaviors coded for each subject, and the accuracy of the interval during which each behavior was observed.

After obtaining satisfactory reliability ($k > .7$) on the behavioral codes of interest, the frequency of use of the nine behaviors described above was averaged for all mothers of aggressive versus popular boys. Only two catagories had sufficiently high rates of occurrence to consider further: verbal directives and information

giving/requesting. The average proportion of occurrence of each of these behavior codes for mothers of aggressive versus popular children were compared against the self-reported child-rearing styles of these two groups of mothers as a validity indicant of the latter measure. The results of the validity check are presented in the Results section.

Table 1

Videotape Observational Codes

POWER ASSERTIVE CODES

In general, parent uses her power, instead of reasoning, explanation, or emphasis of other people's feelings or points-of-view, to control child's behavior.

1. VERBAL DIRECTIVES:

Attempts to control the child's behavior without justification or rationale other then appeals to mother's own authority/power over the child. E.G. "I said turn the know this way!", or "Stop it!" or, "Do this," "Stay there," "You know better,"

2. VERBAL BRIBES / THREATS:

A. Bribes

e.g., " Here's Y. Now will you do X ?"

or , "If you do this, then..."

B. Threats of not providing desired object or activity

3. PHYSICAL FORCE / PUNISHMENT:

Parent uses, or threatens to use physical power to control child, or guide child through a behavior, e.g., hitting, guiding, turning off TV

4. OTHER POWER ASSERTIVE BEHAVIOR

Table 1

Videotape Overvational Codes (continued)

INDUCTIVE CODES

In general, parent justifies her actions and statements, offering some rationale (other than her power), or reference to another person's feelings.

6. JUSTIFICATION OF STATEMENT OR RATIONALE:

Maternal references to the consequences of child's behavior for others, including parents' or others' feelings of hurt, dissappointment, happiness, e.g., ..."because..."

7. GENERAL INFORMATION GIVING / SEEKING:

Giving general information to child in non-directive statements, e.g., "That person's handicapped," "The lady wants us to...." Or, seeking information from child through questions e.g., "What happened? Was it hard?"

8. POSITIVE REINFORCEMENT / PRAISE

Physical and/or verbal praise and encouragement of child's behavior, e.g., "Good." "That's right.", or "Alright!"

9. OTHER INDUCTIVE BEHAVIOR

Table 1

Videotape Observation Codes (continued)

UNCODABLE VERBALIZATIONS
10. INAUDIBLE
Anytime coder sees mother's mouth move but can't tell what she said. If child answers her with a Y or N, coder may infer that it was a question and score it as 7, otherwise, score it as 10.

CHAPTER III

RESULTS

Initial correlations and descriptive statistics revealed that children's perspective-taking ability was more normally distributed and better related to the other variables of interest than children's empathy (see Pearson Correlation Matrix, Table 5). This information, combined with the fact that children's empathy and perspective-taking were indices collected about the children from the same measure, led the investigator to use children's perspective-taking ability in the analyses to follow, when hypotheses about children's empathy were tested.

As described in the Subjects section of Chapter II, mothers of popular versus aggressive children differed very little in their SES levels ($F\ [1, 35] = 0.93$) and levels of marital conflict ($F\ [1, 34] = 0.017$). When examining the relationship of these two variables to the other variables of interest in the current investigation, no significant correlations were obtained. Thus, SES and Level of Marital Conflict were used descriptively and were not entered into additional statistical analyses of the theoretical model

tested in this investigation.

The overall theoretical model of this study was tested first. To examine whether children's social status could be predicted by differences in levels of maternal empathy, self-reported maternal child-rearing styles, children's perspective-taking abilities, levels of household education, and child day care attendance, a cross-validation approach to discriminate analysis was used. First, an analysis sample, consisting of 75% (N=26) of the 37 mother-son dyads, was randomly selected and used to develop the discriminant function. Second, after establishing a discriminant model to predict children's social status, a holdout sample, consisting of the remaining randomly selected 25% (N=11) of mother-son dyads, was used to test and validate the model.

As can be seen in Table 2, the analysis sample produced a discriminant function that correctly classified 86% of the popular children and 83% of the aggressive children, with an overall discriminative ability of 85%. This discriminant model improved accuracy more than 25% above that expected based on the proportional chance criterion of 58%. The proportional chance criterion was computed as follows: C proportional = p2 + (1 - p)2, where p = the proportion of dyads in group 1, and (1 - p) = the proportion of dyads in group 2.

Table 2

Discriminate Analysis: Test of the Theoretical Model

Predictors:	Criterion:
Mother's Empathy	
Maternal Child Rearing Style-OE	
Child's Perspective-Taking	
Child's Day Care Attendance	
Education	Status

Analysis Sample Data - N=26

Number of Observations & Percents Correctly Classified

From Status	POPULAR	AGGRESSIVE	Total
POPULAR	12	2	14
	85.70	14.30	100.00
AGGRESSIVE	2	10	12
	16.70	83.30	100.00
Prior Probability	0.5385	0.4615	

Overall Classification Accuracy = 0.85

Holdout Sample Data - N=11

Number of Observations & Percent Correctly Classified

From Status	POPULAR	AGGRESSIVE	Total
POPULAR	6	0	6
	100.00	0.00	100.00
AGGRESSIVE	0	5	5
	0.00	100.00	100.00
Prior Probability	0.5455	0.4545	

When the discriminate function was tested for validation using the holdout sample (N = 11), the overall classification accuracy was 100% for all children in both the popular and aggressive status groups. A Chi Square was computed to examine the probability of obtaining a 100% classification accuracy, compared to the proportional chance criterion, and was significant at the $p < .001$ level (Chi Square [1, N=37] = 30.41, $p < .001$). Thus, the above model was considered a good predictor of aggressive versus popular peer status for this sample and investigation.

Next, the relative ability of each independent variable to discriminate between the two status groups was examined using a stepwise discriminate analysis. It was hypothesized that children's levels of empathy (or perspective-taking) would account for the greatest predictive power in discriminating children's social status, while maternal child-rearing styles, maternal levels of empathy, household education levels, and child day care attendance, would account for successively smaller amounts of predictive power. Table 3 contains the summary of the stepwise selection. As can be seen, three of the independent variables were significant predictors of children's social status: Maternal empathy level (F [1, 35] = 16.277, $p < .0003$), level of household education (F [1, 34] = 8.594, $p < .006$), and children's

Table 3

Stepwise Discriminate Analysis: Test of Theoretical Model

Predictors:	Criterion:
Maternal Empathy Level	
Maternal Child-Rearing Style-OE	
Child's Perspective-Taking	
Level of Household Education	
Child's Attendance of Day Care	Status

Summary of Stepwise Selection:

Step	Variable Entered/Removed	Number In	Partial R-Squared	F Value	Prob >F
1	Maternal Empathy	1	0.3174	16.277	0.0003
2	Education	2	0.2018	8.594	0.0060
3	Perspective-Tak	3	0.1187	4.444	0.0427

Step	Wilks' Lambda	Prob < Lambda
1	0.6826	0.0003
2	0.5448	0.0001
3	0.4802	0.0001

perspective-taking ability (F [1, 33] = 4.44, $p < .04$). Maternal child-rearing style did not contribute significantly to the discriminatory power of the model, nor did child day care attendance. Contrary to the hypothesized predictive power of the independent variables, maternal level of empathy accounted for the greatest proportion of variance in status when the contributions of all other independent variables were held constant (Partial R-Squared = 0.3174), while household level of education accounted for the second largest proportion of variance in status (Partial R-Squared = 0.2018), and children's perspective-taking ability accounted for the smallest amount (Partial R-Squared = 0.1187).

Based on the results from the stepwise discriminate analysis described above, one final discriminate analysis was computed to test the ability of the three significant discriminating variables (mothers' empathy, household education levels and children's perspective-taking abilities) to predict accurately children's social status. The same procedures were used in this second discriminant function as were used in the earlier discriminate analysis of the overall theoretical model. Identical results were obtained. That is, when the holdout test sample (N = 11) was used, children's social status was predicted with 100% accuracy in both the aggressive and popular social status

Table 4

Discriminate Analysis: Final Statistical Model

Predictors:	Criterion:
Education Maternal Empathy Child's Perspective-Taking	Status

Analysis Sample Data - N=26

Number of Observations & Percents Correctly Classified

From Status	POPULAR	AGGRESSIVE	Total
POPULAR	13 92.86	1 7.14	14 100.00
AGGRESSIVE	3 25.00	9 75.00	12 100.00
Prior Probability	0.5385	0.4615	

Overall Classification Accuracy = 0.84

Holdout Sample Data - N=11

Number of Observations & Percent Correctly Classified

From Status	POPULAR	AGGRESSIVE	Total
POPULAR	6 100.00	0 0.00	6 100.00
AGGRESSIVE	0 0.00	5 100.00	5 100.00
Prior Probability	0.5455	0.4545	

groups based on levels of maternal empathy, household education levels, and children's perspective-taking abilites (see Table 4).

When examining the individual components of the theoretical model more closely, it was hypothesized that maternal differences in self-reported child-rearing styles would account for a greater amount of the variance in children's levels of empathy - or perspective-taking, than

Table 5

Pearson Correlation Coefficients/ PROB> |R|/ for All Children

		1	2	3	4	5
1.	EDUC	-	0.3727 0.0231	NS	-0.4537 0.0048	NS
2.	MOMEMP		-	NS	-0.2974 0.0738	NS
3.	STYLE-FC*			-	0.3457 0.0361	NS
4.	STYLE-OE				-	NS
5.	CH.PERSP					-

*POWER-ASSERTIVE, a component of STYLE-FC, was also significantly correlated with EDUCATION level ($r=-0.324$, $p = .05$).

would maternal levels of empathy. However, Pearson correlations revealed that perspective-taking abilites in

Table 6

One-Way Analysis of Variance: Mothers' Child-Rearing Style By Children's Social Status

	STATUS	
	POPULAR	AGGRESSIVE
Sum	-33.82	-12.34
Sum X2	127.12	70.98
Mean	-1.69	-0.73
N	20	17

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB >F
Status	1	8.56	8.56	2.27	<.10
Error	35	131.95	3.78		
Total	36	140.51			

children were not significantly related to any of the maternal variables (See Table 5).

The specific relationships between maternal child-rearing styles, maternal empathy, and children's social status were examined next. A one-way ANOVA revealed

Table 7

One-Way Analysis of Variance: Mothers' Empathy by Children's Social Status

	STATUS	
	POPULAR	AGGRESSIVE
Sum	475.00	330.00
Sum X2	11439.00	6575.00
Mean	23.75	19.41
N	20	17

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB >F
Status	1	173	173.000	18.52	<.001
Error	35	327	9.347		
Total	36	500			

that mothers of popular children did not differ significantly from mothers of aggressive children in their self-reported use of child-rearing practices (F [1, 35] = 2.27, $p < .10$). However, mothers of popular children endorsed significantly more empathic statements on Hogan's Empathy Scale, than mothers of aggressive children (F [1, 35] = 18.52, $p < .001$), when a one-way ANOVA was used.

The overall Pearson's Product Moment correlation matrix was used to examine whether mothers with low levels of empathy were more likely to report using power-assertive child-rearing techniques than to report using inductive child-rearing methods, when compared to mothers with high levels of empathy. A near significant correlation between the two variables was obtained in the direction predicted ($r = -0.274$, $p = 0.0738$). An additional Pearson's correlation revealed that mothers' level of empathy was also significantly correlated with household level of education ($r = 0.3727$, $p = .0231$), such that high levels of household education were associated with high levels of maternal empathy (see Table 5).

A one-way ANOVA was also computed for children's status groups by level of household education. A significant relationship was found revealing that higher levels of household education were associated with popular social status in children, while lower levels of

household education were associated with aggressive social status in children (F [1, 35] = 15.53, $p < .001$) (see Table 8).

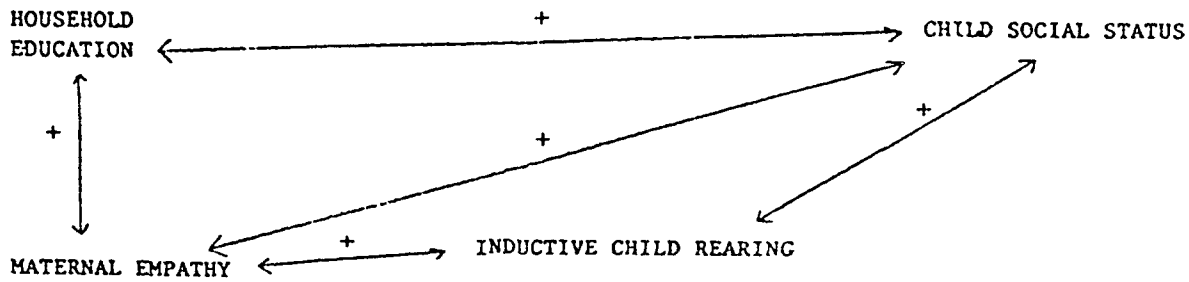
The results obtained from the one-way ANOVAs, and Pearson's Product Moment correlation tests are presented in Figure 2 (see Figure 2).

Table 8

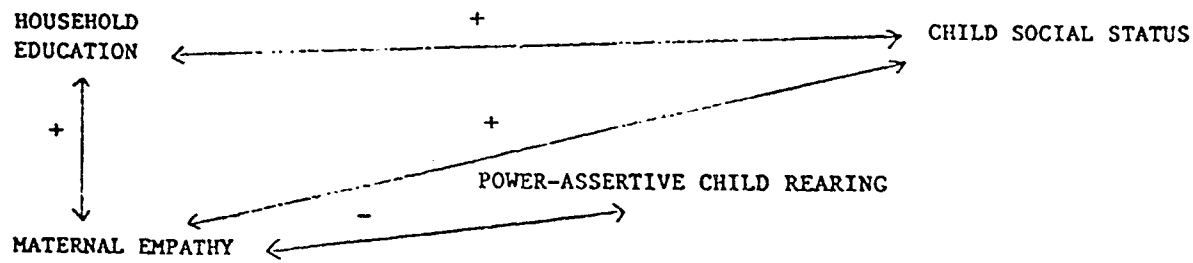
One-Way Analysis of Variance: Level of Household Education by Children's Social Status

	STATUS		
	POPULAR	AGGRESSIVE	
Sum	332.00	239.00	
Sum X2	5578.00	3427.00	
Mean	16.60	14.00	
N	20	17	N=37

SOURCE	DF	SUM OF SQUARES	MEAN SQUARE	F VALUE	PROB >F
Status	1	59.34	59.34	15.53	<.001
Error	35	133.66	3.82		
Total	36	193.00			



Relations Between Variables for Children of Popular Social Status



Relations Between Variables for Children of Aggressive Social Status

Figure 1. Empirical Relations Between Family Variables and Child Variables.

Based on the above ANOVAs, which revealed that mothers of popular children endorsed significantly more empathic statements than mothers of aggressive children and yet did not differ significantly on self-reported child-rearing styles, videotaped interactions of mother-son dyads were examined to investigate whether mothers of popular boys were more likely to demonstrate using inductive child-rearing techniques than to demonstrate using power-assertive methods, when compared to mothers of aggressive boys. Mothers of popular children were observed to use more inductive statements than mothers of aggressive children during the entire 10-minute interaction (t= 2.75, p = .01). This difference held true within the inductive subcategories of both information giving/seeking (t = 2.29, p = .028), and praise and reinforcement (t = 3.55, p = .001). Mothers of popular and aggressive boys did not differ, however, in the overall frequency with which they used power-assertive statements. Both groups of mothers used fewer power-assertive statements than inductive statements (popular: t = -8.63, $p < .000$; aggressive: t = -3.4, p = .004) during the 10-minute interaction (see Videocode Frequencies, Table 9).

When the observational period was broken down by quartiles within Task A (Draw-A-Family on the Etch-A-Sketch), additional between and within group

differences were evident. In both the first and fourth quartiles, mothers of popular boys used more inductive responses than mothers of aggressive boys (t = 2.03, p < .05, and t =3.34, p = .002, respectively). With regard to the number of power-assertive responses used, mothers of popular and aggressive children did not differ in either the first or the last quartile. Within both groups of mothers, each used more inductive responses during the first quartile of Task A than during the last quartile (popular: t =3.27, p =.004; aggressive: t =5.33, p < .000), and a similar number of power-assertive responses during the two quartiles. When within status group and quartile comparisons of inductive versus power-assertive responses were considered, both groups of mothers used significantly more inductive than power-assertive responses during the first quartile (popular: t =6.35, p < .000; aggressive: t = 3.73, p =.002), while only mothers of popular boys used more inductive than power-assertive responses during the fourth quartile (t =4.27, p <.000).

Task B (Free-Play) was also broken down by quartiles and examined for both within and between status group differences. The results were somewhat similar to those obtained in Task A. In the first quartile, but not in the last, mothers of popular boys used more inductive responses than mothers of aggressive boys (t = 2.61, p = .014).

Table 9

Maternal Videotape Code Summary by Child's Social Status (Mean Frequencies Per Mother)

	CODES			
	POWER-ASSERTIVE		INDUCTIVE	
	Direct	Punish	Information Give/Seek	Praise
TASK A (4 min.)				
Popular	12.75	00.40	25.75	04.40
Aggressive	13.24	00.29	20.00	01.65
TASK B (5 min.)				
Popular	03.15	00.05	27.40	03.30
Aggressive	06.12	00.29	19.71	01.41
TASK C (1 min.)				
Popular	01.35	00.00	05.55	00.40
Aggressive	02.65	00.00	03.71	00.06
TOTAL (10 min.)				
Popular	17.25	00.45	58.70	08.10
Aggressive	22.35	00.59	42.82	03.12

Mothers of popular and aggressive boys did not differ with regard to the number of power-assertive responses used in either the first or the last quartile. Mothers of each status group used consistently more inductive responses than power-assertive responses within both the first and the last quartiles (Popular - Q1: t = 8.11, $p < .000$; Popular - Q4: t = 7.91, $p < 7.91$; Aggressive - Q1: t = 5.14, $p < .000$; Aggressive - Q4: t = 4.56, $pp < .000$). Neither the mothers of aggressive children nor those of popular children differed between the first and fourth quartiles within either the inductive or the power-assertive response catagory.

The above results raised the question of whether there was an equal probability of power-assertive responses following inductive responses for both groups of mothers. To address this question, the conditional probability of a power-assertive statement following an inductive statement (expressed as p[PA+1/I0]) was computed for each mother of each status group based on the method described by Gottman and Bakeman (1981). Each mother's conditional probability was then compared to the expected probability of PA+1/I0 (where p[PA/I]exp = p[PA] X p[I]) using a the Chi Square test of goodness of fit. Each mother's resultant Chi Square value was then converted to a Z-score, by taking the square root of the Chi Square value, and entered into a

one-way ANOVA comparing conditional probabilities across status groups. More within status group variation in conditional probabilities was revealed than between status group differences (F (1, 34) = 0.42, p = .523).

Additional comparisons were made between the observational data and mothers' self-reported child-rearing style data obtained from the Parental Discipline Measure, to investigate whether the child-rearing methods mothers actually used when interacting with their sons in the observational setting were consistent with the types of statements they reported to use in the interview. To investigate the relationship between the two measures, the total number of inductive and power-assertive responses were each divided by the total number of responses made for each measure. Across measure correlations were then computed within each response catagory and status group. No significant correlations were obtained between measures for the proportions of inductive responses for either status groups. However, significant between measure correlations were obtained for the proportions of power-assertive responses used by each status group of mothers (popular: r = 0.415, p = .034; aggressive: r = 0.417, p = .048).

CHAPTER IV

DISCUSSION

The results of this study support social learning theory, specifically that children's social skills may be learned from the behavior that they observe exhibited at home by their parents. Most importantly, the results support the notion that the behavior children observe at home is related to the social status of the children in their peer groups. That is, parents may provide models of socially competent or incompetent behavior that their children observe at home and then practice with peers. In the case of this study, mothers who used more inductive, flexible child-rearing styles with their children had boys who were viewed as popular by their school peers. Possibly, these boys learn interaction strategies from their mothers that teach them to be responsive to their peers. In addition, these strategies may facilitate the boys' ability to initiate and maintain peer interactions. On the contrary, boys reared by mothers who use more power-assertive methods may learn interaction strategies that are aversive to their agemates and cause them to be

rejected by their peers. Moreover, boys reared with power-assertive methods may actually have fewer opportunities to observe and learn prosocial interaction strategies than their agemates reared with inductive methods.

The results of this study also support the notion that maternal empathy is an important component to include in a model of the development of children's social status. In this study, mothers with high empathy levels used more inductive child-rearing methods than mothers with low empathy. High empathy in mothers was related to popular social status in their children, while low levels of maternal empathy were related to aggressive social status in children. It is possible that maternal empathy level effects the type of discipline style that mothers use with their children. Mothers who are highly empathic may be more responsive to their children's learning needs in a given situation, and thus adjust their response (either as inductive or power-assertive) according to their child's understanding of the situation. As a result, mothers who can empathize with their children may be more likely to explain certain learning situations to them than mothers with low empathy. The explanations given by mothers with high empathy may provide opportunities for their children to learn about other people's feelings and perspectives.

The perspective-taking skill that children may learn from their mothers in these types of situations may help the children to be sensitive and responsive to the perspectives of their peers in social situations at school. Thus, maternal empathy may moderate the style of child-rearing mothers use, and then be related to the patterns of social interaction exhibited by their children with peers.

Overall, then, the results of the present study support the development of a predictive model of first grade boys' social status in the peer group. This study proposed that first grade boys' social status in the classroom could be predicted based on levels of maternal emapthy, household education, maternal child-rearing style, children's perspective-taking ability, and children's attendance of day care. And, in sum, children's social status was discriminated with 100% accuracy by maternal empathy level, household education level, and children's perspective-taking ability. Thus, the results support several of the proposed hypotheses, and several results merit discussion. First, however, the population on which the data were collected is discussed. And then second, the results are discussed in relation to the proposed model.

Aggressive Children's Social Status

The screening methods used, and the proportion of children who participated in this investigation are

consistent with those used in other investigations of children's social status within the classroom. Nonetheless, as mentioned in the method section, significantly fewer aggressive boys participated in the full study described herein, than were originally identified through the classroom sociometrics. The same discrepancy for popular children was not obtained. That is, proportionately more popular children, who were identified through classroom sociometrics, participated in the full investigation with their mothers than aggressive children. This difference leaves open the possibility that the aggressive children who did participate in the study may have differed in some ways, perhaps significantly, from those aggressive children who did not participate. In fact, on closer examination, it appears that some of the boys viewed as the most highly aggressive did not participate in the UNC-G based mother-child aspect of this study. This selection bias appears to have resulted in obtaining a truncated sample of the population targeted for study in this research. That is, it is likely that there was less variability in the social status of the children sampled in this study than there was in the true target population.

The resultant narrowing of variablity of subjects' social status is likely to have lessened the probability of

obtaining significant results. Thus, the significant results that were obtained are likely to be meaningful. Nonetheless, the particular subject selection bias of this study limits the ability to generalize the results obtained herein to other populations of popular and agressive children.

In anticipation of the above sampling bias, both mothers and their children were offered participation incentives; first, parents were informed that their child's classroom would receive an educational game if at least 75% of the children received parental consent to participate in the classroom screening, and second, they were informed that they and their child would be paid for their participation at UNC-G. Additionally, all families were offered transportation to and from UNC-G. These incentives, however, were not sufficient to overcome the participation biases. Therefore, future investigations may need to explore and incorporate different methods of establishing parental allies to encourage fuller classroom participation.

Keeping in mind the population characteristics, several findings merit further discussion as they relate to the proposed predictive model of children's social status in the peer group.

The Overall Model: Predictors of Children's Social Status

Children's Perspective-Taking. In previous studies, children's perspective-taking ability has been linked to teacher ratings of children's aggression in the classroom (e.g., Feshbach and Feshbach, 1969). Data from the current study suggest that children's perspective-taking is also helpful in discriminating peer nominations of children's social status. This new finding is important since teacher and peer nominations of children's social status have often been incongruent (French & Tyne, 1982; French & Waas, 1985), and yet it is the children rated as aggressive by their peers who are repeatedly cited as at risk for poor adjustment in later life (e.g., Cowen, Pederson, Babigian, Izzo, & Trost, 1973). Thus, peer nominations have generally been preferred over teacher nominations and ratings (Asher, Markell, & Hymel, 1981; French & Tyne, 1982). The finding that children's perspective-taking skills are helpful in discriminating peer nominations of social status suggests that perspective-taking may be an important component of the skills comprising social success in the peer group. That is, children with good perspective-taking ability may be better at initiating conversations with peers and better at solving problems and resolving conflicts than their peers with poor perspective-taking ability. Additionally, given

the lengthy process of collecting peer nominations, the need to collect them from established peer groups, and their link to children's perspective-taking skills, assessing perspective-taking skills may prove useful and cost-effective in identifying children at risk for aggressive social status in the classroom and problems in later life. It would be important to note the normative course of perspective-taking skill development to determine whether perspective-taking could be used as an early marker, perhaps prior to children's entry of school, to identify at-risk children who could benefit from prevention programs.

While the results of the present investigation indicate that children's perspective-taking skills are useful in predicting their social status, children's empathy was not. The population in the current study had a widely distributed range of perspective-taking scores, while their empathy scores were less widely and normally distributed. This difference may reflect the limitations in subject variablity mentioned earlier and may help to account for why empathy scores were able to discriminate children's social status less well than perspective-taking scores. The literature also suggests that perspective-taking skills are developmental percursors to empathy. That is, a child must be able to identify what

another child is feeling before being able to empathize with the child. Thus, it is possible that empathy might discriminate children's social status in a slightly more socially advanced group of children, even though it did not in this group. Alternatively, it is possible that the empathy slides and stories depicted affect clearly enough for the children to identify the other child's perspective, but not strongly enough to elicit empathy for the child. One wonders whether a story about a lost boy (written in 1968) is as likely to elicit an empathic scared response, as might a more contemporary story about drug dealers exchanging gun fire outside a boy's apartment.

Maternal Empathy. An additional link to children's social status was established through levels of maternal empathy. While previous studies have demonstrated a link between maternal and child levels of empathy, this study demonstrated that mothers of popular children endorse more empathic statements than mothers of aggressive boys, and that maternal levels of empathy are useful in predicting children's social status. As discussed above, these findings suggest that maternal empathy may be an important variable involved in the process of children's social status development. That is, empathic mothers may provide more opportunities for their children to learn about other people's feelings through discussion and explanation of

their own feelings in regard to the child's behavior. These mother-child encounters may be opportunities for children to learn about the impact of their behavior on others around them, and to modify their behavior in a socially desirable manner. These findings point to the pivotal role children have between their home environment interactions and their social interactions with peers outside the home, such as in school. A longitudinal study would help to specify the causal role of maternal empathy in the development of children's social status. Additionally, the link between maternal empathy and children's social status in this study leaves open the possibility that children at risk for social problems may be identifiable prior to their commencement of formal schooling by way of assessing levels of maternal empathy.

Household Level of Education. Household level of education was also a significant predictor of children's social status in this study. This finding was not surprising; aggressive acts are shown repeatedly to be more prevalent in areas where low education and poverty prevail (Scherer, Abeles & Fischer, 1975). Previous studies have also demonstrated that when education is a component of SES, children with low SES backgrounds are able to generate significantly fewer alternative solutions to problems -- an index of social competence, than are children from higher

SES backgrounds (Spivack & Shure, 1974). As Spivack and Shure (1974) report, failure to see alternatives to aggressive behavior is a defining characteristic of aggressive children. Thus, for some low education families, parents may lack some of the same skills that are being documented as deficient in their socially rejected children. If so, then increasing parental problem-solving skills may be one avenue through which deficits in children's social skill development could be prevented.

Non-significant predictors of children's social status included children's attendance of day care, and maternal child-rearing styles. Each of these two topics are addressed below.

Day Care. While some researchers have suggested that placement of children in day care influences negatively children's social development in the peer group situation (e.g., Belsky & Steinberg, 1978), the results of the current investigation do not support their contentions. While in some cases it may appear that day care has a negative impact on children's social development, other factors, such as the quality of time spent with parents (Roupp, 1979), and parental involvement in children's activities outside the home (Bronfenbrenner, 1975), may moderate the impact of day care on children's social development. Fuller answers to the impact of day care on

children's social development will only become clearer as more comprehensive studies are conducted.

Sub-Components of the Predictive Model

Relation Between Children's Perspective-Taking and Maternal Empathy.

Despite the differences between children's perspective-taking and empathy skills mentioned above, neither was related to maternal empathy levels when both status groups of boys were considered collectively, a finding incongruent with hypotheses yet similar to the findings of some other researchers. For instance, Barnett et al. (1980) examined mothers' and fathers' empathy scores, using Mehrabian and Epstein's (1972) measure, and compared them to both boys' and girls' empathy scores on Feshbach and Roe's (1968) inventory. While Barnett et al. found a significant relation between girls' empathy scores and parents' empathy scores, no significant relation was found for boys. Barnett et al. concluded that the observed relation for girls was consistent with their hypotheses, but that the failure to obtain a significant relation between boys' and parents' empathy was "uninterpretable" (p. 234).

A likely explanation for the above finding lies in the fact that children's empathy scores lacked variability, as mentioned earlier. Alternatively, the boys in the

present study differed from those on whom Feshbach and Roe's (1968) empathy inventory was normed. The children in the present investigation varied in their social status, by selection, yet those on whom the original inventory was normed did not, and in fact were of above average IQ and from middle class backgrounds (Feshbach & Roe, 1968). Children in this study had unknown IQs and varied widely in their social backgrounds; from low SES children who lived in government-funded housing projects, to children from high SES backgrounds who lived in upper middleclass neighboorhoods. This same explanation cannot be offered for the discrepancy between male and female findings in Barnett et al's research, as their sample included all middleclass children from well educated families.

Another potential explanation for the failure to find a relationship between maternal and child empathy in the present study lies in the different types of instruments used to assess maternal versus child empathy levels. While mothers were all given self-report questionnaires to fill out privately, children were exposed to slides and narratives about which they were asked to share their feelings with a female research assistant. While it is generally viewed as acceptable for girls to share their feelings openly, boys often are viewed as weak if they admit to feelings of sadness or fear, and are often

socialized to conceal such emotions (e.g., Feshbach & Roe, 1968). Thus, direct interviewing of boys may have limited their empathic responses in both the present study and in the one conducted by Barnett et al. This explanation, however, is not adequate to explain the lack of relationship between maternal empathy and boys' perspective-taking skills. Further investigations are needed to explore the parameters of the latter relationship.

Maternal Child-Rearing Styles. In the present investigation, maternal use of inductive child-rearing methods was related to high levels of maternal empathy suggesting that a mother's ability to understand her child's point of view may have been related her use of explanations, and questions (to understand her child's point-of-view) with her child.

It was noted earlier that definitional biases may have influenced, or skewed the results obtained on the child-rearing questionnaire. This bias is important since it may have led to some mothers being coded as more inductive and less power-assertive with their child than they really were. That is, a mother who used alot of questions with her son obtained a high inductive score, even if the content of her questions communicated power-assertion to her son (e.g., "Who do you think you're

talking to?"). This scoring bias may have resulted in an overestimation of mothers' inductive child-rearing styles and an underestimation of mothers' power-assertive child-rearing styles, potentially obscuring child-rearing differences that may have existed more distinctly between mothers of popular versus aggressive boys. Revising the existing definitions of child-rearing styles, as were taken from the literature for use in the current study, and re-scoring maternal responses to questions of child-rearing could help to address this question, but it was viewed as beyond the scope of the present investigation. Importantly, the definitions of child-rearing used in this investigation have been used in other studies of child-rearing (cf. Hoffman & Saltzstein, 1967), which leaves open the question of biased results in other studies reported in the literature.

Observational Data. Perhaps some of the most interesting results were obtained from the analyses conducted on the observational data of the mother-child interaction task. While each group of mothers was observed to use a similar number of power-assertive/directive statements, mothers of aggressive children used an equal number throughout the first and last quartile of Tasks A and B, while mothers of popular children used more at the beginning of each task and fewer at the end. This finding

lends support to the notion that mothers of socially competent, or popular, children may be more responsive to the behavior and needs of their children than mothers of rejected or aggressive children (e.g., Baumrind, 1967, 1971; Bryant & Crockenberg, 1980; Dumas, 1988; Grusec & Kuczynski, 1980). Thus, mothers of popular children in this study may have used more directives during the initial phases of the tasks to help orient their children to the task at hand, and then later used less directives and more questions and praise to maintain their children's participation, compared to mothers of aggressive children. Conditional probability analyses, examining the maternal response patterns to different child behaviors would, help to specify the nature of the apparent differences in responsiveness between mothers of aggressive versus popular children.

These findings of differences in timing of maternal responses also point to the importance of methodology. That is, what we find in our data may be a function of how the data are measured (i.e., intervals versus raw totals). In this particular case, had the behaviors only been totalled, important differences would have been obscured.

The fact that mothers of popular children used consistently more inductive statements than mothers of aggressive children in the current study, is congruous with

the literature that links proactive child-rearing methods, such as teaching and "dialoging," to children's development of competence (Spivack, Platt, & Shure, 1976).

And finally, the positive correlation for power-assertive statements between self-reported child-rearing styles on the Parental Discipline Measure (Hoffman & Saltzstein, 1967) and observed mother-child interactions, lends validity to the Parental Discipline Measure in that what mothers reported they would say was related to what they actually did say. The failure to find a significant correlation for inductive statements between the two measures does not necessarily mean that the self-report measure is not a valid indicant of inductive child-rearing styles; rather, the situations presented to the mothers in both measures may have differed in a manner that elicited different types of responses. While there may have been a similar number of situations across measures that elicited power-assertive responses, the number of situations that elicited inductive responses may have varied.

Implications and Future Directions

This investigation proposed a specific model of how several factors within both the family and peer social system of the child are related to one another. The results support social learning theory, specifically, that

children's social skills may be learned from the behavior that they observe exhibited at home by their parents. This observation of parental interaction style, such as the use of prosocial explanations versus power-assertive directives, may provide the foundation for the skills children use when interacting with their peers, and that lead children to be socially accepted versus rejected. This link between behaviors within the family system and children's social standing within the peer system is important in extending the understanding of children's social development. While historically, researchers have established many global variables that are related to the development of aggression in the antisocial profile of behavior, there exists a need to know which behaviors are related to what specific aspects of the aggressive child's behavior profile so that researchers and clinicians can concentrate intervention designs on malleable factors within the model. In this regard then, models, such as the one investigated in this study, need to concentrate on proximal, and potentially malleable factors that are related to the development of aggressive behavior profiles.

The results of this study suggest that some of the behaviors that effect children's social development may be learned at home through parental child-rearing strategies and thus may be malleable factors within the model of

children's social development.

Several of the results also point strongly to the pivotal role of the child as a link between interactions in the home environment, and interactions with peers in environments outside the home. This pivotal role of the child begs the question of the extent to which children create their own environments. For instance, to what extent do temperamental characteristics in children determine the child-rearing strategies used by parents? Or, alternatively, to what extent are parents' child-rearing strategies determined prior to the birth of their child by parental education level, socioeconomic stress or comfort, and empathy?

The results obtained in the present suggest that examining the impact of each family variable on the others, and on children's social status, in a longitudinal investigation would help to illuminate the specific causal role that each variable plays in the development of children's social status in the peer system. A fuller understanding of the relationships among and between the family and child variables could begin to be gleaned by assessing household education level and maternal empathy prenatally, and then systematically relating each to maternal child-rearing practices and the development of children's perspective-taking skills and eventual classroom

social status. Children's temperamental differences at birth (cf., Thomas, Chess, & Birch, 1970) would also seem to be an important variable to consider in that it would allow an examination of the reciprocal influences of the child system on such family system variables as maternal child-rearing practices and responsiveness to child behaviors.

Future studies could also address the question of whether the mothers of socially rejected children can modify their interaction strategies according to the behavior exhibited by the child with whom they are interacting. That is, are mothers of aggressive children inflexible in their interaction strategies only with their own difficult child, or with all children regardless of the behavior exhibited. This finding would be important since part of social skill is modulating interaction strategies according to the context of the situation. And, what children learn about modulation from their families may impact on how they interact with and are received by their peer social group.

Finally, the results of this investigation are important to the development of preventative models of psychopathology. They increase our understanding of the types of both family and child behaviors that may eventually serve as markers to identify families with

children, or children themselves, at risk for later psychopathology.

BIBLIOGRAPHY

Allinsmith, B.B. (1960). Expressive styles:II. Directness with which anger is expressed. In D.R. Miller & G.E. Swanson (Eds.), Inner conflict and defense. New York: Holt.

Asher, S.R., & Hymel, S. (1981). Children's social competence in peer relations: Sociometric and behavioral assessment. In J.D. Wine and M.D. Smye (Eds.), Social Competence. N.Y.: Guilford Press.

Asher, S.R., Markell, R.A., & Hymel, S. (1981). Identifying children at risk in peer relaations: A critique of the rate-of-interaction approach to assessment. Child Development, 52, 1239-1245.

Bandura, A. (1965). Influence of models' reinforcement contingencies on the acquisition of imitative responses. Journal of Personality and Social Psychology, 1, 589-595.

Barnett, M.A., King, L.A., Howard, J.A., & Dina, G.A. (1980). Empathy in young children: Relation to parents' empathy, affection, and emphasis on the feelings of others. Developmental Psychology, 16, 243-244.

Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. Genetic Psychology Monographs, 75, 43-88.

Baumrind, D. (1973). The development of instrumental competence through socialization. Minnesota Symposia on Child Psychology, 7, 3-46.

Becker, W.C., Peterson, D.R., Luria, Z., Shoemaker, D.J., & Hellmer, L.A. (1962). Relations of factors derived from parent-interview ratings to behavior problems of five-year-olds. Child Development, 33, 509-535.

Belsky, J., & Steinberg, L. (1978). The effects of day care: A critical review. Child Development, 49, 929-949.

Bronfenbrenner, U. (1975). Is early intervention effective? In H.J. Leichter (Ed.), The Family as Educator. New York: Teachers College Press.

Bryant, B.K., Crockenberg, S.B. (1980). Correlates and dimensions of prosocial behavior: A study of female siblings with their mothers. Child Development, 51, 529-544.

Busk, P.L., Ford, R.C., & Schulman, J.L. (1973). Stability of sociometric responses in classrooms. Journal of Genetic Psychology, 123, 69-84.

Coie, J.D., Dodge, K.A., & Coppotelli, H. (1982). Dimensions and types of social status: A cross-age perspective. Developmental Psychology, 18, 557-570.

Collins, W.A., Berndt, T.V., & Hess, V.L. (1974). Observational learning of motives and consequences for television aggression: A developmental study. Child Development, 65, 799-802.

Cowen, E.L., Pederson, A., Babgian, H., Izzo, L.D., & Trost, M.A. (1973). Longterm follow-up of early detected vulnerable children. Journal of Consulting and Clinical Psychology, 41, 438-446.

Dodge, K.A., McClasky, C.L., & Feldman, E. (1985). Situational approach to the assessment of social competence in children. Journal of Consulting and Clinical Psychology, 53, 344-353.

Dumas, J.E., & Wahler, R.G. (1985). Indiscriminate mothering as a contextual factor in aggressive-oppositional child behavior. "Damned if you do and damned if you don't". Journal of Abnormal Child Psychology, 13, 1-17.

Dollard, J., Miller, N.E., Doob, L.W., Mowrer, O.H., & Sears, R. (1939). Frustration and Aggression. New Haven: Yale University Press.

Eron, L.D., & Huesmann, L.R. (1984). The relationship of prosocial behavior to the development of aggression and psychopathology. Aggressive Behavior, 10, 201-211.

Eron, L.D., Lefkowitz, M.M., Walder, L.O., & Huesmann, L.R. (1974). Relation of learning in childhood to psychopathology and aggression in young adulthood. In A. Davis (Ed.), Child Personality and Psychopathology: Current Topics I. New York: Wiley.

Feshbach, N. (1974). The relationship of child-rearing factors to children's aggression, empathy and related positive and negative social behaviors. In J. DeWitt & W.W. Hartup (Eds.), Determinants and origins of aggressive behavior. The Hague; Mouton & Co.

Feshbach, N. Feshbach, S. (1969).The relationship between empathy and aggression in two age groups. Developmental Psychology, 1, 102-107.

Feshbach, S. (1964). The function of aggression and the regulation of aggressive drive. Psychological Review, 71, 257-272.

Feshbach, S., & Feshbach, N. (1972). Cognitive processes in the self-regulation of children's aggression: Fantasy and empathy. In Feshbach (1974).

Feshbach, N., & Roe, K. (1968). Empathy in six and seven year olds. Child Development, 39, 133-145.

French, D.C., & Tyne, T.F. (1982). The identification and treatment of children with peer relationship difficulties. In J.P. Curran, & P.M. Monti (Eds.), Social skills training: A practical handbook for assessment and treatment. NY: Guilford Press.

French, D.C., & Waas, G.A. (1985). Teachers' ability to identify peer-rejected children: A comparison of sociometrics and teacher ratings. Journal of School Psychology, 23, 347-353.

Gewirtz, J.L., & Stingle, K.G. (1968). Learning of generalized imitation as the basis for identification. Psychological Review, 75, 374-397.

Goldstein, A., & Glick, B. (1987). Aggression replacement training: Comprehensive intervention for aggressive youth. Champaign, IL: Research Press.

Gough, H.G. (1986). Manual for the California Psychological Inventory. (Rev. Ed.), Palo Alto, CA: Consulting Psychologists Press.

Grusec, J., & Kuczynski, L. (1980). Direction of effect in socialization: A comparison of the parent's versus the child's behavior as determinants of disciplinary technique. Developmental Psychology, 16, 1-9.

Hartup, W. (1979). The social worlds of children. American Psychologist, 34, 944-950.

Hetherington, E.M. (1979). Divorce: A child's perspective. American Psychologist, 34, 851-858.

Hetherington, E. M., Cox, M., & Cox, R. (1978). The aftermath of divorce. In J. Stevens & M. Mathews (Eds.), Mother-child/Father-child relationships. Washington, D.C.: National Association for the Education of Young Children.

Hetherington, E.M., Cox, M., & Cox, R. (1982). Effects of divorce on parents and children. In M.E. Lamb (Ed.), Nontraditional Families. Hillsdale, N.J.: Erlbaum.

Hoffman, M.L. (1960). Power assertion by the parents and its impact on the child. Child Development, 31, 129-143.

Hoffman, M.L. (1970). Moral development. In P.H. Mussen (Ed.), Manual of child psychology (Vol. 2). New York: Wiley.

Hoffman, M.L. (1975). Moral internalization, parental power, and the nature of parent-child interaction. Developmental Psychology, 11, 228-239.

Hoffman, M.L. & Saltzstein, H.D. (1967). Parent discipline and the child's moral development. Journal of Personality and Social Psychology, 5, 45-57.

Hogan, R. (1969). Development of an empathy scale. Journal of Consulting and Clinical Psychology, 33, 307-316.

Hollingshead, A.B. (1957). Two Factor Index of Social Position. New Haven, Conn.:Yale University.

Kelly, J.B., & Wallerstein, J.S. (1976). The effects of parental divorce: Experience of the child in early latency. American Journal of Orthopsychiatry, 46, 20-32.

Klein, R. (1970). Some factors influencing empathy in six and seven year old children varying in ethnic background. Unpublished dissertation, University of California at Los Angeles School of Education. In Feshbach, N. (1975).

Kolvin, L., Garside, R.G., Nicol, A.R., MacMillan, A., Wolstebholme, R., & Leitch, I.M. (1977). Familial and sociological correlates of behavioral and sociometric deviance in eith year old children. In P.J. Graham (Ed.), Epidemiology of childhood disorders (pp 195-222). New York: Academic Press.

LeMare, L.J., & Rubin, K.H. (1987). Perspective-taking and peer interactions: Structural and developmental analyses. Child Development, 58, 306-315.

MacDonald, K., & Parke, R. (1984). Bridging and gap: Parent-child play interaction and peer interactive competence. Child Development, 55, 1265-1277.

Marcus, R.F., Telleen, S., & Roke, E.J. (1979). Relation between cooperation and empathy in young children. Developmental Psychology, 15, 346-347.

Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. Journal of Personality, 40, 525-543.

Modell, S., & Tyler, F. (1981). Parental competence and styles of problem solving/play behavior in children. Developmental Psychology, 17, 73-78.

Oden, S., & Asher, S.R. (1977). Coaching Children in social skills for friendship making. Developmental Psychology, 48, 495-506.

Patterson, G.R., Dishion, T.J., & Bank, L. (1984). Family Interaction: A process model of deviance training. Aggressive Behavior, 10, 253-267.

Putallaz, M. (1987). Maternal behavior and children's sociometric status. Child Development, 58, 324-340.

Richard, B.A., & Dodge, K.A. (1982). Social maladjustment and problem solving in school-aged children. Journal of Consulting and Clinical Psychology, 50, 226-233.

Roff, M., Sells, S.B., & Golden, M.M. (1972). Social Adjustment and Personality Development in Children. Minneapolis: University of Minnesota Press.

Roupp, R. (1979). Children at the Center: Final Report of the National Day Care Study, Vol. 1. Cambridge, MA: Abott Books.

Rutter, M. (1982). Social-emotional sequelae of day care. In E. Zigler & E. Gordon (Eds.), Day Care: Scientific and Social Policy Issues. Boston: Auburn House.

Sameroff, A.J. (1983). Developmental systems: Contexts and evolution. In P.H. Mussen (Ed.), Handbook of Child Psychology (4th Ed.) (Vol. 1): History, Theory, and Methods, W. Kessen (Vol. Ed.). New York:Wiley.

Scherer, K.R., Abeles, R.P., & Fisher, C.S. (1975). Human aggression and conflict: Interdisciplinary perspectives. NJ: Pretice-Hall.

Sears, R.R. (1961). The relation of early socialization experiences to aggression in middle childhood. Journal of Abnormal Social Psychology, 63, 466-492.

Sears, R.R., Whiting, J.W.M., Nowlis, V., & Sears, P.S. (1953). Some child rearing antecedents of aggression and dependency in young children. Genetic Psychological Monographs, 47, 135-234.

Spivack, G., Platt, J.J., & Shure, M.B. (1976). The problem-solving approach to adjustment. San Francisco: Jossey-Bass.

Spivack, G., & Shure, M.B. (1974). Social adjustment of young children: A cognitive approach to solving real-life problems. Washington: Jossey-Bass.

Thomas, A., Chess, S., & Birch, H. (1970). The origins of personality. Scientific American, 223, 102-109.

Tryon, A.S. & Keane, S.P. (1985). Popular and aggressive children's interaction patterns and bids of entry into a social situation. Paper presented at the 19th Annual Convention of the Association for the Advancement of Behavior Therapy, Houston, TX.

Zigler, E., & Finn, M. (1984). Applied developmental psychology. In M. Bornstein & M.E. Lamb (Eds.), Developmental psychology: An advanced textbook. Hillsdale, NJ: Lawrence Erlbaum Associates.

APPENDIX A

Sociometric Inventory

Name _____ Sex _____ Teacher _____
School _____

1. Name three classmates (from the list provided) that you like most.

   A. _____ B. _____

   C. _____

2. Name three classmates (from the list provided) that you like least.

   A. _____ B. _____

   C. _____

Name two classmated (from the list provided) who best fit each of the following descriptions.

3. This person acts very shy with other kids. He or she seems to play or work alone most of the time.

   A. _____ B. _____

4. This person starts fights, says mean things, doesn't share and seems to disrupt the group alot.

   A. _____ B. _____

5. Here is someone who is really good to have as part of your group, because this person is agreeable and cooperates. This person pitches in, shares, and gives everyone a turn.

   A. _____ B. _____

6. Name your three most favorite activities.

APPENDIX B

Parental Discipline Measure

ID _____

Parent Interview

1. I'd like to ask about some of the things you do nowadays to get _____(Child) to do things you want him to do. For example, think of a time when this type of situation, or something like it, occurred:

   You have something important that you want very much for _____(Child) to do for you right away. He is in the other room alone watching television. You walk in and tell him what you want done and ask hin to do it right away. He says he'll do it as soon as the program is over, in about half an hour

   What do you usually do when something like that happens? Please try to describe exactly what you usually do and exactly what words you use

Now, here is a list of things tnat some of the parents we've talked with do at times like that. (Hand them LIST 4). Please check how often you do each one, or sometning like it, in that type of situation.

Rank your 3 things that you do most often, next often etc.

LIST 4

USUALLY	SOME-TIMES	RARELY	NEVER	
				Hit or spank him.
				Tell him he ought to be ashamed of himself for being so selfish.
				Show him that I'm hurt or disappointed.
				Tell him that if he doesn't do it right away, he won't be able to have something he likes or do something he likes to do.
				Tell him I'm angry at him or give him an angry look.
				Tell him I'd do it myself, but I'm tired or not feeling very well.
				Tell him I'll hit or spank him if he doesn't do it.
				Show him I don't like it by not talking to him for a while.
				Remind him of how much we do for him or how hard we work.
				Go over and turn off the television set.
				Tell him to go ahead, watch the program, but not to come to me when he needs help.
				Tell him we can finish the program as long as he does what I want as soon as it's over.
				Tell him that's all right, I'll do it myself.
				Not say a word, just go and do it myself.
				Tell his father and let him handle it.
				Tell him to go ahead, watch the program, but not to come around later and say he's sorry.

PLEASE CHECK HOW OFTEN YOU DO EACH THING IN THIS TYPE OF SITUATION.

PUT A 1, 2, and 3 NEXT TO THE THINGS YOU DO MOST OFTEN, SECOND MOST OFTEN, AND THIRD MOST OFTEN.

2. (AD LIB) Now let's take another situation: What do you do nowadays when you child gets a little careless and breaks things like a good dish or a lamp, or spills something that stains the rug or couch, or something like that.

   Here again, please try to describe exactly what you usually do and exactly what words you use.

3. Here is a list of things some parents do when their child does something that they are glad he did. (Hand R LIST 6). Please indicate how often you do these things when (CHILD) does something you are glad he did.

   Remind R to rank first 3 choices.

LIST 10 (glad)

USUALLY	SOMETIMES	RARELY	NEVER	
				Give him extra spending money or something else he wants.
				Not make too much of it even though I might feel good inside.
				Kiss him or hug him.
				Tell him how proud or happy I am.
				Tell him it was a grown up thing he did.
				Show him he could still do better.
				Say that what he did was good but remind him he shouldn't take too much pride in his accomplishments.
				Tell him it was a good thing he did.

1. Please check how often you do each thing when you are glad about what he did.

2. Put a 1, 2, and 3 next to the things you do first, second, and third most often.

4. Now let's take another situation: What do you usually do nowadays when (CHILD) is sassy or talks bak to you in an angry voice, or shouts, or mumbles something angry under his breath, or something like that?

   Here again, please try to describe exactly what you usually do and EXACTLY what WORDS you use.

Here is a list of things that some parents do when their child does that. (Hand R LIST 5). Remind her to RANK if not done.

LIST 5

USUALLY	SOMETIMES	RARELY	NEVER	
				Hit or spank him.
				Make him leave the room.
				Tell him he ought to be ashamed of himself.
				Show him that I'm hurt or disappointed by what he said.
				Not let him have something he likes or do something he likes to do.
				Tell him I'm angry at him or give him an angry look.
				Tell him that now I know he doesn't care about me.
				Tell him I'll hit or spank him if he ever talks to me like that again.
				Show him I don't like it by not talking to him for a while.
				Ask him how he can talk like that after all we do for him.
				Tell his father and let him handle it.
				Tell him I won't talk to him or have anything to do with him if that's the way he's going to act.
				Do nothing.

1. PLEASE CHECK HOW OFTEN YOU DO EACH THING WHEN HE TALKS BACK.

2. PUT A 1, 2, AND 3 NEXT TO THE THINGS YOU DO FIRST, SECOND, AND THIRD MOST OFTEN.

5. (Ad Lib). Now try to think of a time when you child might not have done as well as he could have in school.

   What do you usually do in a situation like that? Please try to describe exactly what you usually do and EXACTLY what WORDS you use.

6. Suppose that you saw you child and his friends making fun of another child, like calling the child names or something like that.

   What would you do or say in that type of situation?

7. Finally, think of how you would handle a situation like this one. You're in a restaurant with (CHILD), and a handicapped person, say a crippled man, is at the next table. As the man leaves, (CHILD) says in a voice loud enough for him to hear, "Why does that man walk so funny?" or something like that.

   What would you do or say in that type of situation?

APPENDIX D

Demographic Information Sheet

ID_____

Mother-Son Interactions

The following are some questions about you, your son, and your son's father. Some of the questions ask for rather private information. Because of the private nature of *some* of the questions, please do not put your name on this questionnaire. Your answers will not be associated with your or your son's name, nor will they be shown to anyone.

Thank you for your help.

1. Did your son ever attend day care? Full time? _____ After School?_____
   If yes, how many years? Full time? _____ After School? _____

2. What is the highest grade level of education that the head of your household completed? Circle one.

   6 7 8 9 10 11 12 13 14 15 16 17 18 19 or more
   Jr. High High School College Graduate School

3. What is the occupational role of the head of your household? _____
   _____.

4. Are you the head of the household? _____
   If not, do you work outside the home? _____ How many hours/week? ____

5. Who is the primary care-taker of your son? You, or your son's father? _____

6. Are you currently married with your spouse living at home with you? _____
   If not, how long have you been separated or divorced? _____

7. How much support versus conflict do you feel that you and your son's father experience? Circle one.

   1 2 3 4 5 6 7 8 9 10
   No Conflict Some Conflict Constant Conflict
   Alot of Support Some Support No Support

APPENDIX E

Feshbach's Affective Situational Test of Empathy

ID_____
Slide Sequence_____

Instructions: You are going to watch some slides and hear stories about children your own age, and then I'm going to ask you some questions. Ready?

_____ I. How do you feel?
(affect)

How do you think the child on the screen feels?

II. How do you feel?

How do you think the child on the screen feels?

Repeat questions for each two series of the remaining three affects.