

AN ABSTRACT OF THE THESIS OF

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The present study was designed to examine the relationship between expressed attitudes toward child-rearing, and children's social behavior in a preschool setting. More specifically, the study was concerned with the association of parental authoritarian, hostile-rejecting, and democratic attitudes with the aggressive and cooperative peer interactions of preschool children. Under investigation also was the differential influence of the same sexed parent and opposite sexed parent on the social development of the child. It was speculated that analyses of the interaction scores of the mother and father might show a more significant relationship to children's social behavior than would parental scores taken separately.

The Parent Attitude Research Instrument (PARI) was administered to the parents of 18 girls and 15 boys who attended the Child Development Laboratory at Oregon State University. Data on the

social behavior of each preschool child were obtained during 30 minutes of observation using the Social Interaction Scale (SIS) and a time sampling technique.

Boys' aggression was significantly related to fathers' scores on the Authoritarian-Control Factor, and to the subscale Exclusion of Outside Influence. Girls' aggression was significantly related to mothers' scores on the Democratic Factor, but negatively related to the subscale Seclusion of the Father. Mothers' scores on Fostering of Dependency were positively related to cooperation and negatively related to aggression for girls. It was also found that mothers who scored high on Rejection of the Homemaking Role had daughters who were less cooperative than their peers. However, Fostering of Dependency scores of mothers, were positively related to girls' cooperation and negatively related to girls' aggression.

To examine the presence of a child-rearing attitude, the summed score of both parents was related to the child's social behavior. The summed Authoritarian-Controlling Factor scores were significantly related to boys' cooperation, while the summed Hostile-Rejecting Factor scores were negatively related to girls' cooperation. To further examine the interaction of parental attitudes, a discrepancy score which measured the degree of difference in attitude between parents, was correlated with children's social behavior. None of these correlations were statistically significant.

Although the summed score and discrepancy score of parents did not seem to add important information, when parental patterns were identified according to High and Low groups on the Hostile-Rejecting Factor, it was found that the more aggressive children had parents who tended to be high on the Factor and in disagreement in their child-rearing attitudes. On the other hand, parents who were high on democratic attitudes but tended to disagree, had children who were more cooperative.

It was apparent that sex differences played an important part in the child-rearing attitudes of parents. Parents of girls tended to show more agreement in their child-rearing attitudes than did the parents of boys. In addition, the attitudes of fathers seemed to be a more important influence than has been previously noted in studies on parental attitudes.

Parental Attitudes and Children's
Social Behavior

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PARENTAL ATTITUDES AND CHILDREN'S SOCIAL BEHAVIOR

CHAPTER I

INTRODUCTION

Studies of the relationship between family atmosphere or parental attitudes and the personal and social adjustment of children demonstrate that the child's personality emerges and develops in the context of the earliest complex social relationships, particularly those involving the family.

In his survey of the literature on the consequences of parental discipline, Becker (1964) classified parental discipline according to the dimensions of "love-oriented" versus "power-assertive techniques." He found that definitions of types of discipline vary considerably, as do the populations studied and the consequent child behaviors.

In considering the effects of discipline on children, Becker suggested that love-oriented discipline should be separated into positive and negative methods. After examining the research he concluded that love-oriented techniques have generally included positive methods, such as use of praise and reasoning; and negative methods, which threaten the love relation to the parent, such as isolating the child from the parent, showing disappointment and withdrawing love (1964).

He found, "power-assertive techniques" most typically have included physical punishment, but in some cases have been extended to include yelling, shouting, forceful commands, and verbal threats" (Becker, 1964, p. 177). The consequent variables in the child have focused primarily on the "inhibition and expression of aggression by the child, the child's reaction to transgressions, and the child's resistance to temptation" (Becker, 1964, p. 177). Becker concluded,

. . . the research in this area may be summarized as suggesting that approaches to discipline which focus on using the love relationship with the child to shape his behavior are more likely to be correlated with internalized reactions to transgression (feelings of guilt, self-responsibility, confession) and with nonaggressive or cooperative social relations. On the other hand, power-asserting techniques in controlling the child are more likely to correlate with externalized reactions to transgression (fear of punishment, project hostility), and with non-cooperative, aggressive behavior (Becker, 1964, p. 177).

While a great number of studies have been concerned with variations in the dimensions of parent-child relations as antecedents of children's behavior and personality, the difficulty from the researcher's point of view, is in measuring and evaluating these general comprehensive dimensions. A number of investigators have suggested that the examination of parental attitudes may provide a better understanding of the influence of parents on the child's personality than does the examination of specific parental behavior (Anderson, 1946; Baumrind, 1971; Caldwell, 1964; Orlansky, 1949; Schaefer, 1961;

Watson, 1959). There is some evidence to support this position in the study of Behrens (1954) who investigated both the specific practices and general attitudes in the same group of mothers. Her subjects were 25 Jewish, urban, lower middle-class families who were coming to a mental health clinic. Her small sample and other selective factors make suspect wide generalizations of the results she obtained, but the results she found are clear-cut and apparently unequivocal. She investigated infant-rearing practices in feeding, weaning, and toilet training in their relation to adjustment of these children at age three. She found no correlation between the three infant-rearing practices and the children's adjustment.

Behrens also investigated what she called the "total mother person", her term for general maternal attitudes and conduct. This was divided into three components based on what she considered to be the mother's underlying attitudes (character structure), the manner of meeting the maternal role demanded of her (maternal role), and observed conduct toward the child (maternal conduct). This last has reference to consistency, over-protection, and adaptation of her discipline to the child's needs rather than to specific practices.

She now obtained highly significant correlations between child adjustment and maternal attitudes with this same group of children that showed no correlation between child adjustment and specific

maternal-rearing practices. She was still concerned with the behavior of the mother but not with specific practices. She concluded that it was something more fundamental, expressed attitudinally, which was found to be positively related to child adjustment. Her study clearly supports the contention that positive and negative attitudes are more predictive of the nature of the child's later adjustment than are the specific practices followed by the mother in the socialization of her child.

More recently, researchers concerned with the influence of the child-rearing attitudes of the parents on the social development of the child, have emphasized the need to consider the role of the father as a primary socializing agent. Friedman (1964) maintained that paternal attitudes toward child-rearing and differences in paternal and maternal attitudes yield more significant findings and clear insights into the influence of the family than does an investigation of maternal attitudes alone.

A review of the literature suggests that few researchers have attempted to account for the differential effects of the mother and father on the same sexed as well as opposite sexed child. Likewise, the important consideration of the interaction of paternal and maternal attitudes as an influence on the child's behavior has, for the most part, been overlooked by previous investigators.

Purpose of the Study

The purpose of the present study was to investigate the relationship between the social behavior of preschool children and the child-rearing attitudes of their mothers and fathers. The basic research question was whether the behavior of the preschool child, when interacting with peers, could be related to expressed child-rearing attitudes of their mother and father.

The Parental Attitude Research Instrument (PARI) developed by Schaefer and Bell (1958) has been used extensively as a research instrument in the measurement of parental attitudes. The PARI yields scores of three factors: Factor I is an authoritarian-controlling factor which seems to measure authoritarian, suppressive, punitive and restricting attitudes. Factor II is a hostility-rejection factor described as measuring marital conflict, rejection of family life and interaction with the child. Factor III measures democratic attitudes associated with equalitarian treatment of the child, encouraging verbal interaction, and comradeship and sharing.

Social behavior in the present study, referred to the observed behavior of children in a preschool setting, specifically aggressive and cooperative peer interactions. While previous studies have attempted to focus on rather global dimension of children's behavior, the present study was concerned with systematically recording the

smaller details of observable behavior according to a predetermined scale of peer interaction behaviors.

The Social Interaction Scale was especially developed to operationally define those peer interactions which were classified as cooperative and aggressive. The details on the construction of the scale and the method of observation appear in Chapter III.

Hypotheses

The specific hypotheses which were tested are:

Hypothesis I: There is no significant relationship between parental scores on the Authoritarian Factor and children's social behavior.

Hypothesis II: There is no significant relationship between parental scores on the Hostility-Rejection Factor and children's social behavior.

Hypothesis III: There is no significant relationship between parental scores on the Democratic Factor and children's social behavior.

CHAPTER II

A REVIEW OF LITERATURE

There have been numerous studies of the relationship between family atmosphere and/or parental attitudes and the personal and social adjustment of children. This chapter will review some of the significant findings regarding the relationship of different types of family atmosphere and parent-child relationships on various aspects of the preschool child's personality and behavior.

Dimensions of Parent-Child Relationships

Attempts to determine the effects of very early parent-child interactions have centered on a number of different aspects of the mother's role such as: satisfying the infant's basic needs, toilet training, reacting to manifestations of aggression, sexuality, dependency, and independence (Bowlby, 1960; Brofenbrenner, 1958; Despert, 1944; Dollard and Miller, 1950; Heinecke, 1956; Hindley, 1965; Huschka, 1942; Levy, 1943; Robertson and Bowlby, 1952; Schaefer and Emerson, 1964; Sears, Maccoby, and Levin, 1957; Sears, Whiting, Nowlis, 1953). As the child matures, his relationships with his parents become more intensive, more complex, and more subtle. These changes are reflected in the investigations of parent-child relations during the preschool years. These studies

have focused not on specific interactions in restricted situations, but rather on broad, global characteristics of the home, and ease of communication between parent and child.

A number of investigators have attempted to conceptualize meaningful dimensions of parental behavior, as well as the inter-relationships among such dimensions. Table I contains some of the principal parental characteristics which have been identified over several decades of research activity.

To a certain extent these theoretical models are arbitrary in that even after one investigator has abstracted a meaningful dimension, for example, permissiveness or rejection, the task of defining what is meant by the dimension remains. A reoccurring problem in evaluating the research findings concerns the identification of the investigator's conceptualizations of parent-child relations.

Schaefer has attempted to formulate a hypothetical model of maternal behavior on the basis of an extensive review of previous research as well as his own investigations (Schaefer, 1959, 1961). He found that two characteristics consistently emerge throughout the studies. These were love-hostility and control-autonomy as shown in Figure 1.

In formulating his model Schaefer pointed out that parental behavior is not unidimensional; it does not consist simply of

TABLE 1. Dimensions of Parental Behaviors

Investigator	Psychological Dimensions
Symonds (1939)	Dimensions: Acceptance-rejection Dominance-submission
Baldwin, Kalhorn & Breese (1945)	Syndromes: Democracy in the home Acceptance of the child Indulgence
Baldwin, Kalhorn & Breese (1949)	Clusters: Warmth; Adjustment; Clarity; Restrictiveness; Interference
Roff* (1949)	Factors: Concern for child Democratic guidance Permissiveness Parent-child harmony Sociability-adjustment of parents Activeness of home
Lorr & Jenkins** (1953)	Factors: Dependence-encouraging Democracy of child training Organization and effectiveness of control
Milton***(1958)	Factors: Strictness or nonpermissiveness of parent behavior General family interaction or adjustment Warmth of mother-child relation- ship Responsible child-training orientation Parents' attitude toward aggressive- ness and punitiveness
Schaefer (1959, 1961)	Dimensions: Autonomy-control Love-hostility
Roe & Siegelman (1963)	Factors: Loving-rejection Casual-demanding Overt attention

TABLE 1. (Continued)

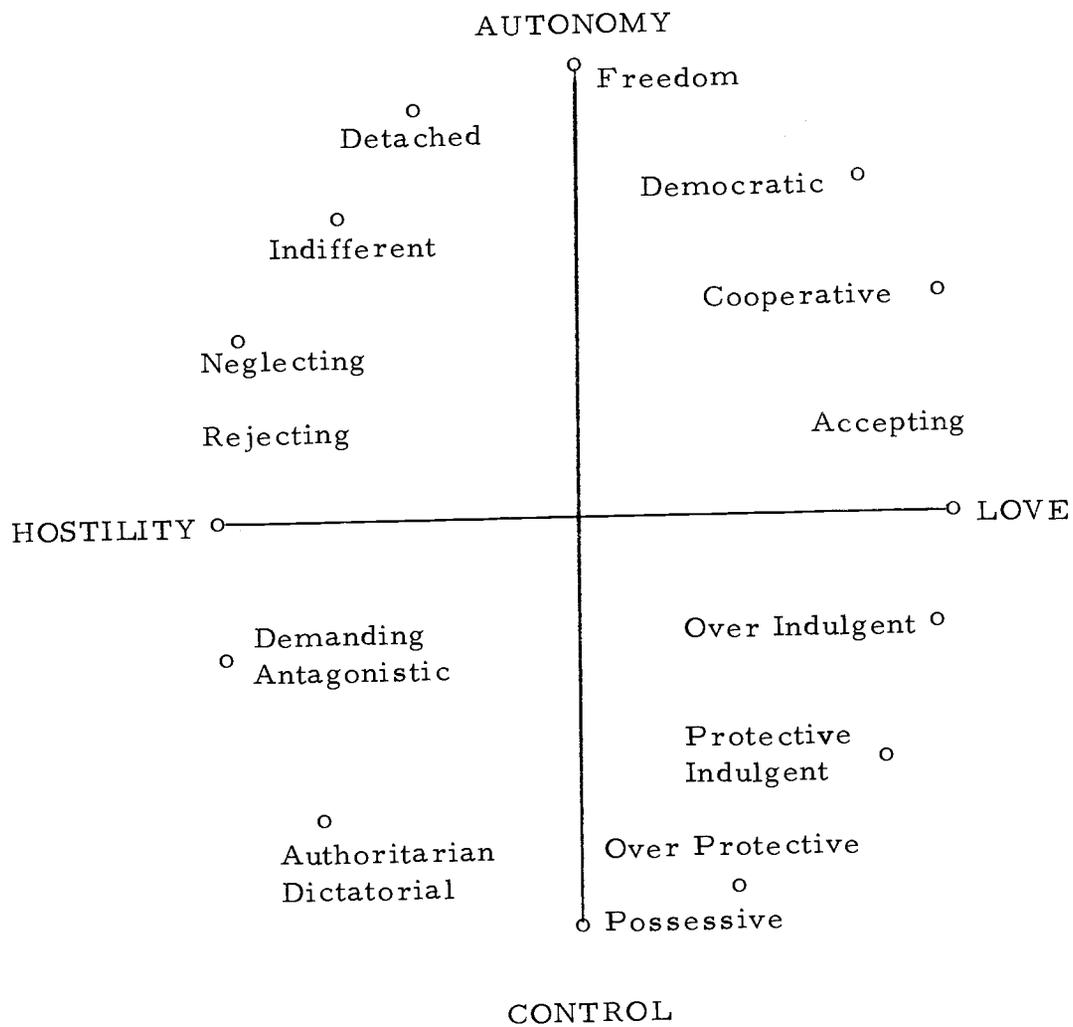
Investigator	Psychological Dimensions
Becker (1964)	Dimensions: Warmth versus hostility Anxious emotional involvement versus calm detachment Restrictiveness versus permissiveness
Schaefer (1965)	Dimensions: Acceptance versus rejection Psychological control vs. psychological autonomy Firm control vs. lax control
Baumrind (1971)	Patterns: Authoritarian Authoritative Permissive

* Based on the Baldwin, Kalhorn, & Breese (1945) data.

** Based on the Baldwin, Kalhorn, & Breese (1945) data and Roff's (1949) factor analysis.

*** Based on the Sears, Maccoby, & Levin (1957) data.

FIGURE 1. Schaeffer's (1959) Hypothetical Circumplex Model for Maternal Behavior.



variations along a single axis. Parents may love their children, or they may reject them, however, they may also be loving and controlling, or loving and permissive, rejecting and controlling, or rejecting and permissive (Schaeffer, 1961).

A refinement of Schaefer's model was attempted by Becker (1964) who reviewed the literature on the consequences of different kinds of parental discipline on the personality and social adjustment of the child. He indicated that it might be desirable to add a third dimension to Schaefer's model by distinguishing two aspects of the control-autonomy axis: restrictiveness-permissiveness and anxious emotional involvement-calm detachment. Figure 2 represents Becker's attempt to show how the various concepts referring to types of parents fit into the model. For example, he noted that two different parents may both be restrictive (or permissive) yet differ in their emotional involvement. He pointed out that

. . . both the democratic parent and the indulgent parent (by definition) are high on the dimensions of warmth and permissiveness, but the indulgent parent is high on emotional involvement while the democratic parent tends to be low on this dimension (calm-detached). Both the organized-effective parents and the overprotective parent are high on warmth and restrictiveness, but the overprotective parent again shows more emotional involvement than the organized-effective parent (Becker, 1964, p. 174).

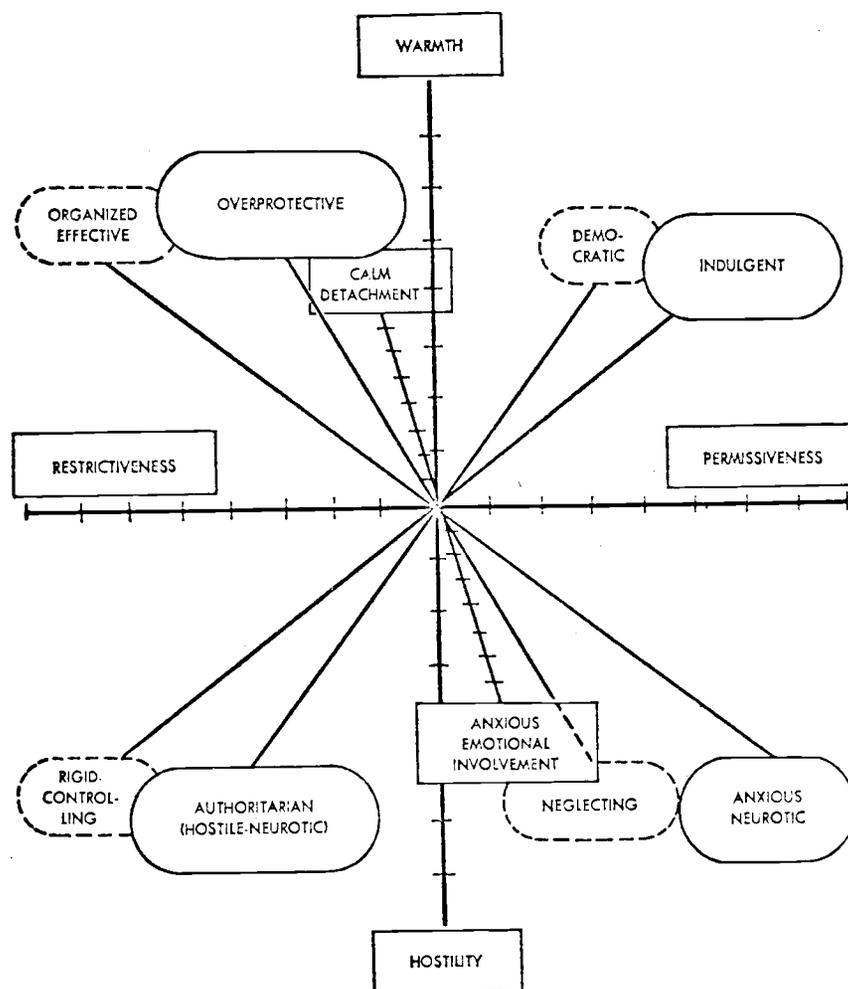


FIGURE 2. Becker's Hypothetical Model for Parental Behavior (Becker, 1964, p. 175).

According to Becker's hypothetical model, each dimension represents a conceptualization of identifiable parent behavior. The warmth-hostility dimension was defined at the warm end by such characteristics as: "accepting, affectionate, approving, understanding, child-centered, frequent use of explanations, positive response to dependency behavior, high use of reasons in discipline, high use of praise in discipline, low use of physical punishment, and (for mothers) low criticism of husbands" (Becker, 1964, p. 174). The hostility end of this dimension was defined, in general, by the opposite of these characteristics.

The dimension of restrictiveness-permissiveness and anxious-emotional involvement versus calm-detachment, was defined at the restrictive end by: "many restrictions and strict enforcement of demands in the area of sex play, modesty behavior, table manners . . . neatness, orderliness, care of household furniture, noise, obedience, aggression to sibs, aggression to peers, and aggression to parents" (Becker, 1964, p. 174). He suggested that these behaviors can be carried out in a rather calm, detached fashion or in an excitable, emotionally over-involved manner (i. e., babying, protectiveness, and solicitousness with high emotionality).

Becker pointed out that although it is possible to make some meaningful generalizations regarding the probable effects of variations in parental behavior along either of these dimensions considered

separately, more precise and more meaningful generalizations become possible when interactions between these two dimensions were considered.

Becker (1964) found that a number of consistent consequences of restrictive and permissive parental behavior could be identified. He regarded this dimension as the degree to which control is exerted (or not exerted) over the child, and pointed out that parents can differ considerably in the manner in which control is achieved. In general, his conclusions were that warm-permissive parents are likely to have children who are rather active, outgoing, socially assertive, and independent, as well as friendly, creative, and lacking in hostility toward others or himself (Baldwin, 1949; Kagan & Moss, 1962; McCord, McCord, & Howard, 1961; Sears, 1961; Watson, 1957). On the other hand, a parent who is warm, may also be restrictive. Becker's interpretation of the research studies suggested that children reared in warm-restrictive homes, as compared with those reared in warm-permissive homes, were likely to be more dependent, less friendly, less creative, more hostile in their fantasies, and either very high or very low in persistence (Baldwin, 1949; Becker, Peterson, Luria, Shoemaker, Hellmer, 1962; Sears, 1961).

He also examined studies which identified parents who were hostile and restrictive or excessively controlling in dealing with

their children. Here he found that parental hostility and restrictiveness tends to promote counterhostility within the child without allowing it to be expressed in behavior. The combination of low permissiveness and high punishment (i.e., hostile-restrictive) leads to self-punishment, suicidal tendencies, and accident proneness (Sears, 1961) as well as to shyness and social withdrawal, difficulties in relating to peers, and little confidence in or motivation toward adult role-taking (Kagan, 1962; Levy, 1943; Watson, 1957).

By and large, these studies suggest that the combination of restrictiveness and hostility fosters considerable resentment, with some of it being turned against the self, or more generally, experienced as internalized turmoil and conflict (Becker, 1964, p. 195).

While restrictiveness combined with hostility tends to maximize self-aggression, social withdrawal, and symptoms of internal conflict (particularly when parental hostility is covert and difficult for the child to label), permissiveness combined with hostility appears to maximize "aggressive, poorly controlled behavior" (Becker, 1964, p. 193). Becker cited studies (Meyers, 1944; Sears, Maccoby, & Levin, 1957) which showed that overt aggression is most frequently the consequence of conditions of high permissiveness which might sometimes be accomplished by severe punishment especially by the ordinarily permissive father. These findings are analogous to the lax-hostile condition of the studies on juvenile delinquency (McCord & McCord, 1961).

Since the publication of Becker's review of research literature on the consequences of parental discipline, Diana Baumrind, director of the Parental Authority Research Project at the University of California, Berkeley, has presented the results of her 10 years of research on the effects of parental authority on the behavior of pre-school children. Since her findings seemed to call into question some of the interpretations made by Becker, a review of the major studies which have associated dimensions of parental control and manifest behavior of preschool and school age children was undertaken. Twelve studies which dealt with the dimensions of parent-child relationships were selected as most relevant to the present investigation, and the findings are presented in Table 2.

The findings reported in these studies fail to support the assumption that parental control generates passivity and dependence in young children. Baldwin (1949) found that high control with democracy held constant covaried negatively with preschool as well as antisocial assertive behavior. However, contrary results have been found in other studies. Hoffman's (1960) results indicate that parental assertiveness and submissiveness in the child are negatively correlated. Sears' (1961) findings on early socialization and later aggression suggest that high punishment for aggression, like "reactive unqualified power assertion" (Hoffman), does not lead to submissive behavior. Baumrind's (1966) results were that parents

TABLE 2. Dimensions of Parent-Child Relationships*

Investigator	Parental Dimension	Child Behavior
Baldwin (1949)	Democracy	Associated with instrumental aggressiveness, fearlessness, playfulness, leadership and cruelty
	Control	Negatively related to quarrelsomeness, resistance and disobedience
Glueck & Glueck (1950)	Physical Punishment	Higher in delinquent group
	Reasoning	Higher in nondelinquent group
	Household duties	Higher in nondelinquent group
	Control (physical punishment, deprivation of privileges, threatening, etc.)	Generally higher in delinquent group
	Supervision Firm by kindly discipline	Higher in nondelinquent group
Sears, Whiting, Nowles, & Sears (1953)	Punitiveness	Associated for boys, with dependence upon peers, and aggression; for girls, with dependency
	Withdrawal of love	Associated with dependency, and also with high conscience when mother is warm
	Current frustration (eating and sickness danger)	No significant findings for boys or girls

Investigator	Parental Dimension	Child Behavior
Watson (1957)	Strict vs. Permissive parental discipline	
	Psychologist's ratings	Permissive higher than strict group independence and socialization
	Teacher's ratings	Strict group higher than permissive group on energetic involvement
Bandura & Walters (1959)	Nagging and scolding	For fathers, higher in aggression than control group
	Physical punishment	For fathers, higher in the aggressive group
	Punishment for dependence	For mothers, higher in aggressive group
	Punishment for aggression toward adults	For both parents, higher in aggressive group
	Withdrawal of love	No difference between aggressive and control groups, but use of this technique correlates with resistiveness in total group
	Use of reaching	Higher in control than aggressive group
	Parental restrictiveness	Higher in aggressive group
	Permissiveness for aggression toward mother	Higher in aggressive group
	Parental demands for obedience	Higher in control than aggressive group
Hoffman (1960)	Initial unqualified power assertion	Associated in middle class homes with resistance toward teachers

Investigator	Parental Dimension	Child Behavior
Hoffman (cont'd)	Reactive unqualified power assertion	For both middle-class and working class youth, associations were with assertiveness and resistance to being dominated; and in working class youth only, associated with hostility
McCord, McCord & Howard (1961)	Punitiveness	Higher in the most aggressive group
	Demands for polite, responsible behavior	Higher demands by parents of least hostile children
	Supervision	Least hostile boys were supervised most
	Control	Most hostile boys were either under or over-controlled
	Consistency of parental discipline	Characterized parents of least hostile children
Finney (1961)	Rigidity	Associated with covert hostility
	Firmness	Associated with conscience development
Becker, Peterson, Luria, Shoemaker, & Hellmer (1962)	Physical punishment	For mothers associated with aggression and conduct problems in boys and girls
	Permissiveness vs. Restrictiveness	No significant findings
	Permissiveness vs. Restrictiveness with sex and aggression	No significant findings for maternal strictness; Parental strictness associated with hostile withdrawal and nervous disposition in both sexes

Investigator	Parental Dimensions	Child Behavior
Kagan & Moss (1962)	Restrictiveness (defined as punitive)	Associated in boys with passive dependent correlates at early ages changing to hostile, non-dependent correlates by adult interview; associated in girls with passive dependent correlates at all ages
Schaefer & Bayley (1963)	Equalitarianism	Associated in both sexes with positive, happy, friendly behavior
	Autonomy (Correlation with positive evaluation vary with sex and age of child)	For adolescent boys maternal ratings at 0-3 correlated positively with timidity, inhibition, courtesy, tact; for 10-1/2-a 2 year boys maternal ratings at 9-14 correlated negatively with friendly, cooperative, interested behavior; for adolescent girls, ratings at 9-14 correlated negatively with defiance, hostility, unpopularity and discontent
	Wish to control	Unrelated to behavior of boys at any age; associations in adolescent girls were with discontent and turbulence
Baumrind (1966, 1971)	Communication	Mature group higher than immature or alienated groups
	Parental Control	Highest in mature (self-reliant), lowest in immature group
	Permissiveness	Associated with immature behavior

* Review of major studies which associated dimensions of parental control and manifest behavior of nursery school and school age children. These 12 studies were particularly relevant to the purpose of this study and had the following methodological characteristics: Data on parents and children were collected independently; data on the children were derived from direct repeated observations in natural or laboratory settings; and parents' scores were based on interview or direct observational data.

of the most self-reliant and approach-oriented group of children were rated highest in firm control. On the basis of these findings, it seems probable that the controlling parent who is warm, understanding, and autonomy-granting should generate less passively (as well as less rebelliousness) than the controlling parent who is cold and restrictive.

In reviewing the studies, it was found that the definition of restrictiveness used by different investigators varies greatly. In general, the findings indicate that restrictiveness, when correlated positively with parental hostility (Becker, Peterson, Luria, Shoemaker, & Hellmer, 1962; Kagan & Moss, 1962), tends to be associated in the child with passivity, dependence, social withdrawal, and passively expressed hostility. In studies where restrictiveness is an expression of parental involvement, antisocial aggression in children and parental restrictiveness seem to be correlated negatively. Bandura and Walter's (1959) findings were that parents of delinquent boys were less, rather than more, restrictive when compared to parents of nondelinquent boys. Findings of Glueck and Glueck (1950) and McCord, et al. (1961) were similar. The studies reviewed do not suggest that moderate restrictiveness decreases self-assertiveness, creative activity, or prosocial behavior, unless accompanied by parental hostility or overprotectiveness.

An examination of the findings of Schaefer and Bayley (1963) demonstrate that when granting autonomy is an indication of

detachment rather than warmth, its opposite, restrictiveness, is not associated with hostility or passivity in the child. The conceptual definition of Schaefer and Bayley's variable "autonomy" (low) is quite similar to that of Kagan and Moss's variable "restrictiveness" (high), but maternal "autonomy" does not covary positively, except for girls at age 9-14, with maternal warmth (measured by the variable "positive evaluation"). At ages 9-14, for girls, when "autonomy" and "positive evaluation" covary positively, the variable "autonomy" is associated in adolescent girls with popularity, contentment and low hostility. At 0-3 years, when "autonomy" and "positive evaluation" are somewhat negatively related, there are no significant associations between the maternal variable "autonomy" and any of the child behavior ratings. For boys also, "autonomy" is correlated negatively with "positive evaluation". The significance of these findings is that "autonomy" measured at 0-3 years is associated with timid, inhibited, courteous, and tactful behavior in adolescent boys, and at 9-14 with unfriendly, uncooperative, uninterested behavior, rather than with self-reliance, independence, and self-assertiveness. Maternal "autonomy", as measured by Schaefer and Bayley, seems to reflect detached uninvolved involvement, except for mothers of girls 9-14, when it is correlated positively with most measures of maternal warmth. The effect on the child covaries with these maternal correlates.

It would appear that no meaningful conclusions can be drawn concerning the effects on the child of variables called "autonomy" or "restrictiveness" until correlates with other parent variables, especially hostility, are known.

It is apparent from these studies that parental variables do not operate in isolation but in combination, so that effects on the child can only be predicted by considering the patterning and interaction among the parental dimensions.

Recently, a series of studies have appeared which attempted to clarify the dimensions of parent-child relationships by investigating the interaction and patterns of parental attitudes and behavior. For the past 10 years, Baumrind and her associates at the Institute of Human Development at Berkeley, have investigated the effects of parental authority on the behavior of preschool children. In three separate studies, data on children were obtained from three months of observation in the nursery school and in a special testing situation. Data on parents were obtained during two home observations, followed by an interview with each parent. In the most recent study (Baumrind, 1971), a parental attitude measurement was used to provide an independent measure of parental attitudes and values concerning child rearing.

In the first study (Baumrind, 1967), three groups of nursery school children were identified in order that the child rearing practices

of their parents could be contrasted. The findings can be summarized as follows: Pattern I: Children who were the most self-reliant, self-controlled, explorative and content, had parents who were controlling and demanding, but they were also warm, rational and receptive to the child's communication. This combination of high control and positive encouragement of the child's autonomous and independent strivings, Baumrind called authoritative parental behavior. Pattern II: Children who, relative to others, were discontent, withdrawn and distrustful, had parents who were detached and controlling, and somewhat less warm than other parents. Baumrind called these parents authoritarian. Pattern III: Children who were the least self-reliant, explorative and self-controlled, had parents who were non-controlling, nondemanding, and relatively warm. These Baumrind called permissive parents. The second study (Baumrind & Black, 1967) of an additional 95 nursery school children and their parents also supported the position that "authoritative control can achieve responsible conformity with group standards without loss of individual autonomy or self-assertiveness" (Baumrind, 1966, p. 905).

The design of the third study (Baumrind, 1971) differed from the previous studies in that: (1) Parent-child relationships were examined for boys and girls separately, which procedure was based on the assumption that sex-related differences in effects of socialization could be demonstrated. (2) Pattern membership was defined

by scores from measures of parent behavior and attitudes rather than, as in the previous studies, by scores from measures of child behavior.

(3) The father as well as the mother would be described according to pattern membership. (4) An additional measure, the Parent Attitude Inquiry, was used as an independent measure of parental values and attitudes toward child rearing.

Two home visits were made by a psychologist to each family. In addition, each parent was interviewed separately, and the interviews tape-recorded. The partial narrative records of the home visits were typed, and the tape-recorded interviews transcribed. Fifty Parent Behavior Ratings (PBR) scales were devised to assess the observed and reported behavior of the mother and father separately and 25 additional scales were devised to measure the joint influence of the parents. Each of the 75 items was constructed to measure a specific manifestation of one of the 15 hypothetical constructs defined operationally by Baumrind, to measure parent-child interaction. The raters assigned subjects to groups on the basis of their patterns of scores on the PBR clusters. Fifty-four families of white boys and 48 families of white girls, were designated as belonging to one of the three parental behavior patterns. Patterns were defined so that they would fit the following definitions.

Authoritative. The authoritative parent¹ attempts

to direct the child's activities but in a rational, issue-oriented manner. She encourages verbal give and take, and shares with the child the reasoning behind her policy. She values both expressive and instrumental attributes, both autonomous self-will and disciplined conformity. Therefore, she exerts firm control at points of parent-child divergence, but does not hem the child in with restrictions. She recognized her own special rights as an adult, but also the child's individual interests and special ways. The authoritative parent affirms the child's present qualities, but also sets standards for future contact. She uses reason as well as power to achieve her objectives. She does not base her decisions on group consensus or the individual child's desires; but also, does not regard herself as infallible or divinely inspired (Baumrind, 1971, pp. 22-23).

Two subpatterns corresponded to this description, differing only in the parents' attitudes towards normative values. One subpattern contained families who were Authoritative and Conforming. Like the Authoritarian parents described below, these parents had high scores in Firm Enforcement and low scores in Passive-Acceptance. However, they also had high scores in Encourages Independence and Individuality. The second subpattern contained parents who met the criteria for the first subpattern, but who also scores high in Promotes Nonconformity (Baumrind, 1971).

¹When speaking of the parent, Baumrind used the pronoun "she", and when speaking of the child, the pronoun "he", unless otherwise specified, the statement applies to both sexes equally.

Authoritarian. The authoritarian parent, by contrast with the above attempts

to shape, control, and evaluate the behavior and attitudes of the child in accordance with a set standard of conduct, usually an absolute standard, theologically motivated and formulated by a higher authority. She values obedience as a virtue and favors punitive, forceful measures to curb self-will at points where the child's actions or beliefs conflict with what she thinks is right conduct. She believes in inculcating such instrumental values as respect for authority, respect for work and respect for the preservation of order and traditional structure. She does not encourage verbal give and take, believing that the child should accept her word for what is right (Baumrind, 1971, p. 22).

Two subpatterns corresponded to this description; they differed only in the degree of acceptance shown the child. One subpattern identifies families who were Authoritarian but Not Rejecting. They were high in Firm Enforcement, low in Encourages Independence and Individuality, low in Passive-Acceptance, and low in Promotes Non-conformity. The second subpattern contained families who met all the criteria for the first subpattern except that they scored high on the cluster called Rejecting (Baumrind, 1971, p. 22).

Permissive. The permissive parent attempts

to behave in a nonpunitive, acceptant and affirmative manner towards the child's impulses, desires, and actions. She consults with him about policy decisions and gives explanations for family rules. She makes few demands for household responsibility and orderly behavior. She presents herself to the child as a resource for him to use as he wishes, not as an active agent

responsible for shaping or altering his ongoing or future behavior. She allows the child to regulate his own activities as much as possible, avoids the exercise of control, and does not encourage him to obey externally-defined standards. She attempts to use reason but not overt power to accomplish her ends (Baumrind, 1971, p. 23).

Baumrind located three subpatterns reflecting different facets of this prototypic permissiveness. One subpattern, called Nonconforming, typified families who were nonconforming but who were not extremely lax in discipline and who did demand high performance in some areas. The second subpattern, called Permissive, referred to families who were characterized by lax discipline and few demands, but who did not stress nonconformity. The third subpattern referred to families who were both non-conforming and lax in their discipline and demands; hence, they were referred to as Permissive-Nonconforming (Baumrind, 1971).

Child Behavior. Over a period of 3 to 5 months one of a team of seven observers recorded all interpersonal and social behavior of the children as they engaged in activities in the nursery school. In addition, each child was observed and rated by the same observer while taking the Stanford-Binet. Baumrind (1968b) prepared a manual to assist the observer in his use of a 72-item Q sort. Each item was defined by describing behavior that would be characteristic of a child rated high and behavior characteristic of a child rated low. Although all observers had previous experience in observing and

rating children, staff members met with them for semi-weekly sessions to construct, criticize, and arrive at univocal interpretations of items. Situations were pointed out in which the child might demonstrate the characteristic behavior described by the items. One observer rated the child in the nursery school, however, a "checker" observer periodically correlated Q sort ratings with the resident observer. Across items observations between the ratings of the resident observer and his checker ranged from an average of .48 for the least reliable observer to .69 for the most reliable observer. The domain of behavior covered by the Pre-school Behavior Q Sort consists primarily of interpersonal behavior and achievement-oriented behavior. "Items were devised to measure facets of two unrelated dimensions of competency-incompetence: namely, social responsibility versus social irresponsibility and independent versus suggestible behavior" (Baumrind, 1971, p. 6). Her model corresponds to other models (Baumrind and Black, 1967; Becker and Krug, 1964; Schaefer, 1964) which used orthogonal dimensions.

Baumrind used the term "instrumental competence" when referring to behavior which is socially responsible and independent. Behavior which is friendly rather than hostile to peers, cooperative rather than resistive with adults, achievement, rather than non-achievement-orientated, dominant rather than aimless, Baumrind

(1971) defined as instrumentally competent behavior.

Since the present study was concerned with observing children's social behavior in a peer interaction setting, specifically, cooperative and non-cooperative or aggressive peer interactions, it might be well to examine Baumrind's subdimensions in detail. One subdimension of instrumental competence, Baumrind designated as Responsible vs. Irresponsible and encompasses three facets of behavior, each of which is related to the others. (a) Achievement-orientated vs. Not Achievement-orientated: this attribute "refers to the willingness to persevere when frustration is encountered, to set one's own goals high, and to meet the demands of others in a cognitive situation versus withdrawal when faced with frustration and unwillingness to comply with the teaching or testing instructions of an examiner or teacher" (Baumrind, 1970, p. 107). (b) Friendly vs. Hostile Behavior Towards Peers: "this refers to nurturant, kind, altruistic behavior displayed toward agemates as opposed to bullying, insulting, selfish behavior" (Baumrind, 1970, p. 107). (c) Cooperative vs. Resistive Behavior Towards Adults: "this refers to trustworthy, responsible, facilitative behavior as opposed to devious, impetuous obstructive actions" (Baumrind, 1970, p. 107).

The second dimension of child social behavior Baumrind designated as Independent vs. Suggestible. This pertains to the following related facets of behavior. (a) Domineering vs. Tractable

Behavior: "this attribute consists of bold, aggressive, demanding behavior as opposed to timid, non-intrusive, undemanding behavior: (Baumrind, 1970, p. 107). (b) Dominant vs. Submissive Behavior: "this category refers to individual initiative and leadership in contrast to suggestible, following behavior" (Baumrind, 1970, p. 107). (c) Purposive vs. Aimless Behavior: this refers to confident, self-propelled activity versus disoriented, normative, goal less behavior.

The results of Baumrind's studies (1966, 1967, 1971) are most relevant to our present investigation. Baumrind found that parents who were authoritative and relatively conforming, as compared with parents who were permissive or authoritarian, tended to have children who were more friendly, cooperative and achievement-orientated. This was especially true for boys. Nonconformity in parents was not necessarily associated with resistant and hostile behavior in children. Neither did firm control and high maturity-demands produce rebelliousness, as had been suggested in the review by Becker (1964). In fact, Baumrind found that close supervision, high demands for obedience and personal neatness, and pressure upon the child to share in household responsibilities were associated with responsible behavior rather than with chronic rebelliousness. She concluded that the condition most conducive to antisocial aggression, because it most effectively rewards such behavior, is one in which the parent is punitive and arbitrary in his demands,

but inconsistent in responding to the child's disobedience. Both authoritative and authoritarian parents demanded socially responsible behavior and also differentially rewarded it. Permissive parents avoided the use of negative sanctions, did not demand mannerly behavior or reward self-help, did not enforce their directives by exerting force or influence, avoided confrontation when the child disobeyed, and did not choose to or did not know how to use reinforcement techniques. Their sons, by comparison with the sons of authoritative parents, were clearly lacking in prosocial and achievement-oriented behavior (Baumrind, 1971).

Baumrind also found that both the authoritative and the nonconforming parents were self-confident, clear as well as flexible in their child rearing attitudes, and willing to express angry feelings openly. Together with relatively firm enforcement and nonrejection, these indices signified patterns of parental authority in which guilt-producing techniques of discipline were avoided. The sons of nonconforming parents and the daughters of authoritative parents were both extremely independent in the nursery school (Baumrind, 1971).

These findings suggest an alternative explanation to Becker's (1964) conclusions on the effects of parental restrictiveness on the child's behavior. He reported that warm-restrictive parents tended to have passive, well socialized children. Baumrind (1967, 1971) found, however, that warm-controlling (in contrast with warm-

restrictive) parents were not paired with passive children, but rather with responsible, assertive, self-reliant children. Parents of these children enforced directives and resisted the child's demands. Early control, apparently does not lead to "fearful, dependent, and submissive behaviors, a dulling of intellectual striving, and inhibited hostility", as Becker (1964, p. 197) indicated was true of restrictive parents.

Although the findings of these investigators appear contradictory, it is possible to distinguish between the effects on the child of restrictive control and of firm control. Restrictive control as used by Becker, refers to the use of extensive proscriptions and prescriptions, covering many areas of the child's life. The result is that parents limit the child's autonomy to try out his skills in these areas. Baumrind uses the term "firm control" to mean firm enforcement of rules, effective resistance against the child's demands, and guidance of the child by regime and intervention. Firm control in this sense, does not imply large numbers of rules or intrusive direction of the child's activities, as would be true of restrictive parents according to Becker.

Conclusion

Baumrind's findings failed to support many of the conclusions of earlier investigators and suggest a weakness in the previous

hypothetical models (Becker, 1964; Schaefer, 1959, 1961). Whereas studies which have relied on observation of parent-child interaction (mostly mother-child interaction) or structured interview with the mother or sometimes both parents, have produced significant findings on one or more dimensions of parent-child relations, often the findings are difficult to interpret, and when compared to other studies, appear to be contradictory, especially when parental control is the focus of the investigation. In formulating conceptual patterns of parental authority, Baumrind (1971) examined not only the observable behavior of the family in the natural setting of the home, but she attempted to relate the influence of parental attitudes and values as variables associated with children's personality development and behavior. Her approach represents a significant methodological improvement over many previous research studies, and suggests that not only are observable parental behaviors and practices important for understanding the complex interaction of parent-child variables, but also that the covert attitudes and values of parents may exert a more significant influence than specific child-rearing practices. Her findings are consistent with other investigators who have concluded that the examination of parental attitudes may provide a better understanding of the influence of parents on the personality and behavior of the child, than the examination of specific parental child-rearing practices (Anderson, 1946; Brody, 1968; Caldwell,

1964; Emmerich, 1969; Orlansky, 1949; Watson, 1957).

While many of the studies reviewed attempted to investigate the influence of the mother on the personality of her child, relatively few studies included paternal influence, and hardly any attempted to examine the interaction of mother and father as a variable associated with children's behavior. Baumrind's studies not only examined parental influence as a function of sex of the parent, as well as the differential effects in boys and girls, but she attempted to account for the interaction of both parents in their behavior and attitudes toward the child. Her constructs of parental patterns included the interaction of both parents' behavior and attitudes.

Especially relevant to the present investigation is Baumrind's use of a paper-and-pencil questionnaire as a measure of parental attitudes toward child-rearing. She showed that there was a positive correlation between expressed parental attitudes as measured by the Parent Attitude Inquiry, and parental behavior as measured by the PBR. She proposed that the use of an attitude questionnaire might not only provide an easy, economical means of gathering data on parental attitudes but also suggested that the expressed parental attitudes might produce additional information on the influence of parental variables on the personality and behavior of children.

The present study was undertaken to further investigate not only the differential effects of like and opposite sexed parent on the

personality and social behavior of the child, but also to examine more closely the interaction of specific attitudinal variables as expressed by mother and father on an attitude research instrument. In the following section, a summary of current research findings on the relationship between parental attitudes and children's behavior will be given. Since all of these studies were completed prior to Baumrind's work, they reflect earlier attempts to demonstrate relationships between parental attitudes and children's behavior, and offer a starting point for further investigation.

Parental Attitudes and Children's Behavior

A number of studies have investigated the various types of parental influence on the behavior of children, with more of the studies concerned with the mother than the father. In general, the research on parental attitudes suggest that parental acceptance, warmth, and support are positively related to favorable social behavior, and that extreme restrictiveness, authoritarianism, punitiveness without acceptance, warmth and love, tend to be negatively related to a child's positive social behavior (Becker, Peterson, Luria, Shoemaker, and Hellman, 1962; Byrne, 1965; Chaplan, 1967; Clapp, 1967; Crandall, 1960; Delaney, 1965; Deming, 1964; Friedman, 1964; Lang, 1969; Moore, 1965; Mote, 1967; Pikas, 1961;

Robertson, 1963; Schaefer, 1961; Schaefer and Bayley, 1963; Sears, 1961; Symonds, 1939).

Several studies have particular relevance to the present investigation. In a study of nursery school children and their parents, Moore (1965) related parental child-rearing practices to the occurrence of dependency and autonomy in children's behavior. The families used in the study were participating in the Purdue longitudinal study and included 29 boys and 24 girls with their parents. Data on parental attitudes toward child-rearing were obtained from interviews. These scales and factors were correlated with factors derived from nursery school teacher's ratings of children's behavior. The results did not confirm the hypothesis that infantile feeding frustration was positively related to later dependency, which further suggests that specific parental practices are not necessarily related to later behavior. The results also indicated that the use of physical punishment by the mother was positively associated with dependency in boys but not in girls. The dependency scores of girls were found to be significantly higher than boys, and ordinal position was also found to be significantly associated with dependency. It was further reported that the more severe the demands and restrictions which mothers placed on their girls for mature behavior, the more the girls tended to be dependent. This study suggests that restrictiveness is an important aspect of maternal behavior which contributes

to dependency in girls. The results of Moore's study also indicated that low dependency in children and high maternal permissiveness were associated with a high degree of autonomy in girls but not in boys. There was some indication that maternal rejection combined with a high degree of father interest in the child leads to a high degree of autonomy in girls. It was also reported that availability and lack of hostility in fathers combined with a low degree of demands on the child by the fathers were related to a high degree of autonomy in boys.

Baragona (1964) in a study of personality characteristics in nursery school children, found a negative correlation between parental authoritarian attitudes and parental acceptance of the child. Parents who differed most (one authoritarian and the other non-authoritarian) tended to have children with the least degree of spontaneity, friendliness, belongingness, and same-sex identification. Parents who differed least tended to have children with a greater degree of spontaneity, friendliness, belongingness and same-sex identification.

In his study of the interrelationships between maternal and parental child-rearing attitudes and the social behavior of children, Friedman (1964) found that parental attitudes toward child-rearing and differences in paternal and maternal attitudes yield more significant findings and clear insights into the influence of the family than

does an investigation of maternal attitudes alone. Discrepancy scores were obtained between maternal and paternal attitudes for use as an index of family harmony or consistency in the child-rearing process. These were correlated with measures of social behavior of children who were attending a small group resident camp. Ratings on the children were obtained by peer-group ratings, observer ratings, self-ratings, and analysis of elected offices held by the child during the camp period. The six social characteristics described were leadership, popularity, physical activity, aggressiveness, helpfulness, and anxiety. Although the findings must be taken with reservation because of the restrictedness of the sample, it is interesting to note that the study showed clearly that the father's understanding of child behavior and the mother's attitude toward causation of child behavior were significantly related to the child's social behavior.

These studies strongly suggest that more significant findings can be obtained by examining the interaction between maternal and paternal attitudes, than by investigating maternal or paternal attitudes separately. However, the differential effects of same sexed and opposite sexed parent as also been noted (Baumrind, 1971; Medinnus, 1967; Rothbart and Maccoby, 1966; Sears, 1961; Sears, 1965). For example the influence of both mother and father on the conceptual development of preschool children was studied by Swan (1970) who presented parents with 23 vignettes depicting parental

functions or preschool child-parent interactions. The Parental Style described as Closing the Mind emphasized parental control or lack of control, while Opening the Mind emphasized reward and teaching as model parental characteristics. He hypothesized that certain child behaviors would be associated with each parental style.

<u>Parental Style</u>	<u>Child Behavior</u>
Control	Rigid-Inhibited
Lack of Control	Undisciplined
Reward	Acceptance-Anxious
Teaching	Creative

Significant relationships were found between fathers and daughters as well as sons on all parental styles, likewise, a significant relationship was found between mothers and daughters on each of the variables, however, none was found between mothers and sons. Swan concluded that styles of both parents are more closely related to girls, which suggested that parents may be significantly more in agreement in relation to child-rearing practices for girls than for boys (at this age), also that parents may emphasize conceptual development for girls more than for boys. Noteworthy also was the finding that the father as well as the mother acts as a primarily influencing parent for preschool children.

Most relevant to the present investigation are studies that have attempted to relate scores on the Parental Attitude Research Instrument (PARI) to the behavior of children. In general, significant findings have been produced when a homogeneous population

with respect to education and occupational levels were used. Pre-school children from professional families, homogeneous with respect to class, were observed in their play behavior and language by Marshall (1961) in a nursery school setting. She used Schaefer's original five-factor system in relating PARI scores of the mother and father to the number of hostile interactions in nursery school play. Hostile interaction was divided into dramatic-play hostility and reality hostility. Her analysis of the findings showed that father's demand for striving and harsh-punitive control correlated highly with reality hostility and with total hostility for boys. These correlations were .69 and .65. For mothers, these same measures correlated moderately with reality hostility for boys and with total hostility for girls. Father's overpossessiveness related negatively to dramatic-play hostility for boys and girls and to total hostility for boys. These results imply that strict-authoritarian attitudes in professional level families are related to the amount of aggression shown by their children with their peers. Marshall also examined the relation of PARI cluster scores to peer acceptance as determined by a sociometric procedure. Suppression, demands for striving, and harsh-punitive control by the father were all positively associated with acceptance for boys and negatively associated with acceptance for girls. Marshall concluded that these results are consistent with sex-role expectations. Dominant-aggressive parents tend to have

dominant-aggressive children. At this age the active, aggressive boys readily gain peer esteem whereas the same behavior in girls is not accepted.

Besides providing some evidence for construct validity for the PARI scales, Marshall's findings have implications for the present study. While education does correlate from $-.30$ to $-.50$ with harsh-punitive control, even in this highly homogeneous sample education of parents does not correlate with the child behavior measures. Furthermore, it is noteworthy that (1) the sample was a highly educated one (average education for mothers 15.5 years, for fathers 16.6 years), (2) the measures of child behavior were quite specific and not global judgments, (3) most of the significant findings related to father's attitudes, and (4) separate analyses were made for each sex.

Similar findings were reported by Chorost (1962) on older children. He administered a shortened form of the PARI to 79 mothers and fathers with adolescent boys in the Philadelphia Devereux School for the treatment of behavioral and educational problems. The families were from the upper socioeconomic level. The boys were evaluated for degree of overt hostility and fantasy hostility by means of ratings and the Rosenzweig Picture-Frustration Test, respectively. The results indicated significant correlations between authoritarian control and overt hostility ($r = .24$ for

mothers, and .30 for fathers). Relations to fantasy aggression were not significant.

Becker and Krug (1964) related PARI scores to ratings of child behavior, of 71 middle-class families with kindergarten children. The child's behavior was rated on 72 bipolar scales by mother, father, and two teachers and reduced by factor analysis to five cluster scores. The PARI was scores for authoritarian control and hostility-rejection. The data was analyzed separately for mothers and fathers and for boys and girls. Eight correlations were significant at the .05 level for the hostility-rejection factor. Mothers high on the hostility-rejection factor have boys who are defiant-hostile ($r = .49$) and emotional ($r = .38$) in their behavior at school. Girls with mothers high on hostility were rated by teachers as being withdrawn ($r = .37$) and distrusting ($r = .34$). When fathers score high on hostility-rejection, their sons were defiant-hostile ($r = .38$) and emotional ($r = .38$) as seen by the father (but not by mother or teacher), and girls tend to be withdrawn ($r = .34$) and submissive ($r = .40$), particularly as seen by mothers. No significant correlations were found with the authoritarian-control factor, however, when examining the cluster scores, Becker and Krug found that the father's demands for striving were related to girl's defiant-hostile behavior ($r = .34$) as rated by the teacher, which is consistent with Marshall's results. However, mothers

who were high on demands for striving were related to girls who were dominant and sociable when rated by teachers. When mother was high on harsh-punitive control, girls were rated by both mother and father as dominant and outgoing. These later findings suggest that dominant mothers have dominant daughters, which were also suggested in Marshall's study.

By direct observation through a one way screen, of children's behavior in a child development laboratory (nursery school setting) Zunich (1966) systematically recorded the behavior of 36 preschool children (18 M; 18 F) utilizing a time-sampling technique and pre-determined categories of children's behavior, that is, contact, cooperation, playing interactively. He administered the PARI to both mothers and fathers of the children and made comparisons of the 16 attitude subscales to the 18 child behavior categories. Nine comparisons evidenced significant relationships at the .05 level or beyond. Approval of activity, comradship and sharing, and encouraging verbalization scales were related to contact and playing interactively, while breaking the will, irritability, and strictness were related to such child behaviors as aggression, criticism, directing and anxiety.

Summary

The studies reviewed here support the notion that parental attitudes can be significantly related to children's social behavior. The important research question with which the present study was concerned, was whether the social behavior the boys and girls could be related to specific child-rearing attitudes, and whether the interaction of paternal and maternal attitudes was more important than the mother's or father's expressed attitudes taken independently.

CHAPTER III

METHOD

Subjects

The subjects of this investigation were 33 children attending the preschool program established by the Department of Family Life at Oregon State University, and both the mothers and fathers of these children. The age and sex division of these children is shown in Table 3. Originally, 40 children, 20 boys and 20 girls, were selected for the study on the basis of their enrollment in the morning or afternoon session of the preschool program. Data could not be collected from the parents of three girls and four boys. Since the design of the study required that children be from intact families, these seven subjects were deleted, leaving a total of 33 subjects.

TABLE 3. Description of Subjects in the Total Sample by Sex and Age.

Subjects	Morning	Afternoon	Total	Mean Age in Months
Girls	8	10	18	32
Boys	6	9	15	33
Box Sexes	14	19	33	32.6

No attempt was made to group the children according to sibling, I.Q., or according to which session they attended, however, an

attempt was made to control for educational and socioeconomic background of the parents.

Subjects of the present study were comprised of families of homogenous backgrounds. Many students dealing with the relationship between parental attitudes and children's behavior have not attempted to control for educational and socioeconomic level of the parents, however, as Becker and Krug (1965) have pointed out, when using a parental attitude questionnaire (PARI), the more significant findings have occurred when these variables were controlled.

Hollingshead's (1967) Two Factor Index of Social Position was used to determine the socioeconomic status of the families from which the subjects came. In developing this Index, Hollingshead (1957) assumed: (1) the existence of a status structure in society; (2) that positions within the social structure are determined by two characteristics; and (3) that characteristics symbolic of status may be scaled. The two factors used by Hollingshead (1957) were occupation and education. Levels of occupation and education were given a scale score ranging from one to seven, and were multiplied by factor weights of seven and four for occupation and education, respectively. The two products were then added and yielded a socioeconomic status score, ranging from a low of 11 to a high of 77. Socioeconomic status may be grouped into five classes (Hollingshead, 1957, p. 10).

<u>Socioeconomic Class</u>	<u>Range of Computed Scores</u>
I (Upper)	11-17
II	18-27
III	28-43
IV	44-60
V (Lower)	61-77

By following Hollingshead's (1957) schema, the subjects in the present study were distributed among the following socioeconomic class positions as summarized in Table 4.

TABLE 4. Description of Subjects in the Total Sample by Socio-economic Class.

<u>Socioeconomic Class</u>	<u>Boys</u>	<u>Girls</u>	<u>N</u>
I (Upper)	7	7	14
II	4	9	13
III	4	2	6
IV	4	0	0
V (Lower)	0	0	0
	<hr/>	<hr/>	<hr/>
Total	15	18	33

On the basis of the above classification, it was determined that the families participating in this study, were of similar socioeconomic background so as to constitute a homogeneous group.

Behavioral Setting

As Swift (1964) has pointed out, the setting in which children interact can significantly influence the frequency and quality of peer social interactions.

The observations of children's social behavior were made at the Child Development Laboratory at Oregon State University. The Laboratory has a large indoor playroom and outdoor play area; materials and equipment suitable for a nursery school are found in both the indoor and outdoor areas. The daily program for both the morning and afternoon group was essentially the same and included a balance of indoor and outdoor activities, both active and quiet play, structured and unstructured activities. It is important, however, to note that individual variations in the activities undertaken by the children and planned for them by their teachers also occurred. These variations in programming depended on a variety of factors, some of which included the needs and desires of individual children, the personalities and teaching strategies of the adults involved, and the physical and weather conditions of the day.

Two qualified nursery school teachers in each session, a head and an assistant teacher, were primarily responsible for conducting the preschool program for their group. These teachers had their master's degree in Child Development and Preschool Education, or were in the final stages of completing their requirements for such a degree. Also, all teachers had prior experience in working with preschool aged children in a laboratory preschool setting.

In addition to the two nursery school teachers, other adults were also present in the laboratory setting. These were primarily college students who were enrolled in a preschool laboratory participation course offered by the Department of Family Life. Although the students' involvement in planning the activities was quite limited, they interacted freely with the children during the entire session. Approximately five different students participated during each daily session.

Since the children had attended the preschool program for six months prior to the beginning of the study, they were considered to have adjusted to the setting as well as to the presence of the adult social agents (teachers, assistants, and students).

Instruments

Two instruments were used for the present study. The Parental Attitude Research Instrument was used as a measure of parental attitudes, and the Social Interaction Scale measured peer interaction among the preschool children.

Parental Attitude Research Instrument

On the basis of an extensive review of the literature (See Appendix A), it was concluded that the modified form of the PARI (Emmerich, 1969) demonstrated sufficient reliability and validity

to be useful as a research instrument for the investigation of parental attitudes in conjunction with the present study.

Children's Social Behavior

In the present study, children's social behavior was focused on peer interaction, specifically on cooperative and aggressive behavior toward peers in a nursery school setting. The Social Interaction Scale was especially developed to operationally define those peer interactions which were classified as cooperative or aggressive. Table 5 lists the categories of behavior which were used.

The categories of behavior listed under aggressive are based upon an intensive study which recorded 2583 aggressive acts and their consequences, by observing peer interaction in the natural setting of two nursery schools (Patterson, Littman, and Bricker, 1967). The peer interactions were classified into the categories listed under aggressive when the child acts as instigator, and victim of aggression which describes the response consequent to an aggressive act.

A similar procedure was used in the classification of cooperative and noncooperative behavior. Observations were made by a trained psychologist at the Oregon State University Child Development Laboratory. Peer interactions were recorded and classified into categories descriptive of cooperative and noncooperative peer interactions as appears in Table 5.

TABLE 5. Behavior Categories of the Social Interaction Scale.

Category	Description
<u>Cooperative contact with peers</u> : refers to contact with peers in a positive verbal or nonverbal interaction.	
(CP)	<u>Cooperative Play</u> : Play or activity with peers; compliance with peer request; attentive to peer.
(PP)	<u>Positive Physical Contact</u> : Child touches another child in a friendly or affectionate manner, e.g., hug, pat, kiss, arm around shoulders, holding hands, ruffling hair, etc.
(TP)	<u>Talking with Peer</u> : Child talks, asks questions, gives directions, approval, praise, in general any verbal exchange including giving commands or answering.
(HP)	<u>Helping Peer</u> : Helping, offering help, or actually assisting a peer, also sharing, cleaning up after peer or doing things for a peer.
(CO)	<u>Compliant Behavior</u> : In general, any friendly behavior toward peer, including following peer, mimicing, or following directions, complying with peer requests (mere compliance without being involved in cooperative activity).
<u>Aggressive contact with peer</u> (instigation): refers to contact with peers in a negative verbal or nonverbal interaction.	
(BA)	<u>Bodily Attack</u> : Hits, punches, also, spitting, kicking, biting, punching, pushing, jumping on, grabbing and choking.
(NP)	<u>Attack with an Object</u> : Hits with stick, throws block, runs into with bike, etc.
(NV)	<u>Verban or Symbolic</u> : Verbally threatens; also includes derogations, assertive demands, or threatening gestures.
(IN)	<u>Infringement of property or invasion of territory</u> : Takes toy, disrupts play, etc.
<u>Victim of aggression</u> (response consequence):	
(PA)	<u>Passive</u> : Does not respond to aggression, or withdraws, gives up toy, etc.

TABLE 5. (Continued)

Category	Description
(CR)	<u>Cries</u> : Includes whining, etc.
(DP)	<u>Defensive Postures</u> : V. covers head; also includes verbal protest; Child does not give up property, moves away.
(TE)	<u>Telling Teacher</u>
(RP)	<u>Recover Property</u> : Grabs truck back from Ag., etc.
<u>Noncooperative Interaction</u> : Child disengages himself from cooperative interaction with peer.	
(IG)	<u>Ignores</u> : Not-attending, ignores or generally disinterested.
(WD)	<u>Withdrawal</u> : Moves away when approached by peer; leaves peer group taking play material with him, for solitary activity; refuses to join in peer activity (solitary).
(NC)	Non-compliant: refuses to follow peer's directions, unfriendly or rejects peer's attempt at interaction; refuses to join in cooperative play.
<u>Independent Activity (ID)</u> : Any activity which does not involve interaction with peer or teacher, most generally solitary play.	
<u>Teacher Interaction (TI)</u> : Activity which involves interaction with teacher, for example, group time, attending to teacher.	

The criteria for the selection of categories were that they lend themselves to clear definition, that they be descriptive rather than inferential, that they be easily recognized in the process of social interaction, and that they be sufficiently comprehensive to cover the behavior that would occur during the activities in the nursery school.

A comparison was made between the behavioral categories of the SIS and several other behavioral rating scales that were designed to measure peer interactions in a nursery school setting (Baldwin, 1949; Marshall, 1961; Stevenson and Stevenson, 1960; Zunich, 1966). In general, the classification of cooperative and aggressive agreed in content with measured used by other observers. For example, Zunich (1966) defined cooperation as "responds to comments, suggestions, or requests with apparent interest and willingness", and noncooperation as "ignores or refuses to comply with or to accept stimulation" (p. 42). However, the categories on the SIS were designed to measure very specific kinds of peer interactions, and therefore demonstrate a refinement over previous scales.

The content of the behavioral categories was examined by three Child Development Specialists who have experience in preschool education and hold the Ph.D., and three full time experienced nursery school teachers, with M.A. degrees, in order to further determine whether the SIS covered a representative sample of the behavior domain to be measured. The instrument was also used during a series of "trial" observations to establish whether peer interactions were being appropriately sampled by the categories listed. These procedures provided sufficient evidence for the content and construct validity of the SIS, and also established its usefulness for measuring

peer interaction in a nursery school setting (Anastasi, 1968, p. 100f. and p. 114f).

Six advanced undergraduate students who have had courses in Child Development, and practical experience at the Child Development Laboratory were trained as observers. During three two hour training sessions, they became familiar with the behavior categories, code letters and scoring system. Through the use of video tapes, the observers had the opportunities to discuss various social interactions among preschool children, and to practice the recording of behavior during 15 second time intervals. An electronic device which was set to emit a light and sound every fifteen seconds enabled each of the six observers to record during simultaneous time intervals. After the initial training sessions, the observers who were randomly assigned to two groups of three persons, simultaneously recorded behavior in the nursery school setting. Questioning and clarification continued until each observer was confident that she was thoroughly familiar with the categories and recording system.

Observer reliability was based on total category appearance, and refers to the ability to identify an observed behavior and to record its placement within a given time interval. The reliability of recording the observations was obtained by calculating the percent of agreement between three observers recording child behavior

simultaneously and independently during two five minute periods. The measures of agreement were obtained by comparing the observations of one observer with the observations taken by the other two observers. The number 20 represents the total number of 15 second intervals.

The recording method which was used in the observation of peer interaction was based on the continuous time sampling method which has been used in a number of studies involving the observation of peer interactions in a nursery school setting (Bishop, 1951; Brody, 1965, 1968; Marshall, 1961; Stevenson and Stevenson, 1960; Zunich, 1966). The use of controlled observation method with the time sampling technique has the special merit of providing quantitative data from which the sampling reliability can be readily determined by fairly simple statistical analysis.

The procedure used to establish interobserver reliability was similar to the method described by Zunich (1966) who reported interobserver reliability to range from .83 to .97. In the present study the range for interobserver reliability was between .85 and 1.00 with a median at .90.

On the basis of the above procedures, it was determined that the use of the SIS as a measurement of peer interaction, and the time sampling technique would provide frequencies of behavior for each subject, and could accurately discriminate between patterns

of behavior among the preschool children used in this study.

Procedures

At two general parent meetings which were held on successive evenings, the purpose of the research was explained to the parents as involving the collection of information on the way parents think children ought to be brought up. The PARI was administered to the parents during the group meetings; the completion of the questionnaire took about 20 minutes. Although special care was taken to instruct the parents that they should answer the questions in such a manner as to reflect their personal viewpoint toward their children, several of the parents commented to the administering of the questionnaire that they answered the items as they felt most parents or parents in general would respond. This may have significant implications for interpreting the findings, and is discussed in the final chapter. For parents not able to attend either of the general meetings, the PARI was sent with a set of instructions similar to those given to the parents attending the meeting. The relationship between the attitude scales and the observational data was not explained.

Data regarding the socioeconomic background of the families and educational level of the parents, was taken from a personal data questionnaire which parents completed at the time of enrollment at the preschool.

Questionnaires were received from all parents except the parents of three boys and two girls, and the fathers of one boy and one girl. These subjects were then excluded from the study.

The observational data on peer interactions was collected at the Orchard Street Child Development Laboratory on the Oregon State University Campus. The Laboratory has a large indoor playroom and outdoor play area; materials and equipment suitable for a nursery school are found in both the indoor and outdoor areas.

The observer was stationed so as to permit maximum coverage of play areas without blocking any of the normal school activities. All observers were carefully instructed to avoid eye contact and interaction with the children as much as possible. These procedures were adopted to prevent or discourage the children from orienting their activity toward the observer. Before actual recording sessions, the observers spent six to eight hours, over a two week period, in the Laboratory so that the children could become accustomed to their presence at the school.

Each observer was equipped with a battery run tape recorder which emitted a sound audible only to the observer every 15 seconds and a writing board with forms of the Social Interaction Scale (SIS) for listing the coded social behavior. The SIS with categories of peer interaction and behavioral codes is found in Table 6.

TABLE 6. Social Interaction Scale

Subject _____ Place _____
 Observer _____ Date _____
 Time _____

Interval	CP	Cooperative play
	PP	Positive physical contact
	TP	Talking with peer
	HP	Helping peer
	BA	Bodily attack
	NP	Negative physical attack with object
	NV	Verbal attack
	IN	Infringement of property or invasion of territory
	PA	Passive when attacked
	CR	Cries
	DP	Defensive posture
	TE	Telling teacher
	RP	Recover property
	IG	Ignores
	WD	Withdraws from play
	CO	Compliant
	NC	Non-compliant
	ID	Independent Activity
	TI	Teacher Interaction

Recording was divided into six five-minute intervals, during which time the social interactions of one subject was recorded under the appropriate coded behavior. A limit of two categories was checked during any 15 second interval, indicating the social behavior that the subject was engaged in during that interval. The total frequency of observations during any five minute sampling period can range from 20 to 40 observations depending upon the activity of the child. For thirty minutes of observation the frequency can yield between 120 and 240 responses. The totals under each category reveal a behavior profile which can be expressed as relative frequencies, that is, the percentage of responses under each category.

Sampling periods included three free play time when the child was allowed to choose his own activity, and three group activities such as music, story time and lunch. This procedure was adopted to insure the widest possible variety of social situations during the 30 minutes of observation. All data were gathered within a two week period after maximum interobserver reliability had been established.

During the actual observation, each observer was to focus on one preassigned subject. Recording began when the subject was near, or began to interact with a peer (Marshall, 1961). The recording was continuous even though the subject may have changed activities many times, or engaged in only one activity. Observers reported this procedure could be carried out with little difficulty, and their

presence apparently had little influence on the child's behavior.

All data on the children's behavior was gathered between March 8th and 19th, 1971. The questionnaires were received from the parents at the March 10th and 11th parents' meetings, and in the mail, to April 28, 1971.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The major purpose of the present study was to examine the relationship between expressed parental attitudes toward child rearing and children's social behavior in a preschool setting. More specifically, the study was concerned with the association of parental authoritarian-controlling attitudes, hostile-rejecting attitudes, and democratic attitudes toward child-rearing, with aggressive and cooperative peer interactions of preschool children. An examination of the literature on parental attitudes toward child-rearing, suggested that such an investigation might provide additional information regarding the differential influence of the same sexed parent and opposite sexed parent on the social development of the child. It was also speculated that analysis of the interaction scores of the mother's and father's child-rearing attitudes might show a more significant relationship to children's social behavior than would analysis of parental attitude scores taken separately.

The Parent Attitude Research Instrument (PARI) was administered to the parents of 18 girls and 15 boys who attended the Orchard Street Child Development Laboratory at Oregon State

University. Data on the social behavior of each of the preschool children were obtained during 30 minutes of observation at the Child Development Laboratory.

Frequencies of each category listed on the Social Interaction Scale (SIS) were recorded and percentages were calculated for the amount of time the child engaged in independent activity, teacher interaction or peer interaction. The sum of these three percentages, therefore, represents the total activity during the 30 minute observation.

Peer interaction was further divided into cooperative, aggressive, victim of aggression and non-compliant interaction. These four categories represented the total amount of peer interaction observed in the preschool setting. A detailed examination of specific peer interaction categories revealed low frequencies on the non-compliant categories, and since the subcategories listed under non-compliant (i. e., ignores, withdraws from peers, noncooperative interaction) refer to unfriendly, rejecting behavior toward a peer, it was decided that these represented a less overt type of aggression, and could be considered as passive-aggressive behavior. On the basis of this reasoning, it was decided to combine the category of aggressive contact with peers with non-compliant peer interaction. This combined category was then designated as aggressive when used in the analysis of the data.

To provide a detailed analysis of the relation between expressed parental attitudes and specific observed behaviors of preschool children, Product-Moment Correlations were calculated between the parental scores on the three major PARI Factors with their subscales, and the categories of observed behavior recorded on the SIS.

In addition to these correlation analyses, a Multiple Linear Regression Analysis was performed. This analysis attempted to ascertain the proportion of the variance in the aggressive and cooperative behavior scores of the children, which could be accounted for by the fathers' attitudes and the mothers' attitudes taken separately, and for the father's and mother's attitude scores when taken together. This analysis could not be carried out separately for boys and girls since there were too few subjects to provide a reliable test of significance if boys and girls were taken separately. Therefore, the Multiple Linear Regression Analysis was performed on the aggressive and cooperative behavior scores of all 33 children without regard to sex differences.

Several studies have suggested the use of a discrepancy score as an index of family harmony or consistency in the child-rearing process. Discrepancy scores were obtained by subtracting the mother's attitude score from the father's attitude score. To ascertain the relationship between parental agreement on each of the PARI Factors, and children's social behavior, discrepancy scores for each

of the PARI Factors were correlated by the Spearman Rank Order Correlation, with measures of aggressive and cooperative behavior which was based on the frequency of observed aggressive and cooperative peer interactions.

The extent to which a child-rearing attitude is present in the family, has been measured by adding the scores of mother and father. The summed score serves as an index of the presence of a child-rearing attitude in the relationship between a child and his parents. To examine the relationship between the presence of a specific child-rearing attitude and children's social behavior, the summed scores of parents on each of the PARI Factors was correlated with the frequency scores of aggressive and cooperative with the interactions, by the Spearman Rank Order Correlation method.

It may happen, however, that one parent expresses a particular child-rearing attitude to a greater extent than the other, therefore a high summed score could be influenced by one parent while the other parent may hold contradictory or less intense views. In this case, one may find a high score on the summed attitude score, and also a high discrepancy score. In the present study an attempt was made to identify parents who tended to agree on a measure of child-rearing attitudes and also expressed this attitude to a greater extent than other parents in this sample. In order to establish comparable groups, the summed scores of parents on each of the PARI Factors

were distinguished according to High and Low by dividing the scores at the median. This provided a High Group and Low Group for each of the PARI Factors. Next, the discrepancy scores of each group were divided at the median. This procedure allowed four groups to be identified according to high and low scores on the attitude factor, and according to high and low scores on amount of parental agreement. Each of these groups represented a different pattern of parental interaction, which suggested a refinement over previous attempts to examine the relationship between parental interaction and children's social behavior.

On the basis of the interaction scores of his parents, each child was designated to a group, which allowed for eight children in each of the four groups. The frequency of cooperative and aggressive peer interactions for the subjects of each group was calculated and an analysis of group differences was made by comparing the number of responses among the groups. Chi square tested the null hypothesis of no significant differences among the responses of individuals in each of the four groups.

It should be noted that 32 subjects and their parents were used in this part of the analysis. In order to maintain an equal number of children in each group, one child and her parents were randomly selected and omitted from the analysis. This adjustment was considered not to have a significant effect on the analysis of the data.

Because of the small number of subjects, sex differences were not controlled in this part of the analysis, hence the 15 boys and 17 girls were assigned to groups according to parental interaction scores, and no attempt was made to take into account the variance in scores which might be due to sex differences.

Findings

Hypothesis I

Hypothesis I: There is no significant relationship between parental scores on the Authoritarian-Control Factor of the PARI and children's social behavior.

Table 7 presents a summary of the Product-Moment correlation coefficients expressing the relationship between parent's scores on the Authoritarian-Control Factor (A-C Factor) of the PARI and children's observed activity in the preschool. A significant positive correlation was found between fathers' scores on the A-C Factor and the percentage of time boys spent in peer interactions ($r = .54$, $p < .05$) Fathers scores on the subscale Suppression of Aggression was also significantly correlated with peer interactions ($r = .60$, $p < .05$), and negatively correlated with teacher interaction ($r = -.51$, $p < .05$) for boys. Fathers' scores on the Fostering of Dependency subscale correlated with girls' teacher interaction ($r = .54$, $p < .05$).

Although mothers' scores on the A-C Factor did not significantly correlate with the activity observed, the subscale Suppression

TABLE 7. Product-Moment Correlation Coefficients Expressing the Relationship Between Parents' Scores on the Authoritarian-Control Factor and Subscales of the PARI, and Children's Activity in the Preschool.

Parental Scores on the Authoritarian-Control Factor	Children's Activity in Preschool					
	Independent Activity (ID)		Teacher Inter- action (TE)		Peer Inter- action (PI)	
	Boys	Girls	Boys	Girls	Boys	Girls
Mothers' scores						
Authoritarian-Control	.09	.05	.27	.10	-.25	-.11
Fostering Dependency	.01	-.36	.18	-.01	-.13	.32
Seclusion of Mother	.07	-.35	.27	.14	-.23	.23
Exclusion of Outside Influence	.19	.24	.39	.21	-.39	.08
Suppression of Aggression	.17	.09	.45	.13	-.02	.01
Suppression of Sex	-.17	.51*	.02	.02	.45	-.46
Fathers' scores						
Authoritarian-Control	-.29	-.45	-.50	.24	.54*	-.11
Fostering Dependency	-.05	-.13	-.44	.54*	.35	-.23
Seclusion of Father	.09	-.13	.27	.20	-.24	-.01
Exclusion of Outside Influence	-.22	-.34	-.48	.27	.49	.13
Suppression of Aggression	-.38	-.02	-.51*	-.22	.60*	.15
Suppression of Sex	-.36	.03	-.36	.15	.49	-.12

* Significant at the .05 level.

** Significant at the .01 level.

of sex was positively related to independent activity ($r = .51, p < .05$) and negatively related to peer interaction ($r = -.46, p < .05$) for girls.

In addition to children's observed activity (teacher interaction, peer interaction, independent activity), correlation coefficients were computed to study the relationship between the A-C Factor scores and children's peer interactions (Cooperative, Aggressive, Victim of Aggression). Table 8 presents a summary of the Product-Moment correlations coefficients obtained expressing the relationship between parental scores on the A-C Factor and children's peer interaction scores. Fathers' scores on the A-C Factor were significantly related to boys' aggression ($r = .59, p < .05$). Fathers' subscale Exclusion of Outside Influence was also significantly related to boys' aggression ($r = .59, p < .05$). Seclusion of the Father subscale correlated negatively with aggression for girls ($r = -.46, p < .05$).

Although the A-C Factor for mothers was not significantly correlated to any of the peer interaction scores, mothers' subscale scores did show several significant correlations. Fostering Dependency was positively correlated with girls' cooperative peer interactions ($r = .48, p < .05$), and negatively correlated with girls' aggressive peer interactions ($r = -.59, p < .01$). Exclusion of Outside Influence was negatively related to boys' aggressive peer interactions ($r = -.52, p < .05$).

TABLE 8. Product-Moment Correlation Coefficients Expressing the Relationships Between Parents' Scores on the Authoritarian-Control Factor and Subscales of the PARI, and Children's Peer Interactions.

Parental Scores on the Authoritarian-Control Factor	Children's Peer Interactions					
	Cooperative		Aggressive		Victim	
	Boys	Girls	Boys	Girls	Boys	Girls
Mothers' scores						
Authoritarian-Control	.34	-.14	-.41	-.15	-.14	.32
Fostering Dependency	.18	.48*	-.19	-.59**	-.08	-.09
Seclusion of Mother	.38	.12	-.42	-.44	-.16	.26
Exclusion of Outside Influence	.23	-.28	-.52*	.09	.01	.28
Suppression of Aggression	-.35	-.11	.15	-.14	.27	.28
Suppression of Sex	.45	-.36	-.17	.13	-.35	.37
Fathers' scores						
Authoritarian-Control	.12	.00	.59*	-.36	-.37	.34
Fostering Dependency	-.04	-.01	.36	-.09	-.11	.10
Seclusion of Father	.25	.14	.47	-.46*	.04	.25
Exclusion of Outside Influence	-.13	.10	.59*	-.15	-.24	.00
Suppression of Aggression	.30	-.07	.27	-.30	-.40	.38
Suppression of Sex	.34	.10	.38	-.09	-.48	-.05

* Significant at the .05 level.

** Significant at the .01 level.

Spearman Rank Order Correlation Coefficients expressing the relationship between parental interaction scores and the frequency of children's aggressive and cooperative peer interactions are summarized in Table 9.

TABLE 9. Spearman Rank Order Correlation Coefficients Expressing the Relationship Between Parental Interaction Scores and the Frequency of Observed Aggressive and Cooperative Peer Interactions for 15 Boys and 18 Girls.

Parental Interaction Score	Aggressive		Cooperative	
	Boys	Girls	Boys	Girls
Discrepancy Scores	.32	-.13	-.02	.25
Summed A-C Score	.40	-.12	.60*	-.31

*Significant at the .05 level.

The summed A-C Scores of mothers and fathers were significantly related to the frequency of boys' cooperative peer interactions ($r = .60$, $p < .05$).

The total frequency and mean for cooperative and aggressive peer interactions for each of the four parental patterns on the A-C Factor are summarized in Table 10.

The chi square analysis showed that there was no significant difference between the frequency of aggressive or cooperative behavior among the four groups. Grouping according to parental interaction scores on the A-C Factor did not seem to relate to the frequency of children's aggressive or cooperative peer interactions.

TABLE 10. Mean and Total Frequency of Observed Aggressive and Cooperative Peer Interactions of Children Designated According to Parental Patterns on the A-C Factor Interaction Scores.¹

Parental Interaction Scores	Aggressive		Cooperative	
	total	mean	total	mean
High A-C x Low Discrepancy	17	2.1	497	62.1
High A-C x High Discrepancy	29	3.6	524	65.5
Low A-C x Low Discrepancy	11	1.3	451	56.3
Low A-C x High Discrepancy	20	2.5	480	60

¹Chi square analysis showed n. s.

The multiple regression analysis which tested the significance of interaction scores, when both parental scores were related to children's aggressive and cooperative peer interactions yielded no significant findings.

Summary: Hypothesis I

Significant relationships were found between the fathers' A-C Factor scores and both boys' peer interactions and the percentage of time spent in aggressive peer interactions, also between the summed A-C Factor scores of parents and the frequency of cooperative peer interactions of boys. In all other instances no significant relationship was found.

Hypothesis II

Hypothesis II: There is no significant relationship between parental scores on the Hostility Rejection Factor of the PARI and children's social behavior.

Table 11 presents a summary of the Product-Moment correlation coefficients obtained expressing the relationship between parents' scores on the Hostility-Rejection Factor (H-R Factor) of the PARI and its subscales, and children's activity observed in the preschool setting. Fathers' H-R Factor scores were positively correlated with girls' teacher interaction ($r = .57, p < .05$). On the subscale of Irritability, mothers' scores were negatively related to girls' peer interactions ($r = -.48, p < .05$).

In addition to children's observed activity (teacher interaction, independent activity, peer interaction), correlation coefficients were computed between H-R Factor scores and children's peer interactions (Cooperative, Aggressive, Victim). Correlation coefficients obtained, expressing the relationship between peer interaction categories and parental scores are summarized in Table 12. Although none of the correlations on the major H-R Factor were significant, the subscale of Rejection of the Homemaking Role for mothers' was negatively correlated with girls' cooperative peer interactions ($r = -.50, p < .05$), and positively correlated with girls' victim of aggression scores ($r = .47, p < .05$).

TABLE 11. Product-Moment Correlation Coefficients Expressing the Relationship Between Parents' Scores on the Hostility-Rejection Factor and Subscales of the PARI, and Children's Activity in the Preschool.

Parental Scores on the Hostility-Rejection Factor	Children's Activity in Preschool					
	Independent activity (ID)		Teacher (TE) Interaction		Peer Inter- action (PI)	
	Boys	Girls	Boys	Girls	Boys	Girls
Mothers' Hostility-Rejection	.03	.34	.21	.23	-.16	-.45
Marital Conflict	.13	-.02	.10	.12	.02	-.06
Irritability	-.02	.37	-.02	.25	.04	-.48*
Rejection of Homemaking Role	.23	.39	.31	.00	-.36	-.35
Fathers' Hostility-Rejection	-.05	.06	.22	.57*	-.10	-.40
Marital Conflict	.05	.14	.30	.21	-.23	-.32
Irritability	.17	-.03	.15	.32	-.21	-.17
Rejection of Family	-.42	-.01	-.13	.38	.37	-.22

* Significant at the .05 level.

TABLE 12. Product-Moment Correlation Coefficients Expressing the Relationship Between Parents' Scores on the Hostility-Rejection Factor and Subscales of the PARI, and Children's Peer Interactions.

Parental Scores on the Hostility-Rejection Factor	Children's Peer Interactions					
	Cooperation (CO)		Aggressive (Ag)		Victim (Vc)	
	Boys	Girls	Boys	Girls	Boys	Girls
Mothers' Hostility-Rejection	-.36	-.25	.48	.21	.13	.14
Marital Conflict	.00	-.05	.18	.09	-.08	-.03
Irritability	-.23	.02	.41	.07	.04	-.09
Rejection of Homemaking Role	-.47	-.50*	.31	.23	.31	.47*
Fathers' Hostility-Rejection	.32	-.06	-.35	-.09	-.15	.17
Marital Conflict	.04	-.10	-.22	-.09	.05	.22
Irritability	.26	-.18	-.48	.14	-.04	.11
Rejection of Family	.50	.09	-.06	-.14	-.44	.01

* Significant at the .05 level.

Spearman Rank Order Correlation coefficients obtained, expressing the relationship between parental interaction scores and the frequency of children's aggressive and cooperative peer interactions are summarized in Table 13. The summed H-R Factor scores were significantly related to the frequency of girls' cooperative peer interaction ($r = -.46, p < .05$).

TABLE 13. Spearman Rank Order Correlation Coefficients Expressing the Relationship Between Parental Interaction Scores and the Frequency of Observed Aggressive and Cooperative Peer Interactions for 15 Boys and 18 Girls.

Parental Interaction Score	Aggressive		Cooperative	
	Boys	Girls	Boys	Girls
Discrepancy Scores	.05	.08	.20	-.19
Summed H-R Factor	.31	.23	-.27	-.46*

*Significant at the .05 level.

The total frequency and mean for cooperative and aggressive peer interactions for each of the four parental patterns on the H-R Factor are summarized in Table 14.

TABLE 14. Mean and Total Frequency of Observed Aggressive and Cooperative Peer Interactions of Children Designated According to Parental Patterns on the H-R Factor Interaction Scores.¹

Parental Interaction Scores	Aggressive		Cooperative	
	total	mean	total	mean
High H-R x Low Discrepancy	9	1.1	453	56.6
High H-R x High Discrepancy	29	3.6	460	57.5
Low H-R x Low Discrepancy	22	2.7	541	67.6
Low H-R x High Discrepancy	17	2.1	498	62.2

¹Chi square was significant for aggression ($p < .005$).

Chi square analysis showed that there was a significant difference ($p < .005$) between groups when the frequency of aggression was the child variable, however, no significant difference between groups was found when the child variable was cooperative peer interaction. This finding suggests that grouping according to parental patterns on the H-R Factor, relates to the frequency of children's aggressive peer interactions, but not necessarily to cooperative peer interactions.

The multiple regression analysis which tested the degree of interaction of both parental scores related to children's aggressive and cooperative peer interactions yielded no significant findings.

Summary: Hypothesis II

Significant relationships were found between the fathers' H-R Factor scores and girls' teacher interactions, and the summed H-R Factor scores of parents and the frequency of cooperative peer interaction of girls. In all other instances no significant relationship between H-R Factor scores and children's social behavior was found.

There is some indication that grouping according to parental interaction patterns significantly accounts for the aggressive behavior in children, although the precise nature of this relationship cannot be determined from the present findings.

Hypothesis III

Hypothesis III: There is no significant relationship between parental scores on the Democratic Attitude Factor and children's social behavior.

Table 15 presents a summary of the Product-Moment correlation coefficients obtained expressing the relationship between parents' scores on the Democratic Attitude Factor (Dem. Factor) of the PARI and its subscales, and children's activity observed in the preschool. Fathers' Dem. Factor scores were related to girls independent activity ($r = .50, p < .05$). Fathers' scores on the Comradship and Sharing subscale were also related to girls' independent activity ($r = .47, p < .05$) and negatively related to girls' teacher interaction ($r = -.53, p < .05$).

In addition to children's observed activity (teacher interaction, independent activity, peer interaction), correlations were computed between Dem. Factor scores and children's peer interactions (Cooperative, Aggressive, Victim). Correlations between peer interaction categories and parental scores are summarized in Table 16. The only correlation that was statistically significant was for the relation between mothers' scores on the Dem. Factor and girls' aggressive peer interactions ($r = .47, p < .05$).

Table 17 summarizes the correlation coefficients for parental interaction scores and the frequency of children's aggressive and cooperative peer interactions. None of the correlation coefficients

TABLE 15. Product-Moment Correlation Coefficients Expressing the Relationship Between Parents' Scores on the Democratic Attitudes Factor and Subscales of the PARI, and Children's Activity in the Preschool.

Parental Scores on the Democratic Attitudes Factor	Children's Activity in Preschool					
	Independent Activity (ID)		Teacher (TE) Interaction		Peer (PI) Interaction	
	Boys	Girls	Boys	Girls	Boys	Girls
Mothers' scores						
Democratic Factor	.08	.05	-.36	-.22	.19	.09
Encouraging Verbalization	.02	.20	-.38	-.32	.24	.01
Equalitarianism	.21	-.27	-.21	.06	.01	.20
Comradship and Sharing	-.15	.21	-.12	-.24	.17	-.04
Fathers' scores						
Democratic Factor	.45	.50*	.13	-.23	-.41	-.30
Encouraging Verbalization	.37	.33	.25	-.17	-.43	-.18
Equalitarianism	.43	.41	-.18	.02	-.16	-.37
Comradship and Sharing	.29	.47*	.15	-.53*	-.31	-.09

* Significant at the .05 level.

TABLE 16. Product-Moment Correlation Coefficients Expressing the Relationship Between Parents' Scores on the Democratic Attitudes Factor and Subscales of the PARI, and Children's Peer Interactions.

Parental Scores on the Democratic Attitudes Factor	Children's Peer Interaction					
	Cooperation		Aggression		Victim	
	Boys	Girls	Boys	Girls	Boys	Girls
Mothers' scores						
Democratic Factor	-.06	-.09	-.40	.47*	.23	-.31
Encouraging Verbalization	.04	-.13	-.32	.31	.11	.13
Equalitarianism	-.06	-.01	-.38	.36	.22	-.33
Comradship and Sharing	-.02	-.09	-.25	.30	.13	-.17
Fathers' scores						
Democratic Factor	-.32	-.17	-.32	.25	.43	-.01
Encouraging Verbalization	-.20	-.08	-.29	.19	.32	-.06
Equalitarianism	-.33	-.24	-.16	.21	.38	.12
Comradship and Sharing	-.24	-.25	-.26	.33	.34	.02

* Significant at the .05 level.

obtained were statistically significant at the .05 level.

TABLE 17. Spearman Rank Order Correlation Coefficients Relating Parental Interaction Scores on the Democratic Attitudes Factor to the Frequency of Observed Aggressive and Cooperative Peer Interactions for 15 Boys and 18 Girls.¹

Parental Interaction Scores	Aggressive		Cooperative	
	Boys	Girls	Boys	Girls
Discrepancy Scores	.21	-.14	-.02	.25
Summed Dem. Factor Scores	-.16	.43	-.10	.11

¹No significant correlations were found.

The multiple regression analysis which tested the significance of interaction scores when both parental scores were related to children's aggressive and cooperative peer interactions, yielded no significant findings.

The total frequency and mean for cooperative and aggressive peer interactions for each of the four parental patterns on the Dem. Factor are summarized in Table 18.

TABLE 18. Mean and Total Frequency of Observed Aggressive and Cooperative Peer Interactions of Children Designated According to Parental Patterns on the Democratic Factor Interaction Scores.¹

Parental Interaction Scores	Aggressive		Cooperative	
	total	mean	total	mean
High Dem. x Low Discrepancy	22	2.7	441	55.1
High Dem. x High Discrepancy	20	2.5	546	68.2
Low Dem. x Low Discrepancy	21	2.6	489	61.1
Low Dem. x High Discrepancy	14	1.7	476	59.5

¹Chi square was significant for cooperation ($p < .01$).

Chi square analysis showed that there was a significant difference ($p < .01$) between groups when the frequency of cooperative peer interactions was the child variable. However, no significant difference was found between groups when the child variable was aggressive peer interactions. This finding suggests that grouping according to parental patterns on the Dem. Factor, relates to the frequency of children's cooperative peer interactions, but not necessarily to aggressive peer interactions.

The multiple regression analysis which tested the significance of interaction scores, when both parental scores were related to children's aggressive and cooperative peer interaction, yielded no significant findings.

Summary: Hypothesis III

Significant relationships were found between the fathers' Dem. Factor scores and girls' independent activity, and between mothers' Dem. Factor scores and girls' aggressive peer interaction.

There is some indication that grouping according to parental interaction patterns on the Dem. Factor scores, significantly accounts for the cooperative behavior, although the precise nature of this relationship cannot be determined from the present findings.

CHAPTER V

DISCUSSION AND CONCLUSIONS

In this chapter the findings of the present investigation are discussed in three parts. First, an analysis of parental attitudes and their interaction with other variables is presented, then the relationship between parental attitudes and children's social behavior is examined in light of the current theoretical and research literature. Finally, a detailed treatment of the data on children's social behavior as observed in the preschool setting is presented. In addition, the major limitations of the study are presented and implications for further research are discussed.

Parental Attitudes Toward Child Rearing

Research on parental attitudes and behavior has gradually evolved to the point where investigators are no longer concerned with determining the relationship between single variables such as maternal rejection, and child adjustment. More recent studies have attempted to examine the attitudes and behavior of both parents, not as isolated individuals within the family, but as interacting personalities who shape and influence each other's attitudes and behavior. The behavior of the child as well as the attitude and behavior of the spouse undoubtedly plays an important part in influencing the parents'

child-rearing attitudes as well as his behavior toward the child.

The design for the present investigation was based on the assumption that the child-rearing attitudes of each parent is the product of the complex interpersonal interactions between the personalities of the parents as well as the personality of the child. Having adopted this position, the importance of considering the interaction between parental child-rearing attitudes becomes apparent. Table 19 presents a summary of the mean scores and standard deviations of parents in each of the major PARI factors.

TABLE 19. Mean Scores and Standard Deviations on PARI Factors for 15 Mothers and 15 Fathers of Boys, and 18 Mothers and 18 Fathers of Girls.

PARI Factor	Boys				Girls			
	Mothers		Fathers		Mothers		Fathers	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Authoritarian-Control	-28	6.8	-23	10.8	-27	7.7	-24	10
Hostility-Rejection	8	5.7	3	7.7	8	8.8	4	4.7
Democratic	15	6.3	16	6.4	19	5.7	16	8.3

An examination of the mean scores reveals that both mothers and fathers in this sample tended to have negative scores on the Authoritarian-Control Factor. This would indicate that these parents, taken as a group, had somewhat less authoritarian and controlling attitudes than would be expected in a less homogeneous group. This finding was consistent with the findings of Becker and Krug (1965) who reviewed the studies which used the PARI as a research instrument

and found that the socioeconomic level and education of the parents can significantly influence the Authoritarian scales on the PARI. In general, the parents of both boys and girls in this sample, tended to disagree with authoritarian statements on child-rearing. This seems consistent with the middle class background of the sample.

In comparing the mean scores of fathers of boys with the mean scores of fathers of girls, there appears to be less difference over the Factors, than between the mean scores of mothers of boys and mothers of girls. This might suggest that these fathers tend to hold more consistent views about child-rearing, while these mothers may be influenced to a greater extent by the sex of the child. For example, it would seem that mothers of girls tended to be more democratic in their attitudes than the mothers of boys.

One way of comparing the child-rearing attitudes of parents of boys with parents of girls, is to examine the relationship between mothers' and fathers' PARI scores. Table 20 presents a summary of the Product-Moment Correlation Coefficients obtained expressing the relationship between mothers' and fathers' PARI scores for boys. The scores of the parents of girls were all correlated in a positive direction, with six of the subscales indicating significant relationships. The scores of the parents of boys, however, tended to show little relationship, with the exception of the subscale Exclusion of Outside Influence where they were significantly correlated in a

TABLE 20. Product-Moment Correlation Coefficients Expressing the Relationship Between PARI Scores of Fathers and Mothers for Girls and Boys.

PARI Scales	30 Parents of Boys	36 Parents of Girls
Factor scores		
Authoritarian-Control	-.19	.42
Hostility-Rejection	-.09	.16
Democratic	.29	.26
Subscale scores		
Fostering Dependency	-.01	.02
Seclusion of Parent	.09	.49*
Exclusion of Outside Influence	-.60*	.57*
Suppression of Aggression	-.07	.47*
Suppression of Sex	.14	.59**
Marital Conflict	-.03	.16
Irritability	-.01	.16
Rejection of the Family	-.21	.47
Encouraging Verbalization	.00	.41
Equalitarianism	.27	.51*
Comradship and Sharing	-.04	.16

* Significant at the .05 level.

** Significant at the .01 level.

negative direction. When the data for this subscale were plotted on a scattergram, scores of the parents of girls tended to cluster at the lower end of the scale for both mothers and fathers, while the scores of the parents of boys tended to cluster at the lower end of the scale for fathers, and at the upper end for mothers. This pattern might be interpreted as showing a trend toward greater control by the mothers of boys, than the mothers and fathers of girls or the fathers of boys. This trend would be consistent with Baumrind's (1971) findings that mothers of preschool boys were more controlling and used more punitive methods than mothers of girls.

On the basis of these findings, one might conclude that in this sample the parents of girls seemed to agree more in their child-rearing attitudes than did the parents of boys.

Parental Attitudes and Children's Social Behavior

In this section the present findings are discussed in light of the current theoretical and research literature.

The Relationship between Authoritarian Child-Rearing Attitudes and Children's Social Behavior

Maternal Authoritarian-Control and Children's Behavior

Although the major Factor of Authoritarian-Control for mothers was not significantly related to any of the dimensions of children's

behavior measured in this study, several relationships were suggested by the statistical significant correlations of the subscales (Table 8). Mothers who scored higher on the subscale Exclusion of Outside Influence, seemed to have boys who were less aggressive. This relationship might be interpreted as suggesting that mothers who regard influences outside the home as a threat to their influence on their children, may be attempting to control the home environment and thus are dominant and controlling with their children.

Marshall (1961) found that mothers who were more dominant tended to have boys who showed less aggression. Studies on imitative behavior in preschool children by Hartup (1962) and by Sears and his colleagues (1965) have shown that boys who have mothers who are more dominant in the home, tend to show less identification with the father, and seem to be supported in a dependency relationship with the dominant mother. However, these findings did not hold true for girls who tended to identify with the dominant mother, and showed more aggressive behavior in their peer interactions. In the present study, no significant relationship was found between Exclusion of Outside Influence and girls' aggressive or cooperative behavior.

Fostering Dependency was significantly related to girls' cooperative behavior and negatively related to girls' aggressive peer interactions. This finding would seem to contradict those of

Marshall (1961) indicating that preschool children who had mothers who fostered dependency were described as more dependent in their approach toward the teacher and less involved in peer interactions. Sears (1961) found that mothers' who fostered dependency in their daughters, had girls whom the teachers described as less mature and less aggressive.

These apparently contradictory findings can be reconciled with the present findings, however, by an examination of the items of the subscale. The specific items included on the Fostering of Dependency subscale suggest that mothers who score high on this scale favor child-rearing practices which are in keeping with middle class role expectations for girls. For example, items number 23 and 45 suggest that a child avoid overly difficult tasks. Baumrind (1971) has suggested that in the middle class family girls are often protected from tasks which seem too difficult or are considered by her parents to be "boyish". She found that mothers tend to differentially reinforce those behaviors which are in keeping with the middle class values and expectations, especially those behaviors which are considered appropriate for girls. Because of these role expectations, girls are often prohibited from engaging in behavior which the parents deem "inappropriate". These parents were observed punishing aggressive or rough behavior while they tended to reward cooperative and friendly play with siblings and peers. They also tended to be

more tolerant of aggressive behavior in boys. These findings would explain the relationship of fostering dependency as it is understood in the PARI subscale, to girls' cooperative behavior with peers and their lack of aggression. Baumrind (1971) also felt that girls tended to mature faster than boys, and therefore would be more likely to generalize the cooperative behavior reinforced at home to the school setting. It would seem, however, that when "fostering dependency" is understood in the sense of "overprotection" as described by Levy (1953), or as "overpossessiveness" as explained in the studies of Sears (1961) and Marshall (1961), then fostering dependency by the mother is likely to be associated with immature and aggressive behavior among preschool children.

The influence of sex role expectations can also be seen in comparing the social behavior of boys and girls whose mothers scored high on the subscale Suppression of Sex. Mothers of boys who scored high on this subscale tended to have sons who were observed in cooperative peer interactions a greater part of the time. Although this relationship was not statistically significant, when compared with the social behavior of girls whose mothers were high on this subscale, the implications for sex role differences becomes apparent. Mothers of girls who scored high on Suppression of Sex had daughters who played independently a greater part of the time, tended to avoid peer interactions (Table 7) and tended to engage in

less cooperative peer interactions (Table 8). These findings and trends suggest that maternal child-rearing attitudes concerning the suppression of sex, has a differential psychological effect upon boys and girls. In their study of patterns of child-rearing, Sears, Maccoby and Levin (1957) found that mothers generally expressed attitudes which were more tolerant toward the expression of sexual behavior in boys than they were for girls. These investigators concluded that girls are more likely to be severely reprimanded by the parents for sexual behavior, while boys may be granted greater freedom even though the parents express restrictive attitudes toward the expression of sex by their children. On the basis of these findings, one might infer that girls who have particularly restrictive mothers, may develop an inhibition of social behavior in the preschool setting. This would account for the limited social contact and high level of isolated activity on the part of those girls whose mothers scored high on the Suppression of Sex subscales.

Parental Authoritarian-Control and Children's Social Behavior

The fathers' scores on the Authoritarian-Control Factor of the PARI were significantly correlated with the percent of time boys spent in peer interaction (Table 7), and with the percent of peer interaction spent in aggressive behavior (Table 8). These findings were consistent with the findings of Chorost (1962) who obtained

positive correlations between the PARI A-C Factor for fathers and adolescent boys' overt hostility. Marshall (1961) also found that the preschool children who were more hostile and aggressive had fathers and mothers who were more demanding and controlling. These parents scored highest on the PARI scales which indicated harsh punitive control and demands for striving. She interpreted her findings as indicating support for Sears' "displacement hypothesis" (Sears, 1961) which attributes children's hostility and aggression to peers, as a displacement of an aggressive drive. Because this aggressive drive cannot be safely expressed toward the controlling and punitive parent, it is released through overt hostility and aggression toward peers. In the present study, however, it does not seem warranted to assume that the fathers who scored high on the A-C Factor were punitive, or exercised "harsh punitive control". Moreover the correlations obtained between the subscale Suppression or Aggression and children's social behavior reveal positive though non-significant relationships with cooperative peer interactions as well as aggressive peer interactions (Table 8). Although these correlations were not statistically significant, they can be interpreted as indicating a trend toward more cooperative as well as aggressive behavior by boys whose fathers scored high on the Suppression of Aggression subscale.

In light of these findings, an alternative explanation to the "displacement hypothesis" might be sought to explain the relationship

between fathers' attitudes and boys social behavior in this sample. Bandura and Walters (1959) proposed that fathers provide a model for aggressive and assertive behavior for their sons. In keeping with male role expectations fathers will differentially reinforce their sons aggressive behavior, and also favor independent and assertive behavior rather than dependent and passive behavior. Further support for this hypothesis was generated by the studies of aggressive and imitative behavior by Bandura and his colleagues (1961) who suggested that the child develops a behavioral repertoire through interaction with the significant social agents in his environment. These significant social agents not only act as models which the child imitates, but they also provide the positive reinforcement for newly learned behaviors. On the basis of these assumptions of the social learning theory of personality development, the findings in the present investigation could be interpreted as suggesting that fathers who score high on the A-C Factor and thus are presumably more authoritarian in their attitudes, provide a model for assertive and dominating behavior, and selectively reinforce such behavior in their sons. There would remain, however, the question of the incidence of cooperative behavior.

To account for this higher frequency of cooperative behavior, one might speculate that the authoritarian and controlling fathers in this sample, provide direction and control through which the boy

learns to exercise self-control over his aggressive responses, and develops positive, cooperative social behavior when interacting with his peers. Becker (1964) contended that the use of strict control by the parent, without corresponding warmth, and modelling of cooperative and friendly social behavior would lead to withdrawn and inhibited social behavior in the child. Further, however, he maintained that control when it is enforced by a parent who is warm and offers a model of cooperative and friendly behavior, will lead to prosocial behavior in the child. This position is highly compatible with Baumrind's (1971) findings that children of parents who were authoritative, were observed in more positive peer interactions, were friendly, achievement orientated and demonstrated more mature social behavior.

Further support for this view can be deduced from an examination of the relationship of other subscales to children's social behavior. Fathers who had high scores on the Excluding Outside Influence subscales, had sons who were more aggressive (Table 8). Studies on imitative behavior of preschool children have suggested that fathers who are the dominant figures in the family, tend to have sons who readily identify with their fathers, and also display more aggressive behavior (Bandura and Huston, 1961; Hartup, 1962; Sears, et al., 1965). An examination of the items on the subscale of Excluding Outside Influence, indicates that fathers who score high on this scale would tend to be dominant authority figures in the

home. Sears and his associates (1965) suggested that the sons of dominant and controlling fathers, tend to form early identification bonds, and are more likely to imitate the dominant and controlling behavior in their interactions with siblings and peers. These findings lend support to the contention that fathers who scored high on Excluding Outside Influence, were probably the dominant figures in their homes. Sons of these fathers may form an early identification bond, and may tend to imitate the dominant and controlling behavior in peer interactions at the preschool.

The subscale Seclusion of the Father was negatively correlated with girls' aggressive peer interactions ($r = -.46, p < .05$). Conversely, correlation with the boys' aggression score was positive, though not statistically significant ($r = .47, p < .10$). This indicated a trend (Table 8). An examination of the items on the Seclusion of Father subscale indicated that a father who scored high on this subscale may tend to limit his interactions with his family. Sears and his colleagues (1965) suggested that the father who remains aloof or spends a great deal of time in activities outside the family, may fail to provide a significant influence on his children, either as a model for imitation, or as a source of reinforcement for social behavior. The father's influence as a socializing agent in the home may thus be greatly reduced, hence the mother tends to take over many of the socializing functions of the father. Sears contends that

this situation removes or minimizes the important influence of the father, which may account for the aggression in boys who were not subject to a father's control. On the other hand, girls are more likely to form strong emotional ties with the mother when the father is absent or remains emotionally uninvolved with family members. The lack of aggression, and development of cooperative behavior may reflect a girl's strong emotional ties with her mother and the consequent adaptation of the female role. These hypotheses offer a tentative explanation of the present findings, however, further research is needed to clarify the complexity of the family interaction patterns when the father is absent or remains aloof from the members of his family.

Interaction of Parental Authoritarian Attitudes and Children's Social Behavior

Marshall (1961) examined the relationship between the mother's and father's PARI scores and aggression in children. She concluded that parents in professional-level families, who have strict-authoritarian attitudes toward child-rearing, tend to have children who show more aggression in their interactions with peers. In the present study, when the discrepancy scores of parents, which measured the amount of agreement between mother and father on the A-C Factor, were correlated with boys' aggression scores, (Table 9) the relationship was in the predicted direction ($r = .32$, n. s.) although not

statistically significant. The correlation between discrepancy scores and girls' aggressive scores was in the opposite direction ($r = -.13$, n. s.) and not statistically significant. With the next analysis, when the sum of the parents' scores on the A-C Factor was correlated with the frequency of observed aggression, the relationship was in the predicted direction for boys ($r = .40$, $p < .10$) and in the opposite direction for girls ($r = -.12$, n. s.) though not statistically significant. Although it can be concluded that taken by themselves, discrepancy scores or sums of scores on the A-C Factor, were not very good predictors of children's aggressive behavior, a trend in the predicted direction was suggested for boys' aggression. However, in this instance the low correlations might be related to the use of the Spearman Rank Order correlation, since the variance among scores would be lost in the ranking of scores.

The absence of significant relationships between discrepancy scores and summed scores of parents on the A-C Factor with children's aggressive and cooperative behavior led to the speculation that patterns of parental interaction might provide more meaningful insights into the relationship between parental attitudes and children's social behavior. Parental interaction patterns with the total frequency and mean of aggressive and cooperative peer interactions were presented in Table 10. An examination of the total frequency of aggressive behavior of children in each group, reveal a trend

toward more aggression among the children whose parents show greater disagreement in their child-rearing attitudes. This trend was particularly apparent among the parents who were more authoritarian and controlling in their child-rearing attitudes. This might imply that aggressive children tend to have parents who are controlling and authoritarian in their attitudes, while one parent is considerably more authoritarian and controlling than the other. This pattern of parental interaction suggests that parents who disagree, may be less consistent in their child-rearing behavior. Becker (1962) found that such inconsistency can lead to confusion on the part of the child. Since the child may be selectively reinforced for certain responses by one parent, while the other parent may supply positive reinforcement for incompatible behaviors, the child has difficulty in predicting which responses will win parental approval and be positively reinforced. One may speculate that the child is placed in the precarious position of being in an environment which is inconsistent in its standards and norms of conduct. The child may attempt to structure his home environment by "testing its limits" through exploratory behavior which may include such behavior as destruction of household property or aggression to siblings and peers. The punishment and control of the more authoritarian parent may be offset by the permissiveness of the other. The child who experiences this lack of consistency at home, may also tend to test the limits of

the generally permissive atmosphere of preschool by aggressive peer interactions.

The presence of authoritarian and controlling child-rearing attitudes in the parent-child relationship, however, need not lead to aggressive behavior. For example, the present findings indicate that boys' cooperative peer interactions were significantly related to the summed scores of parents on the A-C Factor. In a report of preadolescents' preceptions of their parents, Schaefer (1965) found that children who saw their fathers and mothers as dominant and controlling tended to manifest socially acceptable aggressive behavior, were more achievement orientated and engaged in more friendly and cooperative activities with their peers. Schaefer maintained that these parents not only maintained "psychological control" but also provided a model of self-control and cooperative, friendly social behavior. Thus, it would seem that these parents exerted control without destroying the child's autonomy. Baumrind's (1971) findings were preschool children supported the contention that authoritarian parents as well as authoritative parents provide the direction and control necessary for the child to develop achievement oriented behavior, friendly and cooperative peer interactions, and generally more mature social behavior in the preschool than the children of the more permissive parents.

Summary

In presenting the findings on the relationship between authoritarian and controlling attitudes of parents and children's behavior, an attempt was made to interpret the significant relationships in light of current theory and research literature. Although one may speculate regarding the influence of authoritarian-controlling child-rearing attitudes on the behavior of the mother or father when interacting with the child, one should keep in mind that attitudes expressed on a questionnaire represent only a sampling of the universe of child-rearing views. For this reason it is important to relate the findings on one dimension or Factor, to other dimensions or Factors. In the following sections, the discussion of Hostility-Rejection and Democratic Factors, will attempt to relate and further clarify, the findings on authoritarian control.

The Relationship Between Hostile-Rejecting Child-Rearing Attitudes and Children's Social Behavior

Maternal Hostile-Rejection and Children's Social Behavior

A number of studies cited in the review of literature supported the contention that maternal hostility and rejection are related to aggression in children (Becker, et al., 1962; Becker and Krug, 1964; Bandura and Walters, 1959; Finney, 1961; Hoffman, 1960; McCord, et al., 1961; Sears, 1961; Sears, Maccoby and Levine, 1957; Sears, et al., 1953). Although the findings in the present study were not

statistically significant, they were in the predicted direction and showed positive correlations between maternal Hostile-Rejection Factor scores and the percent of time boys and girls spent in aggressive peer interactions ($r = .48, p < .10$; $r = .21, n.s.$). The low correlations for girls' aggression may be understood in light of previous research which has associated mother's hostility with children's aggression. Sears and his colleagues (1953) examined the consequences of punitiveness which was associated with maternal hostility, and the aggressive behavior of children. Punitiveness was defined largely by the degree of discomfort generated by the mother when the child acted in an aggressive or asocial manner. These investigators found that for boys, there was a positive relationship between punitiveness and overt aggression in the nursery school. Girls of both high and low punitive mothers showed less aggression in the preschool than girls of moderately punitive mothers. Becker and his colleagues (1962) reproduced almost exactly the findings relating punitiveness of mother to teacher's ratings of aggression in children. These findings might suggest that in the present study the relationship between boys aggression and mothers' Hostility-Rejection scores tended to be linear, while the relationship between girls' aggression scores and mothers' H-R scores might be curvilinear. A scattergram for girls' aggressive scores and mothers H-R scores, revealed a tendency toward a curvilinear relationship, but because

of the narrow distribution of scores and the limited number of girls in the sample ($N = 18$), no definite conclusion could be drawn.

The tendency for girls to engage in less peer interaction (Table 11) when mothers were high on the Hostility-Rejection Factor ($r = -.45$, $p < .10$), was statistically significant on the subscale Irritability ($r = -.48$, $p < .05$). Girls who engaged in less cooperative peer interaction (Table 12) had mothers who were high on the subscale Rejection of the Homemaking Role ($r = -.50$, $p < .05$). This was also true of girls who were the victim of a peer's aggression a high percent of the time in peer interaction ($r = .47$, $p < .05$). Taken in conjunction with Becker and Krug's (1964) findings that girls with mothers high on hostility were rated by teachers as being withdrawn and distrusting, one might speculate that the mothers in this study who express dissatisfaction with the homemaking role and are irritable with their child, tend to have daughters who engage in less peer interaction, are less likely to become involved in cooperative peer interactions and are the victims of peers' aggression more often than other girls. Becker and Krug (1964) suggested that mothers who express hostile and rejecting attitudes are less likely to supply positive reinforcement to the child, and thereby do not facilitate the development of a positive self-concept and pro-social behavior.

Paternal Hostile-Rejection and Children's Social Behavior

Fathers who scored high on the Hostile-Rejection Factor of the PARI (Table 11), tended to have daughters who engage in less peer interaction ($r = -.40$, $p < .10$), and interacted more with their teachers ($r = .57$, $p < .05$). These findings are consistent with the findings of Becker and Krug (1964) who suggested that girls tend to be withdrawn and submissive when fathers score high on the H-R Factor. These investigators suggest that like the mothers of withdrawn and socially less outgoing girls, the rejecting and hostile father fails to provide positive reinforcement for friendly and cooperative behavior. When the child of hostile or rejecting parents enters the nursery school, she is less secure and tends to withdraw from peers or be more dependent on the teacher.

Interaction of Parental Hostile-Rejecting Attitudes and Children's Behavior

In their study of the relationship between problem behaviors of children and parental attitudes, Becker and his associates (1962) found that when both parents tended to be hostile and rejecting, their children were more withdrawn and more aggressive toward their peers. In the present study, the presence of hostile-rejecting attitudes in the parental-child relationships, tended to be associated with aggressive behavior for both boys and girls, although this relationship was not statistically significant. Likewise, both boys

and girls were less likely to engage in cooperative peer interactions when parental hostility and rejection was present in the parental-child relationships ($r = -.27$, n. s.; $r = -.46$, $p < .05$; Table 13).

Sears and his colleagues (1953) found that the hostile parent tends to be more punitive with the child. Becker (1964) concluded that children whose parents are hostile and use punitive methods of discipline, tend to be more hostile and aggressive with their peers. He concluded that controlling parents who are hostile in their abilities toward the child, will choose methods of control which are aversive to the child, thereby generating feelings of hostility and frustration. The hostility and frustration will most likely be expressed in aggressive and hostile behavior with siblings and peers. To test this hypothesis, the Summed H-R Factor scores of the parents in this study, were divided at the median to form two groups: Parents considered High in hostility-rejection and parents considered Low in hostility-rejection. To determine the extent to which these parents were controlling in their child-rearing attitudes, each group was divided at the median on the Summed scores of the A-C Factor. Children were placed in groups according to parental patterns, and the frequency and mean of aggressive and cooperative peer interactions was computed. Table 21 presents the total frequency and mean of children's aggressive and cooperative behavior for each of the parental patterns.

TABLE 21. Mean and Total Frequency of Observed Aggressive and Cooperative Peer Interactions of Children Designated According to Parental Patterns on the Summed H-R Factor Scores and the Summed A-C Factor Scores.¹

Parental Patterns	Aggressive		Cooperative	
	total	mean	total	mean
Controlling and hostile	15	1.8	442	62.7
Controlling but not hostile	31	3.9	560	70
Hostile but not controlling	21	2.6	382	47.8
Neither Controlling or hostile	10	1.1	549	68.7

¹Chi square was highly significant for aggression ($p < .005$).

A chi square analysis was performed which showed that there was a highly significant difference ($p < .005$) between groups when frequency of aggression was the child variable. This finding suggests that grouping according to parental patterns, might be associated with children's aggression but not necessarily with cooperative peer interactions.

In addition, an examination of the children's peer interaction scores shows that the children of parents who were controlling but not hostile, not only were more aggressive but also more cooperative in their peer interactions. This finding is in accord with the findings of Baldwin (1949) who contended that children whose family atmosphere is what he called democratic, that is, parents exercise control without hostility, but with warmth, tend to show more aggressive as well as cooperative and friendly behavior in the preschool. Baldwin concluded that unlike the controlling parent who lacks warmth

and affection, the parent who sets the limits for the child's behavior, facilitates the development of self-control and fosters outgoing and pro-social peer interaction in the preschool setting.

Baldwin's contention seems to be supported by the data in the present study, which showed that parents who were High on hostility but not controlling, tended to have children who were more aggressive but less cooperative than parents who were controlling and hostile.

Although it is difficult to draw any conclusions on the basis of the present findings, there would seem to be some grounds for maintaining that parental control plays an important part in relation to children's social behavior. Parental hostility and rejection should be considered in light of other parental attitudes and behavior, when one is attempting to associate hostility-rejection with children's behavior.

The Relationship Between Democratic Attitudes and Children's Social Behavior

Maternal Democratic Attitudes and Children's Social Behavior

In their study of maternal attitudes and children's behavior, Schaefer and Baley (1963) found that maternal equalitarianism was significantly correlated for boys and girls with positive, happy, friendly behavior. Marshall (1961) found a negative relationship

between parental suppression and distance and children's friendly interactions with peers in the nursery school setting, while democratic attitudes as measured by the PARI were positively related to friendly interactions which included association and friendly approaches, and conversation with peers. The positive correlations were not statistically significant, however, although they may be taken as indicative of a trend which relates parents' high scores on the Democratic scales of the PARI to cooperative, friendly behavior of children in a preschool setting. Zunic (1966) also found that the PARI subscales of Approval of Activity, Comradship and Sharing, and Encouraging Verbalization were significantly positively related to contact and playing interactively among the preschool children in his sample.

The contention that democratic attitudes of the mother would be positively related to cooperative, friendly behavior of the child was not supported by the data in this study. Mothers' scores on the Dem. Factor were significantly related to girls' aggressive peer interactions (Table 16). In a positive direction, however, they were negatively related to boys' aggressive behavior, although the later correlation did not reach a statistically significant level ($r = -.40$, n. s.). No significant relationships were found between mothers' democratic attitudes and cooperative peer interactions. The same trend was also reflected in the subscales of the Dem. Factor (c. f. Table 16).

Parental Democratic Attitudes and Children's Social Behavior

Fathers' scores on the Dem. Factor were positively related for girls and boys to independent activity ($r = .50, p < .05$; $r = .45, p < .10$). The subscale Comradship and Sharing was positively related for girls to independent activity and negatively related to teacher interaction. These findings do not seem to support the contention that democratic attitudes of the fathers would be related to cooperative, friendly peer interactions and negatively related to aggressive peer interactions.

An examination of the correlations in Tables 15 and 16 suggests that there may be a trend for boys to be more involved in independent activity and less involved in either aggressive or cooperative peer interactions, when their fathers scored high on the Dem. Factor or subscales. Similarly, girls whose fathers scored high on the Dem. Factor, tended to engage in more independent activity, were less likely to be involved in cooperative peer interactions. Unlike the boys, however, they were more likely to be involved in aggressive peer interactions.

Interaction of Parental Democratic Attitudes and Children's Social Behavior

The findings for both mothers and fathers are difficult to interpret in light of the previous studies which have used the PARI scales to investigate the relationship between democratic attitudes of parents

and children's social behavior. Even when the parental interaction scores were correlated with children's behavior scores (Table 17), the relationships remain difficult to interpret and none of the correlations were statistically significant although the Summed scores of parents showed a tendency to be positively related to girls' aggressive peer interactions ($r = .43, p < .10$).

In examining the patterns of parental attitudes, the contention that the presence of more democratic child-rearing attitudes in the family would foster the development of friendly, cooperative behavior among siblings and peers, and thus lead to more cooperative, friendly peer interactions in the preschool was not supported by the data in the present study. Although chi square analysis showed that there was a significant difference among groups when the child variable was cooperation, children whose parents were highest on the Summed score for democratic attitudes, and tended to be in agreement, showed less cooperative behavior in the preschool than any of the other groups (Table 18). Equally difficult to explain is the finding that parents high in Dem. Factor Summed scores, who also showed high disagreement, had children who were observed in more cooperative peer interactions than any of the other groups.

Several investigators have attempted to clarify the relationship between democratic child-rearing attitudes and children's social behavior. Baldwin (1949) compared the effects of Democratic and

Controlled home atmospheres. Ratings were made by systematic home observation using the Fels Parent Behavior Rating Scales. These thirty scales are not entirely independent of each other, but form several clusters or constellations which were assumed to measure some common aspect or area of parent behavior. Two of these clusters, democracy and control, were assumed to represent opposite poles of parent-child relationships. The democratic home atmosphere, as defined by Baldwin, was characterized by general permissiveness, avoidance of arbitrary decisions, and a high level of verbal contact between parents and child (consultation about decisions, explanations of reasons for family rules, supplying answers to satisfy the child's curiosity). "Controlled" homes emphasized clearcut restrictions on behavior, and consequently, friction over disciplinary procedures was low.

The subjects in Baldwin's study were 67 four-year-old nursery school pupils whose homes had been visited and evaluated. Nursery school teachers and observers rated the children's behavior in school.

The findings showed that children from democratic and controlled homes manifested strikingly divergent behaviors. Those from democratic homes were generally active, competitive, and outgoing. They ranked high in aggressiveness, leadership, planfulness, and cruelty, and tended to be more curious, disobedient,

and nonconforming. If, in addition to democracy, there was a great deal of parent-child interaction (activity) in the home, these characteristics were most pronounced.

In democratic, but relatively inactive homes, characterized by more detachment, fewer verbal interchanges, and less leadership in the parent-child relationship, the consequences of democratic atmosphere were less marked.

Children from homes rated high in control, showed relatively little quarrelsomeness, negativism, disobedience, aggression, playfulness, tenacity, or fearlessness. Homes characterized by authoritarian control (high control together with low democracy) produced quiet, well-behaved, nonresistant children who were socially unaggressive.

It is interesting to note that Baldwin found a positive correlation between democracy and control, that is, most democratic parents practiced enough control to avoid the pitfalls of extreme nonconformity and permissiveness. The democratic parents in his study apparently exercised democratic behaviors while maintaining enough direction and control to enable their children to conform reasonably well to cultural demands for self-control and conformity, without restricting the child's freedom of expression, curiosity, originality, and fancifulness.

In a supplementary study, Baldwin and his colleagues (1949) described the consequents of three clusters of home variables, democracy, warmth, and indulgence, on children's personalities. The subjects were 56 nursery school children between the ages of 36 and 60 months who were rated on a battery of 45 behavior and personality variables.

Democracy was associated with warmth, that is, most highly democratic families provided strong emotional support for the child. As in the previous study, children from these homes were socially outgoing in both friendly and hostile ways, participating actively in school events, expressive aggression, and generally asserting themselves quite strongly. Their bossing and aggressiveness seemed to be socially successful and they enjoyed superior status in their own group. Moreover, the democratic home environment seemed to promote intelligence, curiosity, originality, and constructiveness.

Indulgence (babying, protecting) appeared to foster the development of the opposite kinds of personality characteristics. Children from these homes were relatively inactive, unaggressive, lacking in originality and of inferior social status. In addition, indulged children were apprehensive of physical activity and lacked skill in muscle activities.

Baldwin concluded that the effect of the democratic home as contrasted to the non-democratic one is to stimulate the child in

such a way that he is more actively engaged in peer-centered activities, that he is more successful in those activities, and that he is better able to contribute original creative ideas to the groups with which he interacts (Baldwin, 1949, p. 62).

More recent studies by Baumrind (1967, 1971) have expanded the findings of the previous studies. Baumrind found that parents of mature, competent children (Pattern I) were highly consistent, warm, loving, conscientious, and secure in their interactions with their children. While respecting their children's independence and decisions, they generally held firm in their own positions, and they were clear and explicit about the reasons for directives they gave. She concluded that such parents as those of Pattern I children provide a learning setting conducive to the acquisition of behavior that is both socialized and independent. These parents whom she called authoritative, appeared to do a great deal of "teaching", integrating attempts to control their children's behavior with giving information and reasoning. Their efforts promoted the child's learning of self-direction consistent with parental expectations, advance his social skills, encourage independence in decision-making, and stress mature ways of thinking and reasoning (Baumrind, 1967).

Baumrind went on to explain that parents who are warm and nurturant, are probably very effective reinforcers of the child's mature, independent behavior, using love and approval as rewards.

At the same time, these parents also provide excellent models of competent, decisive, reasonable, calm, self-assertive, and mature behavior.

The parents of Pattern II children (relatively discontent, insecure children who interacted very little with their peers) were by comparison with the other two groups of parents less nurturant toward their children and less involved with them. These parents, who Baumrind called authoritarian, were firm in their control and used power freely, yet they were not supportive or affectionate toward their children. Communication between them and their children was poor, attempts to convince their children through reason to obey their directives were infrequent, and the children were not encouraged to express themselves when they disagreed.

Baumrind found the parents of the least mature (Pattern III) children to be warm and nurturant, but they were low in control of the children. These parents whom she called permissive, made relatively few and relatively weak maturity demands and payed little attention to independence training. Compared with the other parents studied, they were lax in both discipline and reward, and more over-protective of their children. They did not motivate, teach, or reward the child's mature, self-reliant, independent behavior. Consequently, in the nursery school setting, the Pattern III children appeared immature, lacking independence and self-reliance.

Baldwin's and Baumrind's investigations, based on different conceptualizations and using markedly different techniques of assessment, yielded findings that are in many ways consistent. The data of both studies indicate that in young children, the qualities of competence, independence, affiliation, outgoingness, self-control, and self-reliance are fostered by nurturant, warm home environments in which independent actions and decision-making, as well as responsible and self-reliant behavior are encouraged and rewarded. Baumrind's data further suggest that in the context of the nurturant home, parental control or firmness, together with high maturity demands, but not authoritarian discipline, high punitiveness, high restrictiveness, or overprotection, promote young children's maturity and competence.

These findings suggest that more information on the relationship of democratic child-rearing attitudes and child behavior, could be deduced from an examination of a combination of democratic and controlling child-rearing attitudes than the democratic attitudes alone. One might speculate that parents who express democratic attitudes might exercise control to a greater or less extent. To test this contention, the Summed scores of parents on the Dem. Factor were divided at the median so that two groups of parents could be identified as High and Low on the Dem. Factor. These two groups were then designated as High or Low in authoritarian-control, by

dividing the Summed scores on the A-C Factor at the median. The frequency and mean of children's aggressive and cooperative behaviors are presented for each group in Table 22.

TABLE 22. Frequency and Mean of Aggressive and Cooperative Peer Interactions of Children for Four Groups of Parents Classified According to Summed Scores on the Dem. Factor and the A-C Factor of the PARI.¹

Parental Pattern	Aggressive		Cooperative	
	total	mean	total	mean
High Dem. x High Control	19	2.3	532	66.5
High Dem. x Low Control	23	2.8	456	56.8
Low Dem. x High Control	23	2.8	497	62.1
Low Dem. x Low Control	12	1.5	468	58.5

¹ Chi square analyses were non-significant.

Although it is difficult to draw firm conclusions on the basis of the parental patterns on democratic and controlling attitudes, one might speculate that children whose parents are high on democratic attitudes and tend to be more controlling, were more cooperative and aggressive, and showed more peer interactions than the other groups. These findings might be interpreted in light of Baldwin's (1949) study, which suggested that children from democratic homes whose parents exercised control, were more socially outgoing.

High democratic parents who exercise little control, seemed to have children who were less cooperative but were aggressive. Although these parents might be likened to the parents who were called "permissive" in Baumrind's study, these data can only suggest

hypotheses which need to be tested through further investigation of the combination scores on the PARI Factors.

Preschool Children's Social Behavior

In gathering the data on preschool children's social behavior it soon became apparent that the behavioral setting was exerting an important influence on the children's behavior. It was the impression of the observers that the activity level of the children, and group output of behaviors was mainly a function of differences in the program of activities characteristic of each session. For example, teachers structured the kind of activity that was taking place, that is, free play, story time, lunch or juice time, group activity time, and thus effectively influenced the kind of interaction which took place among the children. The teachers in both the morning and afternoon groups frequently introduced play activities and games that provided discriminative stimuli for a wide variety of nonaggressive behavior. It was also observed that the teachers seemed able to anticipate social settings in which aggressive behaviors were likely to occur, and by removing one or more of the children or introducing a new activity, she decreased the probability of aggressive behaviors. These observations suggested that the nature of these "structuring" attempts should be explored in detail through further investigations of the preschool behavioral setting.

The study by Henry and Sharpe (1947) supports the hypothesis that the more structured nursery school has less total aggression for the group. Nevertheless, group output of cooperative behavior and assertive-aggressive behavior is more than just the teacher's skill in programming play activities. Patterson and his associates (1967) found that more aggressive peer interactions occurred in outside settings than in the indoor setting. This was also the impression of the six observers in the present study, however, no attempt was made to verify this impression through a comparison of indoor and outdoor peer interactions, since the time sampling of each child's behavior was done randomly, and included both indoor and outdoor observations taken at random.

Some indication of differences between the Morning Session and Afternoon Session may be observed by a comparison of the frequency of social behaviors observed in each group. Table 23 presents the mean and frequency of the social behaviors observed in the preschool, for the Morning and Afternoon Sessions.

An examination of the data yielded that the amount of independent activity was about the same for both groups, but on the average, children in the afternoon group seemed to have more teacher contact and less peer interaction than the morning group. On the average, the morning group showed more cooperative peer interactions, as well as aggressive behavior and victim of aggression.

TABLE 23. Mean and Frequency of Activity and Peer Interactions for Children in the Morning and Afternoon Sessions.

Session	Activity*			Peer Interaction**			total mean
	ID	TI	PE	CO	AG	VC	
Morning (N=14) 6 boys, 8 girls	376 27.8	459 32.7	1079 77	1001 71.5	37 2.6	41 2.9	
Afternoon (N=19) 9 boys, 10 girls	515 27.1	908 47.7	1123 59.1	1123 55.8	30 1.5	22 1.2	

*Activity

ID - Independent Activity

TI - Teacher Interaction

PE- Peer Interactions

**Peer Interactions

CO - Cooperative

AG - Aggressive

VC - Victim of Aggression

These findings suggest that while the teachers in the Afternoon Session maintained a structured environment, this was accomplished by teacher contact rather than by planning cooperative activities among peers. The data suggests that the Morning Session was also structured, as might be inferred from a low frequency of aggression peer interactions, yet the structure seems to be more directed toward planning activities which would involve the children in cooperative peer interactions. While the children in the Morning Session averaged about one aggressive behavior more per child, they engaged in an average of 18 more peer interactions per child. One might infer from this that the children in the Morning Session were interacting with their peers at a much higher rate than the children of the afternoon group, which might account for the higher rate of aggressive behavior. One might conclude from these observations that the

teacher exerts a very powerful influence on the behavior of the children. Any deductions made from data gathered in the preschool setting should take into account the teacher variable as an important influence on the observational data.

For the purposes of the present study, the assumption was made that the teacher variable did not so influence the data that any analysis would be rendered invalid. The position was taken that although the teacher does influence the behavior of the children in the preschool setting, individual differences among children and between the sexes could be measured through the time sampling technique and direct observation.

The head teacher in each session was asked to identify those children whom she felt were the most aggressive, that is, those who were observed by her in peer interactions which involved bodily attacks, verbal attack, infringement of another's property, or physical attacking of another child with an object. Teachers could readily identify those children whom they considered more aggressive, and these names were compared with the subjects who were observed during the 30 minute sampling to be high on aggressive peer interactions. Every child who had been observed in five or more aggressive behaviors during the observational periods, was identified by the teacher as a child whom she regarded as engaging in aggressive behavior. Eight children who were identified by their

teachers as aggressive, were observed in more aggressive peer interactions during the 30 minutes of sampling, than their peers. The range of aggressive behaviors for these eight subjects was five to ten observations.

One child was observed in only five peer interactions during the 30 minutes of observations during the 30 minutes of observation. A follow-up observation and an interview with the teacher confirmed that this child did not interact with his peers in the preschool setting. The data shows that he spent most of his time in independent activity and when he did interact, he seemed to merely attend to his peers rather than actively cooperate in play. On the other hand, he was the victim of aggression during two of the five peer interactions observed. Having data of this detail available to the preschool teachers, should provide a valuable supplement to their own observations, as well as providing a method for measuring children's behavior.

The differences in social behavior between the sexes can be ascertained by a comparison of the mean frequency of each behavior category. Table 24 presents the averages of each of the behavior categories on activity and peer interaction.

On the average, it would seem that girls engage in more cooperative peer interactions, while boys tend to be more aggressive in their peer interactions than girls. This is consistent with

TABLE 24. Averages of Activity and Peer Interaction for 15 Boys and 18 Girls.

Social Behavior	Boys		Girls	
	Mean	S.D.	Mean	S.D.
Independent Activity	26	14	28	13
Teacher Interaction	46	15	37	11
Peer Interaction	63	26	69	18
Cooperative	57	24	67	18
Aggressive	3.4	3.6	1.4	1.4
Victim of Aggression	2.5	3.6	1.4	1.6

other studies (Henry and Shapre, 1947; Patterson, et al., 1967) that found that boys tend to be more aggressive than girls in the preschool setting.

Figure 3 presents a graphic comparison of the differences between the sexes on each of the behavioral categories of the Social Interaction Scale. An examination of the data suggests that on the average, boys tend to be more physically aggressive than girls. Although boys and girls average about the same in cooperative play, positive physical contact and helping peers, girls show a trend toward more verbal interactions with peers. On the average, both boys and girls will defend their property against the infringement of a peer, but boys are more likely to remain passive, or cry when attacked by a peer. Boys tended to withdraw from peer interaction when approached by a peer more often than girls, and boys also showed a tendency not to cooperate with peers more frequently than girls.

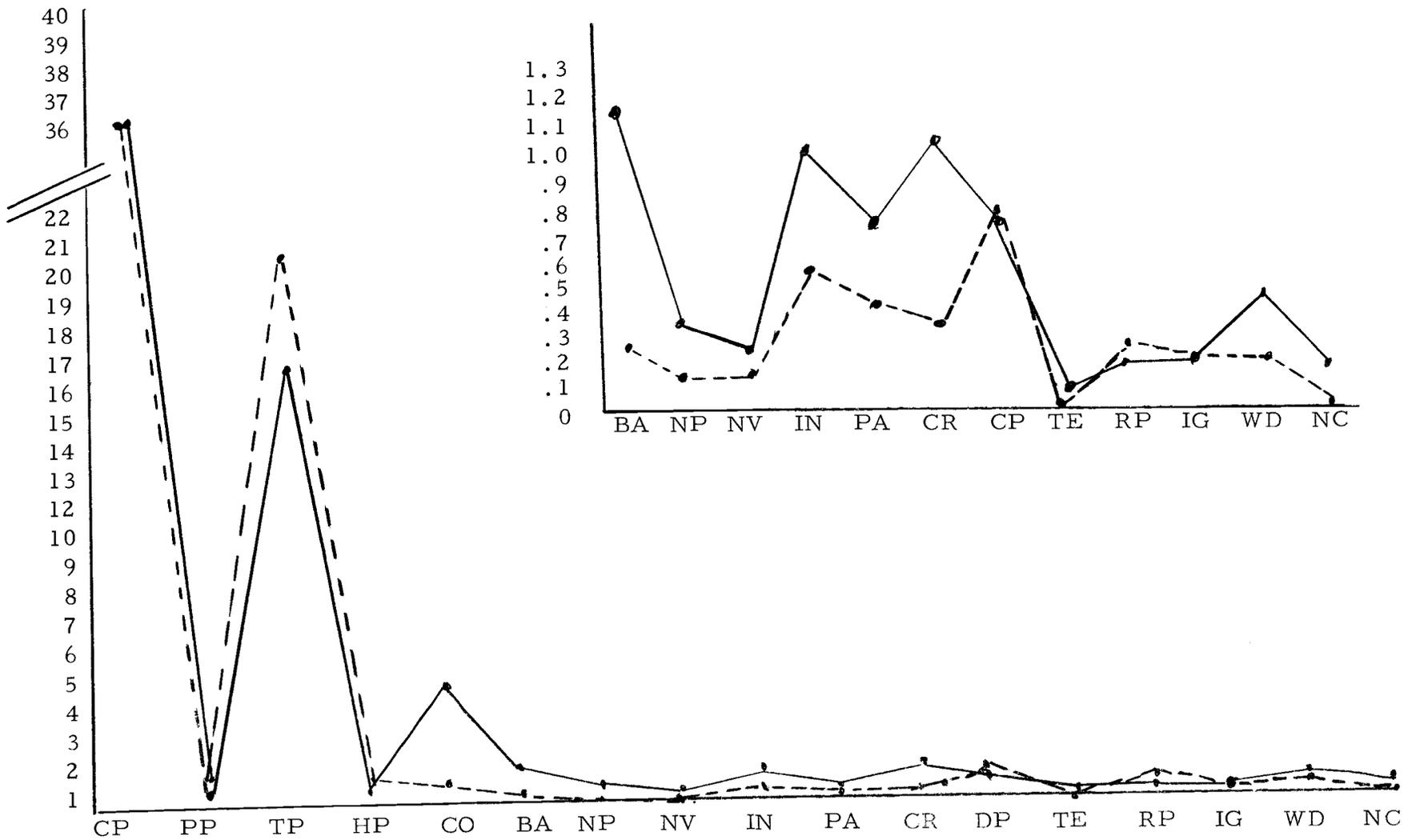


FIGURE 3. Mean Frequency of Observed Behavior Categories on the Social Interaction Scale for 15 Boys and 18 Girls.

These findings must be taken with caution, since they are based on such low frequencies of observed behavior. They do suggest that patterns of social behavior can be identified and verified through empirical research. Future investigations of preschool children's social behavior may very well substantiate the observations of this study.

Limitations and Suggestions for Further Research

Sample

The findings reported in this study are based on data gathered from middle class families, and consequently should not be generalized to lower socioeconomic groups. A comparison with other socioeconomic classes might provide additional information on the importance of socioeconomic level on the relationship between parental child-rearing attitudes, and children's behavior. In the same vein, replication through cross-cultural and cross-regional studies might also provide a better understanding of the influence of extra-familial factors on parent-child relationships.

A major limitation of the investigation was the small number of subjects used in the study. Since one of the concerns of the study was to examine the differences between sexes, it would have been advantageous to have more families in the study. Future investigations should strive for a larger sample in order to analyze between

sex differences and age differences. The findings also suggest that one consider including different age levels since age of the child may significantly relate to parental attitudes and also to social behavior in the preschool setting.

A number of studies have attempted to relate I.Q. scores to parental attitudes, but few have tried to connect I.Q. scores with children's social behavior which might provide valuable information for planning preschool programs.

With a larger sample, one might look at the differences associated with sibling status, years of marriage and marital satisfaction of the parents, as well as comparing single parent families with intact families.

Instruments

The modified form of the PARI seems to have several distinct advantages over the previous form. The use of positive and negative statements apparently controlled for acquiescence response. Positive and negative weighted scores seems to differentiate among parental scores better than the Likert-type scale which was used in previous studies. The arrangement of subscales according to the same Factors for mother and father, simplified comparisons between parents and greatly simplified the analysis of the data.

Several parents commented that they found it difficult to respond to statements worded in the third person. Even though instructions were given to answer the statements as they pertain to your child, apparently parents would respond as they felt most people would behave. One parent commented that he found it difficult to agree or disagree with statements since the wording of many statements did not represent his attitude toward child-rearing. It would seem therefore, that the use of the PARI as a parental attitude measurement has serious drawbacks, and it is the opinion of the present investigator that additional information regarding parental behavior either through interviews with the parents, observations of the family in the natural setting, or a structured situation with parents and children, is necessary to provide a sound analysis of parent-child interaction. The PARI can provide some information regarding the parents' child-rearing attitudes, but the combination of observational data with the attitude measurement seems to be the more advantageous approach.

The Social Interaction Scale seemed to be a useful technique for recording observations of peer interactions in the preschool setting. The time sampling technique which recorded behavior during 15 second intervals, enabled the researchers to record children's behavior in the Laboratory Setting, and to differentiate subjects according to a behavioral profile. However, the present

investigation did not yield sufficient information on the independent activity or teacher interactions of the children. It would seem that subcategories on these two dimensions would provide a more comprehensive description of the children's behaviors in the preschool and allow for a more complete analysis of the relationship between parental variables and children's behavior.

Behavioral Setting

Since the behavioral setting played such an important part in influencing the children's social behavior, generalizations regarding children's social behavior must be guarded. Future investigations carried out in a variety of settings, might provide data which could be compared with children's behavior in a Child Development Laboratory.

It was the impression of the researchers who participated in the gathering of data in the preschool setting, that more information could be gained by scheduling the observations for each child according to a predetermined program which would include specific group settings, such as lunch, music, story time, and indoor and outdoor free play time. It was also suggested that an observation be made while the children are engaged in a structured situation which is not supervised by the teacher. This would provide an opportunity for observing the peer interaction in a group when no adult is

present. These observations could then be compared with situations where the adult is in contact with the children.

Analysis of the Data

A serious restriction was imposed on the analysis of the data because of the low frequency of many of the categories of the SIS. It was necessary to combine two categories and perform the analysis only on the major behavioral dimensions. It would seem necessary to extend the sampling time for each child in order to provide enough data for a more detailed analysis.

To examine the interaction of mother and father on the PARI Factors, a multiple regression analysis was used. Although this procedure might provide valuable information on the interaction of parental attitudes, the results were non-significant in this study. Future investigators might want to consider the interaction among several Factors rather than a single Factor. This approach would call for an extension of sampling time as well as an increase in sample size.

The use of discrepancy scores and summed scores did not seem to provide much additional information on the relationship of parental attitudes, yet the present investigator had the impression that the presence of a child-rearing attitude in the parental-child relationship, or the agreement between parents could be significantly related

to child variables. Future research could focus on the question of the adequacy and usefulness of the discrepancy and summed scores.

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APPENDIX

APPENDIX A

Parental Attitude Research Instrument

Before proceeding to a discussion of the Parental Attitude Research Instrument, an examination of the concept of attitude and the psychological measurement of attitudes will provide a rationale for the measurement of parental attitudes.

Concept of Attitude. Like many psychological variables, attitude is a hypothetical or latent variable, rather than an immediately observable variable. According to Green (1954) the concept of attitude does not refer to any one specific act or response of an individual, but is an abstraction from a large number of related acts or responses.

In general terms, a latent variable is used to describe the consistency or covariation of a number of different responses to stimuli of the same general class. The variable is viewed as mediating the stimuli and the responses. The responses are said to covary because they are all mediated by the same hypothetical variable (Green, 1954).

Among the many definitions of social attitudes that were examined, a common theme that suggests the manner in which attitude may be viewed as a latent variable emerged, namely, the concept of attitude is viewed as a consistency among responses to

a specified set of stimuli, or social objects. For example, Krech and Crutchfield view attitude as ". . . an enduring organization of motivational, emotional, perceptual, and cognitive processes with respect to some aspect of the individual's world" (1948, p. 152). An enduring organization of psychological processes seems to imply a consistency of response patterns. For Doob (1948) an attitude refers to an implicit response that is both anticipatory and mediating in reference to patterns of overt responses, that is evoked by a variety of stimulus patterns, and that is considered socially significant in the individual's society. Overt responses are consistent in that they are mediated by the implicit response. Allport after reviewing many early definitions of attitude, concluded that "an attitude is a mental and neural state of readiness exerting a directive influence upon the individual's response to all objects and situations with which it is related" (1935, p. 810). Campbell (1950) suggested that a social attitude is evidenced by consistency in response to social situations.

It is apparent from these examples that the concept of attitude implies a consistency or predictability of responses. An attitude governs, or mediates, or predicts, or is evidenced by a variety of responses to some specified set of social objects or situations. Campbell has summarized this view in presenting an operational definition of attitude. "An individual's social attitude is an (enduring)

syndrome of response consistency with regard to (a set of) social objects" (Campbell, 1950, p. 31).

Campbell's definition does not divest attitudes of their affective and cognitive properties, which may be properties of, or correlates of, the responses that comprise the attitude. However, attention is focused on the characteristic of attitude that is basic to all attitude measurement: response covariation. As Green (1954) has pointed out, in each measurement method, covariation among responses is related to the variation of an underlying variable. The latent attitude is defined by the correlations among responses.

Attitude measurement. Guttman (1950) developed the idea of a universe in connection with his scaling method, which provides a useful approach to the general measurement problem. The content of an attitude is determined by the responses which constitute it. The set of behaviors comprising an attitude is called an attitude universe. The elements of this universe are manifest variables, that is, the responses to specific situations. A sample of these elements is used to measure the attitude; from this sample of behavior an inference can be made about the entire universe. Guttman maintains that if a sample of elements is homogeneous, it is reasonable to infer that the universe also is homogeneous. Furthermore, the scores of individuals on this scale may be taken as a representative of their behavior as described by the universe of elements. On the

other hand, Guttman pointed out, homogeneous subsets of elements may be found within the original universe, implying that several dimensions are represented in the original attitude universe (Guttman, 1950).

Conceptually, then, attitude measurement involves sampling a behavior universe, and measuring the universe by means of the sample. This means that the sample of elements should be representative. If only a small subset of the total attitude universe is sampled, then inference beyond this subset is not legitimate. Green (1954) feels however, that in practice, it is seldom the universe, but only the sample that is being measured. He goes on to caution that although the elements of the hypothetical universe may be characterized by means of the sample, it is important not to over-generalize. Green makes an important point which has implications for the investigation of parental attitudes and behavior.

From a sample of verbal responses to questions about opinions, one should not make inferences about behavior other than verbal responses to similar verbal questions. It may be that responses to these verbal questions are correlated with responses in nonverbal situations, but this must be determined experimentally (Green, 1954, p. 340).

Here Green proposes one of the most significant questions with which investigators of parental attitudes must contend, namely, "What inferences can the investigator draw on the basis of verbal responses to questions asked on a paper-pencil questionnaire or

an interview?" In other words, the researcher must ask the question, to what extent do the verbal responses correlate with nonverbal or manifest behavior. As Green suggested, the relationship between expressed attitudes and nonverbal or manifest behavior must be determined through experimental analysis. The problems and limitations of inferences concerning the relationship between expressed attitudes and parental behavior will be taken up later in the chapter.

Attitude scales. An attitude has been defined as a latent variable, since its meaning is derived from the covariation in responses in some attitude universe. To obtain a more precise definition of an attitude, a number of researchers have developed mathematical models that relate the responses, or observed variables, to the latent variable.

Lewis Thurstone in 1928, published an influential paper with the title Attitudes Can Be Measured, in which he outlined the basic rationale of his new subjective metric approach for the general problem of measuring social attitudes. Essentially, he proposed that a group of judges be asked to evaluate the degree of favorableness or unfavorableness of selected statements toward some attitudinal object, using such judgement methods as paired comparisons, rank order, equal-appearing intervals, or successive intervals. In the method of paired comparisons, for example, judges were presented with all possible pairs of the selected statements and were asked

to indicate which statement in each pair appeared more favorable. In the method of equal-appearing intervals, subjects were instructed to sort the statements into a set of ordered categories, usually nine or eleven in such a way that the categories appeared to represent equally spaced gradations of opinion. Scale values representing the relative favorableness of each statement toward the issue in question were then derived by applying the law of comparative judgment (or some closely related mathematical model). Statements were selected for the final scale to produce an evenly graduated series of scale values for the entire range of opinion. These statements were subsequently administered to appropriate groups of respondents, who were asked to indicate their agreement or disagreement with each item. The favorableness of each respondent's attitude was estimated by the average scale value of the items he endorsed. Thurstone's judgment methods were widely applied to construct attitude scales, which gave rise to a number of issues for administration and interpretation of attitude scales (Edwards, 1957; Green, 1954; Torgerson, 1958; Messick, 1956).

In 1932, Rensis Likert proposed a quite different approach to attitude measurement, namely, the application of item-analysis techniques from the mental testing field directly to the subjects' responses of agreement and disagreement. No prior judgments of the favorableness of the statements were required (Likert, 1932;

Murphy and Likert, 1937). In this procedure, which is called the method of summed ratings, subjects usually indicated the degree of their agreement or disagreement with each item by selecting one of five response alternatives, for example, strongly disagree, disagree, undecided, agree, and strongly agree. These response categories were typically assigned simple scoring weights of one to five, and a respondent's scale score was taken as the sum of his scores on the separate items. Statements were selected for the final attitude measure in terms of their discriminatory power in significantly differentiating between subjects scoring in the upper and lower quartiles of the total scale (or in terms of the magnitude of correlation between the item response and total score).

Other response methods of attitude scaling have been subsequently introduced, notably scalogram analysis by Guttman and latent structure analysis by Paul Lazarsfeld. Scalogram analysis is a technique for ordering items and individuals so that a respondent agreeing with a particular item will also agree with all items lower in rank order. If there were no exceptions to this pattern, it would be possible to reproduce from a person's total score alone his separate responses to each of the statements. Such a set of items, called a perfect Guttman scale, is said to be unidimensional. However, since perfect patterns of responses rarely occur, one must evaluate the extent to which a unidimensional scale has been achieved

in practice by means of some coefficient of reproducibility that indexes the proportion of item responses correctly reproduced (Guttman, 1950).

Lazarfeld's latent structure analysis provides a general mathematical model relating the probability of item endorsement (and of joint item endorsement) to positions on an underlying latent variable, such as attitude. Depending upon the assumptions made about the distribution of the attitude variable and about the form of the function relating probability of endorsement to the latent variable, it is possible to show that many other measurement methods, such as summated ratings, Guttman scaling, test theory, and factor analysis, are special cases of latent structure analysis (Lazarsfeld, 1960; Green, 1954).

Measures of attitude developed by any of these methods should be evaluated, as Shaw and Wright (1967) have emphasized, in terms of the same standards as any other psychological measure, namely, in terms of the consistency and reliability of response and the convergent and discriminant validity exhibited by its pattern of correlates. This later requirement of construct validity is necessary to support the inference that the observed consistency in response to social objects is due to (and signifies the operation of) an underlying social attitude.

Methodological problems in attitude measurement. Each psychological scaling method either states or implies a scaling model; the chief problem of measuring an attitude is one of selecting a scaling model by which the response data can be related to the attitude variable (Shaw and Wright, 1967).

The problem of the quantification of psychological attributes has been the subject of much debate and will not be considered here (Fishbein, 1967). The rationale underlying the measurement of attitudes has been discussed elsewhere (Allport, 1935; Campbell, 1950; Fishbein, 1967; Messick, 1956; Shaw and Wright, 1967; Thurstone, 1928). The present treatment will be limited to a discussion of the evaluation of scales and the problems involved in the selection of items and limitations of questionnaires.

Before proceeding to a discussion of the reliability and validity of attitude measurement, it might be well to clarify terms that are used in the assessment of attitudes. In its broadest sense, measurement is the assignment of numerals to objects, events, or persons, according to rules (Stevens, 1951; Lorge, 1951). With the rules properly defined, the numerals may be used to represent relations among the objects similarly measured. The results of a measurement is a scale. A scale comprises the set of numerals given to the objects by using a certain rule of assignment. The objects are then said to be scaled (Shaw and Wright, 1967).

Attitude measurement consists in assessing an individual's responses to a set of social objects or situations. This is done by observing a sample of behavior from an attitude universe. Each behavioral element in the attitude universe is the response to a particular situation or object. The particular situation or object that evokes the response, together with a specified set of response categories, is called an item. An item is a manifest variable (Shaw and Wright, 1967).

A number assigned to an individual's item response is an item score. Any collection of items will be called a questionnaire. Other terms, such as test, inventory, and scale, have been used in the literature (Shaw and Wright, 1967). The term questionnaire is free from some of the connotations of the other terms. A questionnaire may contain items from different attitude universes, although usually only a single universe is represented (Green, 1954).

An individual whose attitude is being measured is called a respondent. A number, derived from his item responses, that represents his position on the latent variable is called a scale score, or simply a score. The scores from the attitude scale. The scale implies a system for obtaining a score from an individual's item responses (Shaw and Wright, 1967).

Green (1954) has suggested that to evaluate an attitude scale, statistical evidence is needed concerning the properties of the scale, that is, the particular scaling model, and the item analysis. The reliability of the scale is of primary importance. A clear statement about the attitude universe represented by the scale should also be provided. Evidence of correlation validity should also be presented, since the utility of the scale will depend on its relationship with other variables and its ability to predict other behavior (Fishbein, 1967; Green, 1954; Shaw and Wright, 1967).

Reliability. The reliability of the scale is an index of the extent to which repeated measurements yield similar results. If chance fluctuations cause relatively large shifts in an individual's score, then any particular determination of the score is practically meaningless (Green, 1954).

Reliability has two aspects, which Cronbach (1969) has called stability and equivalence. If the same questionnaire is administered to the same group of respondents on two separate occasions, there will be some shifts in the scores of individuals. The correlation between these scores is the test-retest reliability or the coefficient of stability. Low stabilities of attitude scales have been defended on the grounds that attitudes are dynamic and should be expected to change (Shaw and Wright, 1967). However, Green (1954) has pointed out that there is considerable difference between consistent shifts in

response syndromes and sporadic changes in specific response tendencies. The problem for the researcher, therefore, is to determine the usefulness of a particular scale, for example, parental attitudes, when one is concerned with measuring the latent variable or consistency of attitude, independent of other variables.

Green (1954) suggested that one way to overcome the difficulty of reliability in the construction of an attitude scale, is to develop scales based on equivalent samples of items from the same universe. The correlations between such "parallel" scales would show a coefficient of equivalence, or parallel-form reliability. Such scales could then be used interchangeably.

The homogeneity of the scale refers to the interrelationships among the items. The Kuder-Richardson formulas, which Cronbach (1969) has called coefficient \underline{a} , have been widely used as estimates of equivalence.

Validity. The problem of validity in attitude measurement is concerned with understanding just what the scale measures. If one accepts the definition of attitude presented here, then it measures an attitude universe. The major problem in validation is to delimit and define the attitude universe.

Green (1954) distinguishes three kinds of attitude universes. When the attitude questionnaire is designed to elicit some verbal response which reflects the respondent's opinion, or some other

form of self-description, these attitude universes are called elicited verbal attitudes. The opinions expressed by individuals in normal conversation with friends, Green (1954) classified as elements of spontaneous verbal attitudes. A third class of behavior which refers to verbal or nonverbal behavior directed toward an object in the referent class, Green (1954) referred to as action attitude.

Green's classification is helpful for distinguishing the discrepancies noted in several studies which have attempted to demonstrate a relationship between expressed child-rearing attitudes, and maternal behavior in an experimental situation. For example, Brody (1968) administered the Parent Attitude Research Instrument (PARI) to a group of mothers, and then observed their behavior with their child in an experimental situation. She divided the 50 subjects into high and low groups on the basis of Authoritarian, Hostility-Rejection, and Democratic factors of the PARI, and compared the high and low attitude groups on scores of maternal behavior determined by observing individual mother-child interaction sessions in an experimental play setting. The results showed that high and low groups differed significantly as hypothesized on nonattention, directing, restricting, forbidding, verbal interaction, interactive play, and rate of compliance. There were no significant differences between the groups with regard to attentive observations, responsiveness to questions, helping, criticism, appraise-approval-affection,

teaches-explains-demonstrates, questions, and structuring. She also found that seven of the fifteen behavioral indices showed a significant relationship to maternal attitudes. The author concluded that the failure to find more significant relationships was due to the limitations of the attitude measurement instrument. However, an equally plausible explanation might suggest that a mother's expressed attitudes toward child rearing may not always be reflected in specific observable behavior. This would be especially true when she is being observed in a laboratory situation.

Although critics of attitude measurement have pointed out that attitude scales often fail to reflect specific behavior in experimental situations, or show only low correlations with specific child rearing practices, the determination of the validity of an attitude scale can not be demonstrated solely on the basis of directly observable parental behavior, since observations of overt behavior may not always provide an accurate index of attitude (Anastasi, 1968). The relationship between "what a person says", and "what a person does", as well as the relationship between publicly and privately expressed attitudes, are recognized as special instances of the difficulties related to the validity of attitude measurement (Anastasi, 1968).

Problems inherent in other forms of self-report, are also found in attitude measurement. The researcher must deal with the respondent's tendency to respond in a "socially desirable" way.

Forced choice responses have attempted to control for "social desirability", yet many researchers feel that the forced choice response greatly inhibits the respondent's need to express variations in attitude and feeling which might have significant implications for the researcher (Schaefer, 1961).

The problem of acquiescence, or the tendency to respond to each item in a similar way, as well as the tendency to respond to the extremes are other problems with which the researcher must contend (Cronbach, 1969).

In addition to the problems concerning validity, reliability, questionnaire construction, sampling and administration, the investigator must be concerned with an examination of individual response items, for example, are the questions formulated so as to avoid ambiguity, suggestion and other sources of error; has adequate sampling of the population in terms of size and representativeness, along with control for the influence of socioeconomic variables been reported in the publication materials? These and similar questions should be considered in evaluating the usefulness of an attitude research instrument.

Development of the Parental Attitude Research Instrument

In a general review of the questionnaire studies prior to 1958, Schaefer and Bell (1958) concluded that while there was considerable consensus that objectively measured attitudes toward child rearing

are significantly related to personality development in children, problems in methods of analysis and design left considerable doubt concerning the significance of the findings. They began their effort to develop a better instrument with a conceptual analysis of the domain of parental attitudes. Three clinical psychologists sorted items from previous work by Mark (1953) and Shoben (1949) into subscales which seemed psychologically homogeneous. Through conference, a common conceptual scheme was agreed upon and all items were placed into a category. Next examined was the percentage of items in each category which had shown significant discrimination in the studies by Mark and Shoben. They found that items expressing attitudes generally approved by psychologists were poor discriminators since nearly every one endorsed them. This led to a concentration of effort on the development of the more differentiating scales with items typically phrased in the "bad" direction; however, positively phrased "rapport" scales were also added to make the test-taking task more acceptable to parents.

In order to expand the coverage of attitudes by consideration of theory and of the writings of others, an investigation was made of relevant literature and new items were formulated that reflect these constructs. They then conducted a series of test runs to find items revealing variation in attitudes and showing internal consistency with the other items in the subscale. Next, the eight to ten item scales

were tested out on samples of 60-100 primiparae, multiparae, and nurses to further evaluate internal-consistency reliability. Finally, a set of 23 five-item scales (Form IV) was selected and tested for internal-consistency reliability. Except for the "rapport" scales, which had low variance, all but one of the internal-consistency coefficients exceeded .50 for both primiparae and multiparae.

Several factor analyses have attempted to examine the structure of the PARI scales for women. The first analysis used Form II of the PARI with a sample of 100 unmarried student nurses (Schaefer and Bell, 1957). Five factors were obtained from the analysis and named as follows: "suppression and interpersonal distance", "hostile rejection of the homemaking role", "excessive demand for striving", "overpossessiveness", and "harsh punitive control". The correlations among the factors were not given in the report. Subsequent factor analyses by Zuckerman, Ribback, Monashkin, and Norton (1958) and by Schaefer (1961) indicated the presence of three factors. Schaefer's factor analysis was based on a sample of 100 multiparous wives of military personnel a few days after delivery. Zuckerman, et al., analysis was based on 222 mothers, including mothers of nursery school children, mothers of students in extension courses, and mothers participating in church groups. To this "normal" sample were added 60 mothers of young adult psychiatric patients, and 62 mothers of children referred to a child guidance

clinic and an inpatient children's psychiatric service. The two major factors have been labeled by Schaefer and Bell as "approval of maternal control of the child" and "approval of maternal expression of hostility." Zuckerman, et al., named the first factor "authoritarian control" and the second factor "hostility-rejection". Since the later terms have been used more frequently in subsequent research, these will be used throughout this study. The third factor involved primarily the "rapprochement" scales and has been termed "democratic attitudes". Most of the 23 scales in Form IV of the PARI had appreciable loadings on the authoritarian-control factor. Rejection of the homemaking role, irritability, and marital conflict were the main scales loading on hostility-rejection, while encouraging verbalization, equalitarianism, and comradeship and sharing loaded on democratic attitudes.

Two factor analyses have been reported for an adaptation of the PARI for fathers. Nichols (1962) revised the first form (Schaefer and Bell, 1958) after administering the instrument to 30 fathers. The revised form containing 25 scales with five items per scale was factor analyzed, and a factor structure for fathers that was very similar to the three-factor solution for mothers was revealed. The three main factors focused on authoritarian control, marital conflict, and democratic attitudes. In addition, Nichols obtained two more specific factors focusing on punishment and firm discipline. Nichols reported reliabilities in the .80's for factor scales, with low

correlations between scales. Cline (1963) has also reported the results of a factor analysis which he conducted with a group of 69 men. He reported Spearman-Brown reliabilities for 30 scales ranging from .29 to .86. Three main factors emerged: Authoritarian-Control; Democratic; Hostility-Rejection. Less significant were the factors of Non-punishment, Independence-achievement orientation, Male Dominance, and Seclusiveness.

The work of Zuckerman and Norton (1961) and of Zuckerman, Norton and Sprague (1958) have demonstrated the influence of response sets, particularly an acquiescence-response set (tendency to agree) in their factor-analysis study of the PARI. Zuckerman found that the democratic attitude factor, in terms of its content, was logically the opposite pole of the authoritarian-control factor, yet they were uncorrelated. Nichols (1962) obtained similar results for fathers. These results implied that many parents found it possible to agree equally well with attitudes advocating equalitarianism and comradeship and sharing as with attitudes advocating authoritarian-control. Schaefer and Bell (1958) recognized the possibility of an acquiescence-response set, when they came to the conclusion that items discriminating best between parents of normal children and parents of problem children were those which were usually stated in a "bad" direction. Statements about child-rearing attitudes which were phrased in a "good" direction tended not to be

produce much differentiation, because everyone agreed with them. In view of this, the PARI was designed with most statements phrased in the "bad" direction. This made it possible for an acquiescence-response to be confounded with negative attitudes on the PARI.

Measurement of Parental Attitudes.

A modified version of the PARI will be used in the present study; it is found in Appendix A. This version was used in a study of parental attitudes by Emmerich (1969) who selected scales that had substantial loadings on one of the three major factors isolated in the Zuckerman, et al. (1958) factor analysis of the mothers instrument and the Nichols (1962) study of fathers. Different forms were used in the present study, for mothers and fathers but the forms were very similar with respect to scale contents and factorial structure. The three factors and their corresponding scales (for mothers) were as follows:

(1) Authoritarian-Control: Fostering Dependency, Seclusiveness of the Mother, Suppression of Aggression, Excluding Outside Influences, and Suppression of Sexuality; (2) Hostility-Rejection: Marital Conflict, Rejection of the Homemaking Role, and Irritability; (3) Democratic Attitudes: Encouraging Verbalization, Equalitarianism, and Comradship and Sharing. For the fathers, the three factors and their scales were as follows: (1) Authoritarian-Control: Fostering Dependency, Devotion to the Father Role; Suppression of Aggression, Excluding Outside Influence, and Suppression of Sexuality;

(2) Hostility-Rejection: Marital Conflict, Rejection of Family Life, Rejection of Interaction with the Child; (3) Democratic Attitudes: Encouraging Verbalization, Equalitarian Treatment of Children, and Comradship and Sharing.

Emmerich (1969) reported that items were stated so that a general tendency to agree irrespective of content would result in nonextreme total scores on each of the factors. For Authoritarian-Control, 13 items were stated so that agreement signified the presence of the attribute, and 12 items were stated so that agreement indicated its absence. The corresponding numbers of items were seven and eight for Hostility-Rejection and eight and seven for Democratic Attitudes. The final set of items contained a mixture taken from Schaefer and Bell (1958) and Zuckerman (1959), with seven reversed items formulated by Emmerich (1969).

Odd-numbered items in the sequence indicate the presence of the attribute in question if the parent agrees with the item, and even-numbered items signify its absence if there is parental agreement. Items from the same scale were separated in the item sequence.

The format and the response scale are essentially the same as in the original PARI, scoring differed in accord with Emmerich's revision. Strong endorsement of an item was scored +2, mild endorsement +1, mild disagreement -1, and strong disagreement -2. For items where agreement signified absence of the attribute in

question, the signs were reversed. Thus, measures used in the analyses of the data were the total scores summed across appropriate items and scales for each of the three factors. These scales have the advantage of covering, in an objective way, a wide range of parent attitudes and also of presenting data in a manner which made statistical treatment easily possible.

Influence of Education

PARI scores seem to be markedly sensitive to educational influences and readily reflect differences in educational levels. Authoritarian-Control attitudes were negatively related, in various studies, to occupation of father and educational level of the mother (Becker, Peterson, Hellmer, Shoemaker, and Quay, 1959; Zuckerman, Barrett, and Bragiel, 1960) and to measures of social class (Garfield and Helper, 1962). Within social class, level of education correlates negatively with the scores on control factor (Becker and Krug, 1965; Marshall, 1961), and studies have shown that responses on this factor are changed positively by training and educational experience (Freedheim, Reichenberg-Hackett, 1959). Studies of the PARI have also been consistent in finding the Hostility-Rejection factor not to be related to educational level. Becker and Krug (1965) note that the correlation between education and responses to the PARI is highest for content areas dealing with control of sex, aggression,

and lying, a finding also reported by Schaefer and Bell (1958) and Garfield and Helper (1962).

Becker and Krug (1965) in their review of the literature and critique of the PARI, concluded that the covariations of PARI scores with measures of child behavior have shown promising implications primarily with homogeneous middle class families. The sample in the present study was considered on an educational and socioeconomic level equal to the middle class family. While this places some limitations on any generalizations based on the results, control for educational level of parents should produce less contamination in the findings (Becker and Krug, 1965; Brody, 1968).

Social Desirability

In the present study care was taken to minimize distortions by the following procedure: Parents were instructed that the responses on the PARI should represent their honest opinions regarding child-rearing practices, and the data collected was for research purposes only, names of the respondents would not be identified, nor would the information given by parents influence their child's participation in the nursery school program. See Appendix A for a copy of the instructions given to the parents.

It was felt that these procedures would lessen the likelihood that parents might give the socially desirable response.

Construct Validity Studies

The most extensive construct validity studies of the PARI have been undertaken by Zuckerman and his co-workers. Zuckerman and Oltean (1959) examined the construct validity of the PARI by correlating PARI scales with the Edwards Personality Inventory (MMPI), the F scale, and a test of self-acceptance based on the discrepancy between self and ideal concepts. Three samples were used: a group of 60 female acute psychiatric patients, 24 mothers of college students, and 88 unmarried student nurses. The F scale was found to correlate .51 with the PARI authoritarian-control factor in the patient group and .61 in the student nurse group. When relations to the EPSS were examined, they found that a number of variables showed significant relations to the hostility-rejection factor from the PARI for the mothers of students but not for the student nurses. For the mothers' group, those having highly rejective attitudes on the PARI tend to score high on achievement and aggression, and low on nurturance and affiliation. They also found that the direction of the correlations between the authoritarian-control factor and the EPSS measures were usually in the same direction as those for the hostility-rejection factor although most did not reach statistical significance. Self-acceptance was found to correlate -.37 with the hostility-rejection factor but did not relate to authoritarian control. In the patient population, the authoritarian-control factor was found

to relate primarily to the MMPI Masculinity-Femininity Scale ($r = .56$). Patients with authoritarian child-rearing attitudes tended to score higher on the masculinity side. The hostility-rejection factor was found to relate to pathological tendencies on the MMPI; its relationship to variables in the psychotic triad (Pa, Pt, Sc) were particularly high. While these results generally support some construct validity for the measures derived from the PARI, in the sense of correlating with other measures of similar meaning, many investigators question the procedure of relating self-reports on one instrument, to self-reports from other instruments (Becker and Krug, 1965).

Particularly relevant to the present study are the findings of Emmerich (1969) who administered the Parental Role Questionnaire (PRQ), the PARI and the Sixteen Personality Factor Questionnaire (16 PF, Form C) to 42 couples whose children were attending the nursery school at Purdue University. The PRQ was designed to measure parental role effectiveness on several differential dimensions (parental beliefs and values, parental behavior, and parental practice) by having parents respond to a number of situations which involved interactions with their nursery school child. Emmerich reported 21 of the 54 PRQ measure correlations with the three PARI factors were significant ($p < .05$). He found that Authoritarian-Control correlated consistently and negatively with those PRQ measures which both the factor analysis and his original conceptualizations suggest

were characteristics of effective parental role functioning, and were associated with the need to exert overt control in interpersonal relations, sensitivity, dependency (16 PF). Democratic Attitudes exhibited the opposite tendency (negatively correlated with Authoritarian-Control (-.54, $p < .001$), were more confident and used positive methods of child rearing, and showed greater competency in adaptive functioning. On the personality measurement they tended to be warm, intelligent and enthusiastic, and were also high in emotionality and unconventionality. Parents with hostile-rejection child rearing attitudes were less competent in the parental role functioning, and showed signs of dominant personality, less control, emotional immaturity and suspiciousness. In interpreting the findings, however, Emmerich cautions against inferring causal relationships. He pointed out that parents may adapt an authoritarian attitude toward child rearing more on the basis of their own perceived inadequacy rather than because of their underlying personality characteristics.

Emmerich's observation is particularly relevant in examining research studies which attempt to establish a relationship between parental behavior or attitudes and children's personality or behavior. The researcher may demonstrate a correlation between parental attitudes and/or behavior and the child's behavior, but from this correlation, it should not be assumed that a direct causal relationship

exists. This interpretation is consistent with the findings of Bell (1968) who reviewed a number of studies dealing with child-parent relationships. He concluded that generalizations based on "after-the-fact" findings, neither establish a cause-effect relationship nor support the position that parental attitudes or behavior contribute to a child's behavior. He rather suggested that the parental attitude may have developed through interaction with a particular child who may elicit authoritative or rejecting responses from the parent. Keeping the problem of "directionality" in mind, a review of some of the studies which have used the PARI will be undertaken, in order to establish the appropriateness for its use in the present study.

Use of the PARI as a Research Instrument

The PARI has been used extensively as a research instrument in assessing differences in the parental attitudes of various clinical populations. In studies comparing the attitudes of mothers of schizophrenic patients with mothers of normals (Zuckerman, et al., 1958; Heilbrun, 1960a, 1960b, 1961; Horowitz and Lovell, 1960; Farina, 1960; Guertin, 1961; Heilbrun and McKinley, 1962; Tolor and Rafferty, 1963; Heilbrun and Orr, 1965), and with various classes of handicapped (Kramm, 1958; Klebanoff, 1959; Hoffman, 1960; Reed, 1959; Cook, 1963), schizophrenic (Zuckerman, 1959; Zuckerman, Barrett, and Bragial, 1960), bronchial asthematic

(Purcell, Bernstein, and Bukantz, 1961; Purcell and Metz, 1962; Dingman, Eyman, and Windle, 1963), Cerebral palsey children (mann, 1957), mentally retarded (Margolis, 1961; Bitter, 1963; Cook, 1963), and speech impaired (Moll and Darley, 1960), as well as mothers of emotionally disturbed institutionalized boys (Platt, Jurgensen, Chorost, 1962) and institutionalized delinquent children (Madoff, 1959), the most consistent findings seem to indicate that mothers with a problem child tend to be more overprotective in their attitudes. The studies may also be interpreted as suggesting that mothers of normal children may hold more strict attitudes than mothers of schizophrenics, and mothers of delinquents may hold more authoritarian attitudes.

The PARI was used to study the inter- and intra-generational differences among mothers of Japanese origin (Kitano, 1961; 1964), and to examine social class differences in maternal attitudes and behavior (Kamii, 1965; Kamii and Radin, 1967; Rodin and Kanii, 1965).

A number of studies have related parental attitudes as measured by the PARI to academic performance of adolescents (Pierce, 1961; Holland, 1961; Cross, 1966). Cross (1966) found that both mothers and fathers of high conceptual-level boys were less controlling and granted greater independence, than were the parents of the low conceptual-level boys. With respect to the authoritarianism dimension

for the PARI, nonauthoritarian parents (particularly mothers) were liked to boys of high conceptual level. Such boys also had fathers who were more "intrinsically accepting" relative to the fathers of boys of low conceptual level. These findings support the contention that parental attitudes do influence parent-child interrelations, at least for adolescent (middle class) boys and their families. Other studies which have attempted to relate PARI scores to problems of adolescent boys and girls have not demonstrated such clearcut relationships (Zunich, 1962; Crotty, 1957; Medinnus, 1961; 1963a, 1963b, 1963c).

Several studies which have attempted to relate PARI scores to child behavior, have produced significant findings when a homogeneous population with respect to education and occupational levels were used. These studies (Becker and Krug, 1964; Chorost, 1962; Marshall, 1961; Zurich, 1966) have been reviewed elsewhere in this paper and will not be repeated here.