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HORROCKS, ROBERT NORMAN

THE RELATIONSHIP OF SELECTED PROSOCIAL PLAY
BEHAVIORS IN CHILDREN TO: MORAL REASONING,
YOUTH SPORTS PARTICIPATION, AND PERCEPTION OF
SPORTSMANSHIP.

THE UNIVERSITY OF NORTH CAROLINA AT
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THE RELATIONSHIP OF SELECTED PROSOCIAL PLAY BEHAVIORS
IN CHILDREN TO: MORAL REASONING, YOUTH SPORTS
PARTICIPATION, AND PERCEPTION OF
SPORTSMANSHIP

by

Robert N. Horrocks

A Dissertation Submitted to
the Faculty of the Graduate School at
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Doctor of Education

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1979

Approved by

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APPROVAL PAGE

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The purpose of this study was to explore the relationship of selected prosocial play behaviors in children to moral reasoning, participation in youth sports, and perception of sportsmanship.

A prosocial play behavior inventory which utilized teachers' observations of children was developed by the investigator and 16 elementary school teachers. This inventory was used to assess the prosocial play behavior of the children studied. A reliability coefficient of $r = .98$ was obtained for the inventory using the split-half method for estimating the internal consistency of a test. Assessment of the children's moral reasoning followed the method described by Kohlberg et al. (1976). A hypothetical moral dilemma was read to each child who was then questioned regarding the rationale for making value decisions relating to the story. The children's answers to selected questions were elicited and scored. A structured interview was also used for assessing the children's perception of sportsmanship. A hypothetical sports dilemma story, written by the investigator, formed the basis for discussion. The children's answers to selected questions were elicited and scored. This method paralleled the

assessment of moral reasoning. A focused interview was used to determine the amount of each child's participation in youth sports.

The children selected to participate in this study were 63 fifth and sixth grade boys and girls at an elementary school in Greensboro, North Carolina. A stratified random sampling process was used to select the children as representing high, medium, or low prosocial play behavior abilities according to scores on the prosocial inventory.

The relationship of each of the major variables under consideration was first analyzed by determining the correlation coefficients. In order to further explore the relationship of the variables, each was successively reclassified as the independent variable and one-way analyses of variance and Scheffé analyses were performed when indicated. The following groups of data were analyzed: (a) data of children scoring at three levels on the prosocial play behavior inventory, (b) data of children scoring at three levels of moral reasoning, (c) data of children with varying amounts of sports participation, and (d) data of children scoring at three levels of perception of sportsmanship. The .05 level of significance was required for all statistical decisions.

Results of the analyses showed that scores for moral reasoning and perception of sportsmanship, but not scores

for participation in youth sports, were related to prosocial play behavior scores. The interrelatedness of moral reasoning and perception of sportsmanship scores suggested that perception of sportsmanship reflects a developmental construct in children's stages of moral reasoning. A comparison of the high and the low prosocial play behavior groups showed significant differences on the scores for moral reasoning and perception of sportsmanship. The children in the low group generally used a preconventional mode of reasoning in answering questions, whereas the high group used both a preconventional and a conventional mode of reasoning. The procedures used to determine content and construct validity of the prosocial play behavior inventory supported its utility in the assessment of prosocial play behavior in the upper elementary school population.

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CHAPTER I
INTRODUCTION

Several social scientists suggest that games, play, and sports serve as agencies of socialization for children (Cooley, 1922; Erickson, 1965; Mead, 1934; Piaget, 1932; Sutton-Smith, 1965). It is through games and play that social rules are assimilated. Bar-Tal (1976) asserts that social competence is encouraged through communication skills that make possible complex interchanges in the frequent interactions with peers and adults. Such communications encourage a developing awareness of the role and responsibilities of the individual in the social group and thereby encourage prosocial behaviors.

Sportsmanship, which could be regarded as a special form of prosocial behavior, has been conceptualized as a virtue (Bryson, 1948), an attitude (David, 1970; Keller, 1974; Lauffer, 1970), a knowledge of proper conduct (Bovyer, 1963; Jantz, 1975), and a function of situations and experiences (Hollingsworth, 1969; Smith, 1975; Waxlav, 1972; York, 1976). Sportsmanship has been related to the general aims of education such as: (1) helping boys and girls to learn how to get along with one another, (2) respecting the rights, privileges, ideas, abilities, and property of other people, (3) sharing with and helping

others, and (4) respecting rules and laws (California Framework Committee, 1950). Opportunities for a demonstrated understanding of sportsmanship typically appear in children's play and games in the form of prosocial behaviors. Social scientists consider prosocial behavior to be acts such as helping, sharing, donating, empathizing, and cooperating (Bar-Tal, 1976; Midlarsky, 1968; Piliavin et al., 1969; Wispé, 1972). The concept of good sportsmanship is influenced by individual perceptions of various situational settings. The identification of prosocial behaviors associated with children's game playing may serve to anchor in behavior what physical educators, coaches, and classroom teachers have been trying to encourage in recreational activities.

Central to a theory of prosocial behavior are the cognitive developmental theories of Piaget (1932) and Kohlberg (1963). These authors have stated that age trends in moral reasoning are related to a child's social interactions. A transition to a higher mode of moral reasoning is thought to be a function of a child's logical level of development as well as an outgrowth of his social experiences. Although it would be difficult to predict patterns of prosocial behavior from a child's level of moral reasoning, Kohlberg (1969) recognized specific behavioral tendencies associated with various levels of

reasoning. In addition to moral reasoning, the antecedents of prosocial behavior are slowly being delimited through research. Theories of reinforcement (Fisher, 1963), modeling behavior (Bandura, 1965; Miller & Dollard, 1941), and familial interactions (Hoffman, 1975; Rutherford & Mussen, 1968) have all contributed to a framework of prosocial behavior.

Children's knowledge and attitudes toward proper game and sports behavior have been studied by several researchers (Bovyer, 1963; Jantz, 1975; Smith, 1975; Waxlav, 1972). Jantz (1975) used a Piagetian framework to determine children's perceptions of the origin of the rules of basketball and found a distinct developmental trend in their responses. He considered the understanding of children's levels of moral reasoning to be an essential educational dimension for teachers. He stated:

It is important that those involved with the instruction and supervision of children during game activities be familiar with the various levels of moral thinking if they are to facilitate the moral development of children. (p. 414)

Bovyer (1963) used an open-ended question and asked children to list what they thought sportsmanship was. He found that children who listed more ideas about sportsmanship also tended to display favorable game-playing behavior as cited by their teachers and peers.

In light of the contemporary emphasis on prosocial behavior as it relates to games and sports, this investigator identified the following problem:

Statement of the Problem

The purpose of this study was to explore the relationship of selected prosocial play behaviors in children to three developmental and environmental factors.

Specifically:

Is prosocial play behavior associated with a child's level of moral reasoning?

Is prosocial play behavior associated with a child's participation in youth sports?

Is prosocial play behavior associated with a child's perception of the concept of sportsmanship?

Definition of Terms

The following are definitions of terms as they are used in this study.

Prosocial Play Behavior is that behavior which has been identified by classroom teachers as contributing to the positive climate of children's game playing activities and is exemplified by one of the following student behaviors:

- (1) Avoids arguments
- (2) Wins without "gloating"
- (3) Accepts defeat without complaining

- (4) Offers consolation when a group member makes a mistake
- (5) Shares equipment readily
- (6) Abides by the rules of the game
- (7) Shares the activities of the game (Does not "hog" the ball)
- (8) Accepts referee's decisions
- (9) Takes turns readily
- (10) Accepts constructive criticism and suggestions from peers

Level of Moral Reasoning is that orientation to determining correct conduct as determined by Kohlberg (1963, 1969).

Youth Sports are those sports activities engaged in outside of the school by preadolescents and adolescents. They are characterized as having adult leadership and a schedule for contests and/or practice sessions.

Perception of Sportsmanship is that orientation to determining correct sports and games behavior as it relates to the issues of: (1) affiliative roles and relations, (2) personal contracts, trust, and justice in exchange, and (3) rules of games, and as identified by an interpretation of stage typical statements of moral reasoning (Kohlberg, Colby, Gibbs, Speicher-Dubin, & Power, 1976).

Sportsmanship Dilemma Story is a sports story developed by the investigator and used as a basis of an interview to determine a child's perception of sportsmanship.

Recreational Game Playing is that part of the weekly classroom activity in which the classroom teacher provides opportunities for children to become involved in physical game playing. Such games are either "high" or "low" in organizational patterns, and are conducted within an "extensive," "moderate," or "limited" framework of teacher supervision.

High Organizational Patterns of Games are games in which all children are required to play the same game and in which the rules of the game are predetermined.

Low Organizational Patterns of Games are games selected and often improvised by the children. Children are encouraged, in this mode, to select individual games and play partners.

Extensive Supervision is that situation in which the teacher is directly involved in the organization and progress of the class's game (often acts as the referee). Children's conflicts and rules decisions are resolved by the teacher.

Moderate Supervision is that situation in which the teacher remains on the perimeter of the play group(s) entering in only to resolve children's conflicts and to settle rules disputes.

Limited Supervision is that situation in which the teacher remains on the perimeter of the play group(s), and generally remains there. The teacher encourages the

children to resolve their conflicts and to settle rules disputes for themselves.

Modified Behaviorally Anchored Rating Scale is that rating scale developed jointly by the investigator and members of the rater population. It utilizes a "forced-choice" selection of graded responses to behaviors which are characteristically prosocial.

Demographic Data is that information obtained from the children through a focused interview and from their personal files maintained by the public school they attended. It included:

- (1) I.Q. measurement of the child
- (2) Age of the child
- (3) Sex of the child
- (4) Race of the child
- (5) Birth order of the child
- (6) Number of children in the family
- (7) Size of the child's extended family
- (8) Number of adults in the home
- (9) Two parent or single parent/grandparent family structure
- (10) Occupational prestige of the primary provider
- (11) Years of schooling of the primary provider
- (12) Amount of play with parents
- (13) Number of neighborhood play partners
- (14) Ages of neighborhood play partners

Assumptions Underlying the Research

(1) It is assumed that the construct prosocial play behavior exists, and that teachers can characterize a child's prosocial play behavior based on several observations of the child in recreational game-playing and classroom settings, when an observational tool is provided.

(2) It is assumed that the construct levels of moral reasoning exist, and that the Kohlberg interview method for determining a child's level of moral reasoning is the most accurate and sophisticated method devised to date, and does identify levels of moral reasoning satisfactorily for this study.

(3) It is assumed that the investigator will be able to develop a rapport with children in order to accurately record each child's level of moral reasoning, participation in youth sports, perception of the concept of sportsmanship, and demographic data.

(4) It is assumed that all children rated by classroom teachers participated actively in recreational games.

(5) It is assumed that environmental and developmental variables are acting equally on both boys and girls.

Scope of the Study

The following statements represented the boundaries and limitations of the study:

(1) The investigator considered selected prosocial behaviors as they related to children's level of moral reasoning, participation in youth sports, and their perception of sportsmanship. The investigation of these three variables was not intended to supply a definitive answer to the types of variables which may influence prosocial play

behavior, but rather, were selected for their relevance to the concept of prosocial play behavior.

(2) For the purpose of this study, prosocial play behaviors were determined by an initial investigation involving five fifth and five sixth grade classroom teachers, six elementary school physical education teachers, and the investigator. The types of behaviors identified were therefore limited to these teachers' perceptions of prosocial play behavior.

(3) The investigator interviewed a total of 63 male and female children in the fifth and sixth grade from a public school in North Carolina.

(4) Subjects were selected through the use of a behavior rating inventory used by their classroom teachers. Behavior ratings were based primarily upon observations of the children during several recreational game playing situations and also reflect the influence of classroom observations made at other times throughout the semester.

(5) The children selected for the study were regularly scheduled for two hours of physical education and one hour of recreational games every week at their school. The amount of time that the children spent in these activities may have influenced their developmental tendencies toward prosocial play behavior. This activity time was not considered in the study.

(6) Children were selected using a stratified random selection process to allow for a proportionate distribution of sexes, races, grade levels, and membership in various classrooms.

(7) Subjects were selected from separate samples of children having scored very high, very low, or typically within the mid-range on the prosocial play behavior inventory.

(8) The children selected were 20 boys and girls who rated high on the prosocial play behavior inventory, 22 who rated low, and 21 who rated within the mid-range on the inventory.

(9) The teachers who rated the children on their prosocial play behavior had a mean of 10.9 years of teaching experience, with a range of two to 18 years.

(10) In sampling, the investigator did not consider differences among children which might be related to intelligence, child rearing practices, school academic achievement, motor skill level, psychological counseling, or other factors which could influence prosocial play behavior.

(11) Moral reasoning included only the child's orientation to determining correct behavior as it related to the following issues: (1) affiliative roles and relations, and (2) contract, trust, and justice in exchange.

(12) Perception of sportsmanship included only the child's orientation to determining correct sports behavior

as it related to the following issues: (1) affiliative roles and relations, (2) contract, trust, and justice in exchange, and (3) laws and rules of games.

Significance of the Study

Public schools endeavor to foster prosocial behavior in children through the development of positive interpersonal attitudes. A lack of success at this task is at times painfully evident. It is particularly important that our educational system give more direct attention in the curriculum to facilitating greater growth and development in children's social comprehension and social skills. An initial step toward this end is to gain a greater understanding of developmental and environmental factors as they relate to children's prosocial behavior.

One activity which often consumes a large part of the child's day and therefore provides an excellent means of exploring this concept is recreational game playing. Prosocial patterns of play behavior are often a goal of physical education programs, but the systematic development of children's social cognition in play has not been explored. The antecedents of prosocial behavior are numerous and varied. It is believed however, that a tentative association exists between play, games, cognition, and socialization.

Additional understandings of prosocial behavior could be significant in improving the quality of a child's life.

The more children learn to share, help, and to cooperate, the better the interpersonal relationships will be among them. Teachers need to know the relationship of prosocial play behavior to moral reasoning, experiences in youth sports, and the child's perception of sportsmanship in order to assist in the child's growth and development through physical education activities.

CHAPTER II
REVIEW OF LITERATURE

Introduction

There are numerous environmental and developmental variables which may influence prosocial play behavior. The fact that several variables may be acting at the same time to form a matrix of motivational patterns is appreciated but not fully understood by social scientists. For this reason the scope of the review of literature on prosocial play behavior was broad. In this chapter a review of literature is presented as representative of theories and research studies germane to prosocial behavior and specifically prosocial play behavior. The review topics were: prosocial behavior, moral development, cognitive development, perspective taking and empathy, play and games, and sportsmanship.

The term "prosocial behavior" originated in developmental psychology where it was thought to be behavior which was both innately aggressive but also acceptable to social norms (Sears, 1961). Bryan and Test (1967) and Rosenhan and White (1967) introduced the term prosocial into the social psychological literature on helping behavior. In Bryan's study, prosocial meant socially

responsible behaviors of aiding and donating. For Rosenhan the term prosocial meant donating behavior derived from internalized social norms where the subject gave up more than he would gain. Bar-Tal (1976) defined prosocial behavior as:

voluntary behavior that is carried out to benefit another without anticipation of external rewards and is performed under two circumstances: (a) the behavior is done for its own end, and (b) the behavior is done as an act of restitution. (p. 4)

The first type of prosocial behavior Bar-Tal called altruism, and the second restitution. More general definitions of prosocial behavior have been suggested by other authors. Campbell (1972) used the term altruism to include acts of self-sacrifice for the good of the social order. Cohen (1972) defined prosocial behavior as acts of giving, empathizing, and gratuity. Rosenhan (1972) stated that prosocial behavior basically involves a concern for others. Gergen et al. (1972) suggested that prosocial behavior implies concerns for others for which there are no rewards. Wispe (1972) defined prosocial behavior as those acts which:

would be expected to produce or maintain the physical and psychological well-being and the integrity of the other person(s) involved. (p. 7)

Although social scientists have not reached consensus on a specific definition of prosocial behavior, there is general agreement that such behavior is: (1) carried out voluntarily, (2) aimed at benefiting another, and (3) not externally

motivated by a reward or a threat of punishment (Bar-Tal, 1976; Berkowitz, 1972; Bryan & Test, 1967; Krebs, 1970; Walster & Piliavin, 1972).

The investigation of prosocial play behavior as a situation specific phenomenon leads one to consider the various possible antecedents of this behavior. Opportunities for a demonstrated understanding of prosocial play behavior typically appear in children's play and games in the form of "good sportsmanship." Social scientists consider prosocial behavior to be acts such as: helping, sharing, empathizing, and cooperating (Bar-Tal, 1976; Midlarsky, 1968; Piliavin et al., 1969; Wispe', 1972). The concept of good sportsmanship is influenced by individual perceptions and has been conceptualized as a virtue (Bryson, 1948), an attitude (David, 1970; Keller, 1974; Lauffer, 1970), a knowledge of proper conduct (Bovyer, 1963; Jantz, 1975), and a function of situations and experiences (Hollingsworth, 1969; Smith, 1975; Waxlav, 1972; York, 1976). Because ambiguity surrounds the concept of good sportsmanship, prosocial acts in play situations may serve to anchor this concept in behavior.

Prosocial Behavior

Prosocial studies of children have been focused mainly on helping and donating behaviors. Helping or rescue behaviors have been studied in experimental settings in which the subject was exposed to an emergency situation.

The child's tendency to help someone, allegedly in distress, was then measured (Staub, 1970a, 1970b). In one such experiment Staub (1971) investigated the helping behavior of 40 seventh grade boys and girls. To examine a child's reaction to another's distress, subjects were exposed to tape-recorded distress sounds of a seven-year-old child crying and sobbing. The sequence of sounds, which consisted of a crash followed by severe crying, originated in a room adjacent to the subject. Subjects were either given no information about leaving the experimental room or were given an implied permission. After leaving the subject alone in the room, the investigator observed the subject's reactions to the tape-recorded sounds through a one-way mirror. Staub found that children who were given permission to leave the experimental room tended to help the alleged person in distress more than those who were given no information regarding leaving the room.

In donating and sharing experiments, the subject was provided an opportunity to give away a prize (often a piece of candy or money) to someone or to some bogus charitable institution (Bryan, 1971; Grusec & Skubiske, 1970). Rosenhan and White (1967) were interested in the effect of a model on a child's donating behavior. Subjects in a fourth and fifth grade played a bowling game and were rewarded for a high score with a five cent certificate from a local store. An adult model demonstrated the game

for the individual subjects and upon receipt of the first certificate stated, "I won. I believe I will give one certificate to the orphans each time I win." On following winnings he said nothing when making donations. The donations were made by placing the certificate in a box. The investigators found that almost one-half of those children who observed the model contributed in absence of the adult model, whereas none of the control (no model) subjects contributed.

In addition to children's helping and donating behaviors, prosocial behavior has been studied in relation to: (a) imitation of models (Bandura, 1965; Bandura & Walters, 1963; Miller & Dollard, 1941), and (b) theories of reinforcement (Bandura, 1971; Bandura & Walters, 1963; Doland & Adelberg, 1967; Fischer, 1963).

Bandura (1968) has developed the most complete theory of the underlying processes involved in children's social reasoning behavior. He draws a distinction between the child's cognitive processes of identification and the imitation of social behavior. Identification, he thinks, occurs as a result of observational learning which is encouraged by the perception of behavior in others. Imitation of these behaviors is produced only in conjunction with appropriate environmental cues. Bandura, Ross, and Ross (1963) were interested in modeling behavior and

the concept of aggression. They showed films to nursery school children. One group of children saw a film of an adult model using physical and verbal aggression to gain a token object. This scene was followed by the model being punished. A second group of children saw the film of the adult model, followed by a scene of his not being punished. A third group saw a film of models involved in vigorous but not aggressive play. And a fourth group saw no film. In a following "free-play" situation it was observed that viewing of the aggressive-punished model negatively influenced the amount of aggressive behavior of that group. It was not found however, that aggression was reduced in any of the other groups.

Stein (1967) investigated modeling and its effects on temptation. Fourth grade boys were asked to perform a boring task of pushing a button when a corresponding light appeared. The experimental temptation consisted of an attractive movie being shown just outside of the child's field of vision. Three treatments involved (1) previously observing a resisting model, (2) previously observing a yielding model, and (3) no model. It was found that those children who observed a yielding model showed more yielding when left on their own to perform the task. Those subjects observing a resisting model did not, however, show more resistance than the control group. Modeling behavior and self-denial were the concepts which Bandura and Kupers (1964)

investigated. In this study children were encouraged to participate in a bowling game with an adult as a model. Standards of performance were initially determined and modeled by the adult. Success for scoring in the game was determined by the model who rewarded himself with a readily available source of "M & M" candies. Some of the models adopted a score of 20 for the point at which they would reward themselves with candy. Others set a score of 10 for the reward. The subject observed the model and his standard for performance and then was left alone to play the bowling game. It was found that subjects' patterns of reward closely matched those of their models.

Social learning theory has as its basis the concept of reinforcement. The degree of reinforcement determines whether and to what amount a behavior is repeated. According to Bandura (1971), "Reinforcements convey information to performers about the types of responses that are appropriate" (p. 27). Fisher (1963) studied how various reinforcement conditions affect sharing behavior by children. He encouraged the sharing behavior of four-year-old children by giving them either verbal praise or a piece of bubble gum for giving away at least one of their marbles to children who were shown in pictures. It was found that 11 of the 24 children shared readily when reinforced by tangible rewards (bubble gum) whereas only two shared who were verbally reinforced. In contrasting

studies by Doland and Adelberg (1967), Bryan, Redfield, and Mader (1971), and Midlarsky, Bryan, and Brickman (1973) social reinforcement had an influencing effect upon altruistic behavior. Doland and Adelberg (1967) encouraged nursery school children to share pictures of animals with other children. The children were encouraged by both verbal and tangible rewards. Several authors have argued that the acquisition of prosocial responses requires not only a history of reinforcements but the development of a self-reward system. Aronfreed (1968) suggests that the fact that children maintain certain positive forms of social behavior even without the expectation of external forms of reinforcement, indicates that a self-monitoring system is operating within them. Rosenhan (1972) states that "External consequences are but one of the motivating forces for the Actor. Subjective consequences in the form of affect and/or cognition might perhaps be another" (p. 153).

One important finding of several experiments is that prosocial behavior increases with the age of the child during the first 12 years of life (Green & Sneider, 1974; Handlon & Gross, 1959; Midlarsky & Bryan, 1967; Ugurel-Semin, 1952; Wright, 1942). In a sharing experiment, Handlon and Gross (1959) investigated age differences in preschool, kindergarten, fourth, fifth and sixth grade children. Subjects were paired with children of their same sex and played with an apparatus from which

pennies fell. When the pennies were received, one of the children was asked to leave the room. The other child was instructed to divide the pennies. The results of the study showed that sharing increases with age. While the kindergarten children kept 72% of the pennies for themselves, the average sixth grade child was overly generous, keeping only 40% of the pennies.

Green and Schneider (1974) investigated age differences in three situations. Their subjects were 100 boys in four age groups: 5-6 years old, 7-8, 9-10, and 13-14 years old. In the first test situation the subjects were asked to volunteer to put together books for poor children. In the second situation, the experimenter "accidentally" dropped five pencils on the floor and the subject was given an opportunity to help pick them up. In the third situation, the subjects were given five candy bars and told that they could share them with other children at their school. The results of the study showed that the sharing of candy and assisting in picking up pencils increased with age. Volunteering to assist with the book project, however, was unrelated with age. Several explanations are offered for this age trend in prosocial behavior. First, the ability of children to interact with their social environment increases with age. Second, the ability to empathize with other children develops with age (Aronfreed, 1968, 1970). Third, an

increase in prosocial behavior may accompany age as a result of accumulated observational experiences of adult models (Bar-Tal, 1976). Fourth, age related changes in prosocial behavior may be due to the gradual development of cognitive abilities as they support the framework of moral reasoning (Kohlberg, 1963; Piaget, 1932).

Cognitive and Moral Development

Investigators of children's moral development have generally followed either a behavioral or cognitive developmental approach. Hoffman (1970) identified three philosophical doctrines which bear on the moral development of the child. The doctrine of "original sin" which is represented by the psychoanalytic theory has led to research interest in the production of guilt when a moral standard has been violated. The doctrine of "tabula rosa" views the child as neither corrupt nor innocent, but capable of being molded by the forces of society and particularly adults. The "innate purity" doctrine which is representative of a Rousseauian view of the child, stresses the developmental processes which encourage the socially interacting child towards a state of moral autonomy.

The developmental view stresses an analysis of the thought structures underlying moral development as well as a sequence of cognitive stages through which children progress. Erikson (1963) recognized stages of psychosocial

development in the developing personality and asserted that such stages appear in an invariant sequence. Gesell (1929, 1946, 1956) also supported the invariant sequence doctrine of development but did not consider progression through stages contingent on the cognitive development of the child. He rather suggested a "maturational unfolding" theory which stated that biological patterns of growth naturally led the child through cognitive stages of development. Gesell's longitudinal studies of children however, emphasized a descriptive rather than an analytical recording of behavior. He believed that children progress through three five-year cycles of developmental patterns. It is in the first five-year cycle that moral growth is initiated with a subsequent expansion of growth in the following cycles. Gesell (1956) stated:

To a remarkable degree equivalents of these ethical stages reappear in the cycles of years from 5 to 10 and emerge once more in the cycle of years from 10 to 16. In general each of these cycles registers an improvement and broadening of ethical attitudes. (pp. 464-465)

The three five-year cycles which Gesell identified were: first, the "intrinsic self" cycle in which the child refuses to accept blame for his misdeeds. Second, in the "social reference" cycle, the child shows a dependence on parents as delineators of right and wrong. In this cycle the concepts of "good" and "bad" are gradually expanded to include "right" and "wrong." The third cycle referred to as the "reciprocal-self-and-social" cycle, is marked by

a loyalty to friends and to group solidarity as a reference group in making moral decisions. The child at this stage begins to make situational moral judgments. An awareness of decisions as they affect others becomes evident during this cycle.

Piaget (1932) offered a comprehensive theory of children's moral development. His theory rested on the sequential stage theory of cognitive development but also reflected similarity with the sociological theories of Durkheim (1925). For Durkheim, morality only had meaning within the context of personal relationships within a social unit. Piaget (1932) recognized the influence of society as a determiner of morality and stated that "all morality consists in a system of rules" (p. 1), and "Society is the only source of morality" (p. 326). Piaget's 1932 report of research using about 100 Swiss children of lower socioeconomic families as subjects is divided into four sections. The first section deals with an analysis of children's perceptions of rules in the game of marbles. In the second and third sections of the report he presents the results of analyzing children's moral judgments in response to dilemma stories. In the final section, he reviews his findings in light of the social theories of Durkheim (1925), Fauconnet (1920), M. Baldwin (1897), and Bovet (1912).

Consistent with his general cognitive-developmental stage format, Piaget outlined four successive stages in marble play. In the "motor stage" the child plays individually with marbles and rules are irrelevant. An "egocentric stage" (between 3 and 7 years of age) follows in which parallel play with other children is observed. The rules of the marbles game are followed to the extent that they are understood. Towards the end of the eighth year winning becomes important to the players. Contrary accounts of what are proper rules are still evident in the third stage. During the fourth stage (developing between 11 or 12 years of age), children take pleasure in discussions of the complexity of the rules. The code of rules appears to be firmly implanted in their gaming conduct.

Piaget described three levels of orientation to rules by children. The first orientation appears in the motor stage in which rules have no social relativity. A second orientation to rules is characterized by a unilateral respect for the rules of the game as being obligatory and sacred. Although the child during this stage may verbally acknowledge the universality of rules, he still persists in playing for himself, disregarding rules when it is to his advantage. Piaget explained that it is not until children begin to submit to the rules of the game in a spirit of genuine cooperation that they have achieved the third and highest orientation to rules. This

cooperation is based on a mutual respect and an awareness that rules can be changed through mutual agreement. Such an orientation appears sometime after the age of ten.

Through conversations with the 5 to 13 year old children Piaget identified two major stages of moral development. The earlier stage predominates throughout the first 7 or 8 years of age and is characterized as a "morality of constraint," "heteronomous morality," or "moral realism." During this stage the child views adults as dominant, and rules as being developed external to themselves and therefore inalterable. Piaget stated:

Such is the prestige of parents in the eyes of the very young child, that even if they lay down nothing in the form of general duties, their wishes act as law and thus give rise automatically to moral realism. (p. 133)

Piaget believed that the young child's morality of constraint is the product of cognitive immaturity and a unilateral emotional respect for adults. It is egocentrism which prevents the young child from taking the viewpoint of others in social situations. The second stage of morality is characterized as a "morality of cooperation." During this stage the child becomes aware of the details and circumstances of the acts he is judging. Rules are no longer regarded as fixed, but are rather seen as based on mutual respect and cooperation. The child begins to consider the "intention" of an act before passing moral judgment. Generally, the child is viewed as passing from

a stage of "heteronomy" to one of "autonomy." Piaget (1932) submitted the following overview:

the results obtained in the course of our study of moral realism confirm those of our analysis of the game of marbles. There seem to exist in the child two separate moralities . . . The first of these processes is the moral constraint of the adult, which leads to heteronomy and consequently to moral realism. The second is cooperation which leads to autonomy. (p. 193)

Piaget viewed the two moral stages as overlapping thought processes. The more mature thought process gradually succeeds in dominating the first. Thus a child's capacity to function at the higher level provides the framework for perceiving society as a system of modifiable rules. Piaget contends that the developing mind cannot help but regard the principle of cooperation as an immanent condition of social relationships. He stated that cooperation and mutual respect "play an irreplaceable part as catalytic agents and give a definite direction to moral evolution" (p. 392).

Much research has been reported on the variables which may influence moral development in children. Whiteman and Kosier (1964) looked at several environmental and developmental variables as indices of increased moral reasoning. They studied 173 public school children in the age range of 7 to 12 years. Using short moral stories as a mode of investigation, they found that the ability to formulate mature judgments was a function of: a) increase in age, and b) increase in I.Q. at each age. They found also that there was no relationship between a child's

ability to make mature moral judgments and the sex of the subject, attendance at Sunday School, membership in Boy or Girl Scout organizations, or personality characteristics as rated by their classroom teachers.

Boehm (1962) studied 160 children of working-class and upper-middle-class families. He used the Piagetian method of discussing moral dilemma stories. The children's responses were analyzed by four judges working independently. When the group was divided into either "nine years old and above" and "below nine years old," significant developmental trends in reasoning appeared.

Piaget (1932) found that the immature child expects the physical universe to aid in maintaining the moral order, whereas the more mature child believes that the punishment for misdeeds is a social facility. The research of Havighurst and Neugarten (1955) yielded contradictory findings. In studying 10 American Indian groups it was found that four of the groups revealed no age trends toward an awareness of "immanent justice." They also found that in only two of the 10 groups was there a decrease with age in an understanding of the conception of rules being fixed and rigid. The findings of this study tend to undermine the idea of universality of stages progressing in an invariant sequence. But rather, the findings supported Piaget's hypothesis that children in primitive societies become more rigid in their moral development as they

increase in age, due to constraints being placed on them.

It is expected that progress through moral stages is encouraged by the child's developing cognitive abilities and increased interaction with the social environment. Research studies support the hypothesis that moral reasoning and intelligence are positively related. Studies by MacRae (1954), Johnson (1962), Whiteman and Kosier (1964), and Boehm (1962) particularly, support the case for cognitive development and its positive effect on progression through stages of moral development.

Results of several studies have indicated that a positive relationship exists between moral reasoning and socioeconomic class. Several reasons are given for this finding. One is that class difference in I.Q. already exists. The study by Boehm (1962) however, contraindicated this belief as I.Q. was statistically controlled in the analysis. Boehm found similar moral reasoning abilities for similar I.Q.s regardless of socioeconomic class. A second explanation of social class and moral reasoning abilities is based on the difference in child-rearing practices in various homes. Support for this contention has not been empirically shown. A third explanation is that class differences in moral attributes are a result of differing encounters with authority figures outside the home. Lower-class children have more encounters with law enforcement

agents and school disciplinarians. These experiences may encourage a dependence on externally developed and imposed social rules and, according to Piagetian theory, should retard moral development.

Research to demonstrate the transitional process between stages of moral reasoning has been done by several authors (Bandura & MacDonald, 1963; Cowan, Langer, Heavenrich, & Nathanson, 1969; Lefurgy & Woloshin, 1969). Studies have shown that shifts in moral judgments could be initiated through exposing subjects to adult models who displayed more advanced moral reasoning than the subjects. The malleability of the subjects' levels of moral reasoning in the presence of models, leads one to suspect the assumption that stage progression is a function of a slow and gradual cognitive synthesis. Several studies have challenged the cognitive developmental theories of slowly maturing stages of development. A study by Bandura and MacDonald (1963) demonstrated that social reinforcement and modeling procedures accelerated development of mature judgments. A series of experiments by Jensen and associates (Jensen & Hafen, 1973; Jensen & Houghston, 1971; Jensen & Hughston, 1973; Jensen & Larm, 1970) showed that it was possible to train children in moral reasoning. Turiel (1966) and Crowley (1968) provided evidence which indicates the importance of the role that environment and social learning factors play in the development of

abilities in moral reasoning. In a study by Magowan and Lee (1970) it was found that the type of story itself used in assessing level of moral reasoning in children had a bearing on the research findings. They concluded that children give more immature responses to stories with unfamiliar as opposed to familiar settings.

Kohlberg (1963) extended, modified, and refined Piaget's theory to describe six, rather than two, stages of moral development. Kohlberg identified stages of reasoning based on the child's justification for moral decisions. His theory is based on empirical data which were collected during interviews of 72 boys aged 10, 13, and 16. The interviews centered around hypothetical moral dilemmas. The children's comments were tape recorded and later analyzed. Kohlberg found that the boys' responses could be classified as being consistent with one of six types of moral thought. It was also found that more mature modes of thinking appeared with increased age. Kohlberg hypothesized that each type of thought is a prerequisite to the next higher level of moral reasoning. He found that the six types of moral judgment could be understood with reference to three types of relationships between the "self" and "society's rules and expectations" (1976, p. 33). The three types of relationships represented three moral levels and were as follows: 1) preconventional level, 2) conventional level, and 3) postconventional level.

Using this framework, a child at a preconventional level considers rules and social expectations to be external to the self. A child at a conventional level has internalized the rules of society and perceives them as being formulated by others, especially those in authority. A child at a postconventional level has differentiated himself from the rules and expectations of others, and relies rather on self-chosen principles to define his values (Kohlberg, 1976, p. 33). Within each of these three levels are two stages of moral reasoning. Kohlberg (1976) identified eleven issues, values, or moral institutions which he believed were found in every society and culture. They included:

- (1) Laws and rules
- (2) Conscience
- (3) Personal roles of affection
- (4) Authority
- (5) Civil rights
- (6) Contract, punishment, and justice in exchange
- (7) Punishment and justice
- (8) The value of life
- (9) Property rights and value
- (10) Truth
- (11) Sex and sexual love (p. 43)

Kohlberg (1964) offered an example of the six stages of moral reasoning with respect to the issue of "Laws and rules."

- Stage 1 Obey rules to avoid punishment.
- Stage 2 Conform to obtain rewards, have favors returned.
- Stage 3 Conform to avoid disapproval, dislike by others.
- Stage 4 Conform to avoid censure by legitimate authorities and resultant guilt.
- Stage 5 Conform to maintain the respect of the impartial spectator judging in terms of community welfare.
- Stage 6 Conform to avoid self-condemnation. (p. 400)

Kohlberg found that middle-class children were capable of negotiating these stages more easily than working-class children. He stated that this was due to the varying social experiences which are peculiar to the different levels in the hierarchical social scale. His findings showed that it was not the age of the child but the order of the stages that is consistent. Kohlberg contended that since moral reasoning clearly is reasoning, advanced moral reasoning depends upon advanced logical reasoning as defined by Piaget. He contends that while logical development is a necessary condition for moral development, it is not sufficient. A child passes through the stages of moral development in a prescribed order, and the emergence of a moral structure in children is largely based on environmental experiences as well as on logical operations. Kohlberg believed that there was one final step in the sequence, and that is moral behavior. A variety of factors determine whether a person will behave in a moral or in a prosocial manner.

Candee (1976) developed a model for moral behavior which reflected the various forces influencing moral behavior. He stated that "Moral behavior is a function of moral judgment, personal emotions, personal perspectives of the situation, and prediction of success." Mischel and Mischel (1976) contend that in order to predict prosocial behavior in a specific situation one would have to

know the age and sex of the subject, the sex of the experimenter, the expected consequences of the prosocial act, and the type and frequency of the models to which the subject has been exposed.

Turiel (1966) tested Kohlberg's stage theory assumptions using 47 seventh grade boys as subjects. Each boy was assigned to a stage (level) of moral reasoning by using the Kohlberg interview technique. Three moral dilemma stories were then related to the subjects and they were told to seek advice from the test instructor in an effort to resolve the dilemmas. The experimenter's advice consisted of responses which represented either one or two levels above the subject's stage, or one level below the subject's stage. In the retest the subjects were again stage-typed using the three experimental moral stories as well as six additional stories. The hypothesis tested was that children are more likely to assimilate only one stage higher than their pretested level and that a slipping from one stage to a lower stage would not occur. Data supported the hypothesis.

Rest, Turiel, and Kohlberg (1969) studied 45 children and found similar results. In their test-retest design, they used five hypothetical moral dilemmas in order to "stage-type" the subjects. In a second session the boys were exposed to a series of moral arguments that were at three different levels in relation to their own dominant

stage. The levels were: one stage above their present stage, two stages above, or one stage below their stage level. They found that the subjects preferred the arguments that were presented one stage above their own levels of moral reasoning.

Turiel (1974) discussed the theoretical relationship between regression and progression in developmental stage theory and concluded that:

Transition from one stage to the next involves a phase of conflict or disequilibrium, during which the existing mode of thinking is reevaluated and a new mode is constructed. (p. 14)

Motivational factors appear to be influential in the moral developmental theories of both Piaget and Kohlberg. They speak respectively of "disequilibrium" and "cognitive conflict" and the "need to resolve." They do not, however, address themselves to the rationale for forward movement from one stage to the next. Motivational theory extended into the study by Peck and Havighurst (1960). They studied 35 adolescents from a small city in the age range of 10 to 17 years. Using projective tests, interviews, and behavior ratings they investigated the general persistence and predictability of moral conduct. They hypothesized five motivational variables which depicted five character types. The types were: the amoral, the expedient, the conforming, the irrational-conscientious, and the rational altruistic. It was found that not one of the

subjects was entirely of one character type. The authors concluded that children act from a mixture of motives.

Several empirical studies investigated the relationship between cognitive development, moral development, and prosocial behavior. Rubin and Schneider (1973) investigated the relationship between moral judgment, egocentrism, and altruistic behavior. Using 7-year-old children, altruistic behavior was measured in two situations. In the first, the child was asked to donate candy to a group of poor children. In the second, the child was given an opportunity to help a younger child put tickets into small piles. The results showed that the number of candy boxes donated to poor children was positively and significantly related to both egocentrism ($r = .31$) and to moral judgment ($r = .31$). Volunteering to assist a younger child in making piles of tickets was also positively and significantly related to both egocentrism ($r = .44$) and to moral judgment ($r = .40$). These results indicate that the measured altruistic behavior is related to a diminishing egocentrism and to a higher level of moral judgment. In similar studies, Emler and Rushton (1974) and Rushton (1975) found that the moral judgment of children was positively associated with prosocial behavior.

Kohlberg (1963) reported that an analysis of the interview protocols obtained in the Hartshorne and May (1928) studies on the nature of character, reveals that

one cannot predict the moral behavior of the adolescent who cheats. He suggests, however, that one can predict quite a lot about the moral behavior of the adolescent who does not cheat. Kohlberg (1976) contends that the child who consistently does not cheat in a variety of situations has acted upon mature moral judgment; that is, he has assimilated reasons not to cheat. This is an indication that he has reached an advanced level of moral maturity. This conclusion is supported by findings in studies by Krebs (1970) and Brown et al. (1969). Krebs found that 75% of the conventional and pre-conventional children (Stage 4 or below) cheated on at least one of four experimental cheating tests, while only 20% of the principled (Stage 5) children did so. Brown et al. found that approximately half of the college students at a pre-conventional level of moral reasoning cheated as compared to 11% of stage 5 and 6 level students.

In a research report, Kohlberg (1968) indicated that children of low socioeconomic status are slower than higher status children in passing through the stages of moral development. Selman (1974) showed supporting evidence that delinquents do not show expected age-developmental changes in moral reasoning. In a study of social behavior and moral reasoning Campagna and Harter (1975) administered the Wechsler Intelligence Scale and the Kohlberg moral development inventory to 44 boys. The subjects' mental

ages ranged from 10.00 to 13.39 years. A comparison of boys who resided at a state institution for children who manifest various types of psychopathology (sociopathic group), and normal children from a public elementary and junior high school (non-sociopathic group) was made. The normal and sociopathic subjects were matched on full scale I.Q. and mental age. Stage of moral reasoning was made using the Kohlberg interview technique of moral assessment. The results of the study revealed that level of moral reasoning was higher for normal children than for sociopathic children. Also, within each group, high mental age children tended to have higher moral judgment scores than low mental age children. This finding suggested the presence of a general cognitive factor underlying moral development.

Simpson (1976) suggested that an understanding of level of cognitive functioning and level of moral reasoning alone are not sufficient to determine moral behavior. One must also take into consideration role-taking opportunities as well as the gratification of basic psychic needs as outlined by Maslow (1954). Mischel and Mischel (1976) supported this contention and pointed out that "The moral reasoning measure seems to predict incorrectly the moral behavior of about half the subjects at the lower stages of moral maturity" (p. 101). They suggested that the predictive accuracy from moral reasoning to prosocial

behavior would be more accurate for selected small subsamples as representative of the highest levels of moral maturity.

Kohlberg's theory has been criticized particularly for its ineffectiveness in identifying upper stages of moral reasoning. Holstein (1973) pointed out that the use of males as the main characters in the moral dilemmas biased the interview technique. In her research Holstein (1972) also noted that a discrepancy in the stage assessment technique accounted for adult males typically scoring at stage four and females at stage three. Gilligan (1977) suggested that the qualities of pleasing others and smoothing interpersonal tensions, often valued by women, was unjustly ascribed by Kohlberg to stage three reasoning. Kurtines and Grief (1974) in a review of literature relating to Kohlberg research found several conceptual and methodological problems in the assessment technique of moral reasoning. Their primary criticism was directed toward the identification and assessment of the higher levels of moral reasoning. Muson (1979) also pointed out that contemporary critics of Kohlberg are concerned about the confusion relating to the upper stage concepts of justice and ethical principles.

Perspective Taking and Empathy

Several authors have cited the relationship between perspective taking (role taking), empathy, moral reasoning,

and acts of moral or prosocial behavior (Aronfreed, 1968; Flavell, 1968; Kohlberg, 1976; Piaget, 1932; Selman, 1971). According to Piaget (1932), it is not until the child is 7 or 8 years old that he begins to realize that others have their own perspective which is different from the child's. This begins to be realized when his egocentrism begins to wane. Perspective taking (role taking) skills develop coincidentally with the child's logical development and are heavily dependent on social experiences. Perspective taking, according to Kohlberg (1976) involves taking the attitude of others, by becoming aware of their thoughts and feelings. When the emotional side of role taking is stressed, it is typically referred to as "empathy" or "sympathy." Perspective taking opportunities exist for a child through experiences with his family, peer group, school, and other social organizations. Holstein (1968) found that the disposition of parents to encourage dialogue and perspective taking on value issues is one of the clearest determinants of moral stage advance in children. Kohlberg (1976) has stated also that the amount of extensive participation in a social group will influence moral development.

The dominant research emphasis on perspective taking skills of children has been on cognitive perspectives and has placed a premium on verbal skills. Flavell (1968) showed children an ordered series of pictures which tell a

story in comic strip fashion. After the child related the story depicted by the pictures, the experimenter removed three of the pictures leaving a four-picture sequence. The subject's task then was to predict the story that a second experimenter would relate upon seeing the series of four pictures. Flavell found that younger children (below 7 years of age) typically failed this test, whereas older children were able to assume the second experimenter's perspective and relate the modified version of the story. Flavell (1968, 1974) presented a model for social perspective taking which described four steps in role taking activity. He postulated that, first, the child must perceive the existence of another's capabilities for mental activity. Second, the child must be aware of the needs for perspective taking on his part. Third, an inference must be made by the child as to another's possible experiences as they relate to the situation at hand. Finally, an application through the child's overt behavior must be observed. Flavell suggested that a competitive game strategy is often evidence of the four step model he suggested.

Selman (1976) contends that an interrelationship exists between moral reasoning, perspective taking, and social behavior. Perspective taking is a form of social cognition intermediate between logical and moral thought. Just as Piaget's cognitive stages appear to be necessary

but not sufficient conditions for the parallel moral stages, perspective taking seems to be necessary but not sufficient to dictate corresponding moral reasoning stages (Selman, 1976, p. 307). Several studies support this analysis between role taking and moral judgment (Giraldo, 1973; Hickey, 1972; Thrower, 1972).

Selman (1971a) studied 60 middle class children ages 8, 9, and 10. Each child was administered Kohlberg's moral judgment test, two role taking tasks, and the Peabody Picture Vocabulary Test of Intelligence. In the first role taking test, the child was asked to select either a dime or a nickel which were placed in respective boxes by the experimenter. By taking one of the coins, the subject would be tricking his partner who was later told to come into the room and select from one of the boxes (hopefully the box which still had the coin in it). It was pointed out that the partner knew that the subject was going to try to trick him. Following this activity the subject was questioned to determine his rationale for attempting to trick his partner. If the subject displayed no understanding of why his partner would choose a particular box, he was assigned to level one of perspective taking. An assignment to a second level was made if the subject failed to account for the possibility that the partner could assess his own thought processes. A level three assignment was an indication that the subject was aware that reciprocal perspective taking was in process. In his analysis

and discussion, Selman indicated that the development of reciprocal role taking skills is related to the conventional level of moral judgment. Selman (1971b, 1976) suggested that the child prior to 6 years of age is egocentric in that his own view of a social situation predominates his thinking. He is unable to perceive others' view points in a social situation. At best the child assumes a similarity between his own view and those of others. It is only gradually that the child is able to infer others' intentions, feelings, or thoughts. Between the ages of 6 and 10 the child comes to realize that he can be the object of another's thoughts. At 10 or 11 years of age the child comes to realize that mutual role taking is possible, that is, the ability to take another's perspective while simultaneously being aware of one's own perspective. At approximately 12 years of age perspective taking extends to the "generalized other." At this time it is recognized that both he and the other know that each is capable of simultaneous role taking.

The contribution of empathy to prosocial behavior has been noted in the literature. Stern (1924) contended that empathy is basic to acts such as attempting to comfort, or in helping behaviors. Isaacs (1933) viewed empathy as essential in developing the ability to take turns, and to cooperate through active sharing. It has been suggested that a parent's use of the discipline

technique of pointing out the harmful consequences of a child's acts to another, contributes to moral development because it arouses empathy for the victim of the child (M. L. Hoffman, 1970; Saltzstein, 1976). Aronfreed (1970) indicated that empathy is a necessary precondition for prosocial behavior and that the ability to empathize was closely related to age. Cohen (1972) argued that the intensity of empathy varies across social groups and that certain conditions of sharing within the social group encourage the development of empathy.

Play and Games

Research on the influence of play and games on the developmental patterns of prosocial play behavior has been mostly theoretical. Several social scientists suggested that games, play, and sports serve as agencies of socialization for children (Cooley, 1922; Erickson, 1965; Mead, 1934; Piaget, 1932; Sutton-Smith, 1965). Bar-Tal (1976) noted that social competence is encouraged through communication skills that make possible the complex and frequent interactions with peers and adults. Bettelheim (1972) asserted that game playing serves an essential function in teaching children specific skills in living. He further stated that regardless of the level of complexity of the game, all such activities have in common the lesson of observing rules. Arnaud (1974) was quite specific in stating the value of play:

When shared with other children, play is a major vehicle for lessening naive egocentrism, for deepening children's empathy for others, and for developing the skills involved in constructive socialization with other children. (p. 74)

Dewey (1962) suggested that, based upon a child's developmental patterns, teachers should understand that attitudes, values, and behaviors are best taught when a student encounters a problem relevant to his interests and abilities, seeks to resolve the problem, and lives with the consequences. Games and play can provide a universal avenue for such explorations in the area of social development. Izard and Izard (1977) considered play to be "one of the cohesive forces that provides the context for social, emotional, and intellectual interactions with the environment" (p. 215). Gracie (1977) feels that play is an avenue of learning social skills. She stated: "It is important for its instrumental role in developing learning skills: social relationships and the nature of social reality" (p. 84).

The concepts supported by prosocial play behavior are commonly stated as goals of elementary physical education. Dauer and Pangrazi (1975) represented this view and recognized the role of play in physical education and its potential for developing social cognition and prosocial behavior. They stated:

Physical education is concerned with the development of desirable standards of ethical behavior, and

social and moral conduct. Many terms, such as good citizenship and sportsmanship, can be used to describe this goal. (p. 15)

Game playing provides an excellent means of acquiring and developing a predisposition for fair play. It furnishes an ideal opportunity for learning values which can influence behavior in everyday life. McIntosh (1973) identified several virtues as they related to game playing. Among items on his list were:

- (1) Respect for an opponent both on and off the field.
- (2) Acceptance of the officials' decisions without question or dispute.
- (3) Playing the game to the limits of human skill without resorting to physical intimidation.
- (4) Honesty and openness in all things pertaining to the game on and off the field. (p. 16)

Several writers ascribe character building benefits to participation in games and sports. Boudreaux (1972) speculated that the acquisition of desirable social values and concepts through games and sports will help a child later in life. Barren (1973) included the traits of loyalty, obedience, and courage as concomitant to sports and games participation. Alley (1974) asserted that games and play in elementary school are essential to developing positive patterns and attitudes of social behavior.

One of the roles of sports and games in the curriculum is to encourage cooperative citizenship. Spring (1974) stated: "On the athletic field the individual was to learn to work for the good of the group and to define

individualism as specialized effort for the good of the team" (p. 114).

Several authors have written of developmental patterns of play behavior (Mauldon & Redfern, 1968; Piaget, 1932; Sutton-Smith, 1965). Such writings often include a consideration of the types of games and play activity peculiar to each level of development. According to Pearson (1958), the active pursuit of organized games and sports seems to come into popularity during the beginning of adolescence. Two early theorists noted the transition of play patterns from late childhood to early adolescence. Gulick (1920) recognized the influence of play patterns as they affected social development of the child. He noted that elementary forms of play were replaced by more group games with accompanying complex ethical and social relationships. He spoke of a game playing morality more comprehensive than cooperation. Gulick observed that genuine teamwork is often a characteristic of adolescent play patterns. As he stated:

There is, however, a more comprehensive morality that comes in with the team games. Here enters the element of devotion to the whole, or loyalty to a group. It begins at about the age of twelve, although, in this case also, there are individual variations. As a rule, it is quite futile to plan team games for the years from seven to twelve. Basketball played by small children is not team-play. Every one wants to put the ball into the basket himself. Team-work is the keynote of this group of games. And team-work is very different from simple cooperation, as any boy who has played on a team knows. A game in which every

boy plays as well as he can, but without sacrificing himself for the good of the whole is not team-work. (pp. 190-191)

Hollingworth (1927) observed a difference in the play patterns of 11-year-olds and adolescents. Although competition is common to both, the subordination of the individual to the goals of the team is not really seen until children are 12 or 13 years of age. He stated:

The plays of the free eleven-year-old are strongly social, in the sense that they involve many players. Elements of individual competition are strong: organized team play is often attempted, probably on the basis of imitation, but such efforts commonly degenerate into "all-star" performances. (p. 201)

The subordination of the "self" to the general good of the group performance is generally not observed until the onset of adolescence. Hollingworth noted this change in play patterns and stated:

In adolescence . . . team games involving elaborate organization, calling for subordination of the individual to the total result or final goal, becomes more common. (p. 245)

Sportsmanship

Sportsmanship has been closely allied with prosocial play behavior and moral behavior in game situations. Social scientists considered prosocial behavior to be acts such as helping, sharing, donating, empathizing, and cooperating (Bar-Tal, 1976; Midlarsky, 1968; Piliavin et al., 1969; Wispe, 1972). Sportsmanship, and its associated behaviors, has been conceptualized as a virtue (Bryson, 1948), an attitude (David, 1970; Keller, 1974; Lauffer, 1970),

a knowledge of proper conduct (Bovyer, 1963; Jantz, 1975), and a function of situations and experiences (Hollingsworth, 1969; Smith, 1975; Waxlav, 1972; York, 1976). In a group report to the National Conference on the Development of Human Values Through Sport (1973), the following values were listed as warranting deliberate and systematic teaching by physical educators and coaches:

- (1) Fairness and honesty (integrity)
- (2) Ethical behavior
- (3) Respect for the individual
- (4) Acceptable conduct while engaging in sport activities. (p. 72)

Jantz (1975) observed that opportunities for informal teaching in elementary school for moral growth often occur during physical education class in game activities. In a 1975 study, Jantz tested the feasibility of applying Piaget's framework regarding "Rules of the Game" to pupils in elementary school grades. Rather than using the game of marbles, as did Piaget, he used the rules of basketball as a frame of reference. His subjects were 72 boys in grades one through six. The boys were interviewed individually using five questions. The questions were: What are the rules of basketball?, Who makes the rules of basketball?, How do you agree upon the rules?, What happens if you break the rules?, Do the rules of basketball ever change?. Using a content analysis, the boys' responses were categorized as reflecting either a coercive rules orientation, or a rational rules orientation. Piaget referred

to these two levels of morality as either a morality of constraint, or a morality of cooperation. Following this assessment the boys' interview scores were analyzed using an ANOVA. This analysis revealed significant differences between grade levels. Lower level thinking (morality of constraint) was typically found in grades one and two, and higher level thinking (morality of cooperation) found in grades three through six. Although Jantz considered children's rules orientation, he did not consider his results in light of game playing behavior.

Jersild (1954) pointed out that modifications of attitudes and increases in knowledge of proper behavior probably precedes behavioral change. In order to investigate the ability to increase children's knowledge of sportsmanship, Bovyer (1963) asked 213 fourth, fifth and sixth grade boys and girls to write as much as they could about the meaning of sportsmanship. After the initial writing the group was randomly divided into two groups in which I.Q., mental age, and chronological age were the same. One of the groups was then read twelve sportsmanship stories. No discussion was permitted following the readings. Both groups were then asked again to write as much as they could about the meaning of sportsmanship. Bovyer stated that those who heard the stories did not differ from those who did not hear the stories in the number of statements that they recorded. There was a significant

difference however, between the fourth and sixth grade children. Bovyer noted that sixth graders tended more often to mention categories related to somewhat subtle human relationships than fourth graders. The categories most often mentioned were:

- (1) plays by the rules and exhibits fair play
- (2) respects the decisions, requests, opinions,
and ideas of other people
- (3) is a good loser
- (4) is even-tempered
- (5) respects the emotional feelings of other people
- (6) takes turns and lets others play (p. 285)

In a follow-up procedure, Bovyer found that those children who were rated as "good sports" scored significantly higher than those who were rated as "poor sports." The sports behavior ratings were arrived at subjectively by both the children's peers and teachers. Bovyer speculated that this is an indication that "the knowledge of favorable traits of conduct may be related in a positive manner to behavior that is considered favorable" (p. 286). He concluded that "Random play and single readings of stories are not enough; play activities and the forces of literature may be brought out more strongly under teacher guidance and discussion" (p. 287).

In summary, the review of literature in this chapter described the various environmental and developmental variables which may influence prosocial play behavior.

Imitation of models and theories of reinforcement were shown to be instrumental in affecting prosocial behavior.

Several experiments provided evidence supporting a developmental tendency in children to display prosocial behaviors.

Cognitive and moral development of children has been described by many researchers as basic to an understanding of prosocial behavior patterns. This relationship, however, has not been substantially supported by research findings and is presently in a stage of theory development.

Other research indicates that a relationship exists between children's abilities in perspective taking, empathy, and prosocial behavior. The interrelatedness of these abilities has also been thought to influence children's moral decision making.

Play and games have been thought to be agencies of socialization for children. Several writers ascribe character building benefits to participation in play and games. In this review developmental patterns of play behavior have been described from the point of view of several authors who have noted distinct changes in children's play patterns as they approach adolescence.

Social scientists have noted that a knowledge of proper behavior precedes behavioral changes. Research related to a knowledge of sportsmanship and related behaviors has been scanty but tends to support a hypothesized relationship between children's perception of sportsmanship and their prosocial play behavior.

CHAPTER III

PROCEDURES

The purpose of this study was to explore the relationship of selected prosocial play behaviors in children to three developmental and environmental factors.

Specifically:

Is prosocial play behavior associated with a child's level of moral reasoning?

Is prosocial play behavior associated with a child's participation in youth sports?

Is prosocial play behavior associated with a child's perception of the concept of sportsmanship?

The procedures for the study are presented in four sections. The sections include: instrumentation, pilot study, collection of data, and analysis of data.

Instrumentation

Data were obtained for four variables. Data for the variable prosocial play behavior were obtained from a prosocial play behavior inventory. Three phases of a structured interview provided data for the variables: moral reasoning, participation in youth sports, and perception of sportsmanship.

Prosocial Play Behavior Inventory

Teacher observations using a rating scale was the method used for assessing the children's prosocial play behavior. There is evidence supporting the validity of teacher judgments and teacher ratings of non-academic behavior of children (Bower, 1958; Schanberger, 1968; Ullmann, 1957). In particular, Coury (1968) found support for the contention that teachers are well informed on the principles of child growth and development, and sensitive to the kinds of adjustment problems children experience.

In developing a prosocial play behavior inventory, the investigator adapted the procedures suggested by Smith and Kendall (1963) who minimized the problems often associated with rating scales by developing a behaviorally anchored rating scale jointly with members of the rating population. Through working with the teachers assigned to do the rating of children's prosocial play behavior, the investigator developed a set of behavioral attributes associated with successful and cooperative recreational game playing. This was done by an investigation which was conducted with the assistance of ten fifth and sixth grade teachers, and six elementary school physical education teachers. The result was a prosocial play behavior inventory. The steps in the process were as follows:

1. First, a list of 35 prosocial and antisocial play behaviors was developed by the investigator.

2. Next, the teachers observed their children in recreational settings which consisted of both "high" and "low" organizational games, and under three supervisory settings. The settings were: extensive supervision, moderate supervision, and limited supervision. Teachers were asked to observe prosocial and antisocial play behaviors in a combination of two organizational patterns and three supervisory patterns. A total of six observational conditions were required before the teachers could score the behaviors (see Appendix A.)

3. The teachers were asked to score the selected play behaviors as either "easily observable," "at times difficult to observe," or "very difficult to observe" (see Appendix B).

4. Next, the teachers' ratings were tabulated and only behavioral statements receiving 80% agreement as "easily observable" remained in the inventory. Since the investigation concerned only prosocial play behavior, the antisocial behaviors were eliminated from the inventory.

5. Finally, a survey was conducted of the six elementary school physical education teachers in the Greensboro, North Carolina public school system. These teachers were asked to rate the prosocial play behaviors according to how easily they thought that these acts could be observed in recreational play situations (see Appendix

C). A 66% agreement was required to retain a particular play behavior on the inventory.

The final inventory, consisting of the 10 remaining behavioral statements, was used to rate the children's prosocial play behavior. This process was basic to the investigation of the problems set forth in this study. The inventory is consistent with an adaptation of the Smith and Kendall (1963) method of behavior assessment, and utilizes a "forced choice" response format suggested by Schaefer and Edgerton (1977). A child's prosocial play behavior score is determined by totaling the points circled for each of the 10 behavioral statements. Those children who display prosocial play behaviors receive more points than those who do not display the behaviors (see Appendix D for the Prosocial Play Behavior Inventory). Using the inventory, children's prosocial play behavior scores can range from 10 to 40 points.

The reliability of the inventory was determined using the split-half method for estimating the internal consistency of a test. By using the Ferguson (1976) formula for the calculation of a correlation coefficient from ungrouped data, and the Spearman-Brown formula, reliability coefficients were obtained. For the 63 children in the final sample, $r = .98$; for a random sampling of 50 children from the total Price School population of 245 children, an (\underline{r}) of .96 was determined.

Moral Reasoning

A structured interview was used as the method for assessing the children's level of moral reasoning. A cognitive developmental approach to the study of morality has been discussed by Kohlberg (1963, 1971), and Piaget (1932). Both authors have identified characteristics of moral judgment which change with children's development. It has been consistently noted that children pass through an invariant sequence of moral stages (Piaget, 1932; Kohlberg, 1963). Each stage is characterized by a mode of reasoning which is exercised in moral decision making.

The method of assessing the child's level of moral reasoning was that described by Kohlberg (1963, 1976). His structured interview technique is a process of questioning the child using a hypothetical moral dilemma as a basis for questions. The investigator assesses the level of moral reasoning used to justify the child's responses to questions by equating the verbal exchange with normative responses (Kohlberg et al., 1976).

To determine the child's stage of moral reasoning in the present study, the investigator first identified the value or issue orientation under investigation. Kohlberg (1976) has developed the following list of values and issues he believes are found in every society and culture:

- (1) Laws and rules
- (2) Conscience
- (3) Personal roles of affection (affiliative roles and relations)

- (4) Authority
 - (5) Civil rights
 - (6) Contract, trust, and justice in exchange
 - (7) Punishment and justice
 - (8) The value of life
 - (9) Property rights and value
 - (10) Truth
 - (11) Sex and sexual love
- (p. 43)

Three of these issues were germane to the questions posed in the present study. They were: (1) laws and rules, (3) personal roles of affection (affiliative roles and relations), and (6) contract, trust and justice in exchange. In his moral assessment manual, Kohlberg et al.(1976) presents suggested moral dilemma stories which incorporate these issues. The investigator used the moral dilemma story referred to as "Judy and the Rock Concert" (Appendix E). The selection of this dilemma story was based on its relevance to the age group studied, and on the values and issues underlying the dilemma (affiliative roles and relations, and contract, trust, and justice in exchange). Specific questions suggested by Kohlberg et al.(1976) and refined by the investigator, were used for the interview (see Appendix E). An analysis of the children's responses was used to determine the stage of moral reasoning as defined by the following standards:

- Stage 1 Punishment and obedience orientation
- Stage 2 Naive instrumental hedonism
- Stage 3 Good-boy morality of maintaining good relations and approval of others
- Stage 4 Authority maintaining morality

- Stage 5 Morality of contract, of individual rights,
and of democratically accepted law
Stage 6 Morality of individual principles of
conscience
(Kohlberg, 1964, p. 400; 1976, p. 34)

Kohlberg (1976) grouped the six stages of moral reasoning into three distinct modes of reasoning as follows: preconventional mode (stages 1 and 2), conventional mode (stages 3 and 4), and post conventional mode (stages 5 and 6). A child in a preconventional mode of reasoning recognizes and respects the ultimate rights of authority figures to dictate rules and regulations. Thus, rules and social expectations are something external to the self. A child in a conventional mode of reasoning has internalized the rules and expectations of others, especially those of others. In a conventional mode the child has learned to subordinate the needs of the individual to the needs of the group. A postconventional mode of reasoning is displayed by a person who has differentiated his self from the expectations of others and defines personal values in terms of self-chosen principles.

Children's moral reasoning data were in the form of answers to specific questions relating to the hypothetical moral dilemma story. The children's responses were analyzed by use of the Kohlberg manual and translated into a numerical score. The possible range of scores was from 100 to 600 points. Children's statements relating to the moral dilemma story were reflective of stage 1, 2, 3, and 4 reasoning. A "pure" stage 1 reasoning level is

represented by a score of 100 points, and a stage 3 level by a score of 300 points.

The assessment of the children's responses and stage assignment was made by the investigator. In order to reduce the risk of rater bias in assessing and scoring the children's moral reasoning, a random selection of 30 children's interview protocols was assessed by an independent scorer. Kohlberg (1976) stated that a 90% interjudge agreement was possible in using the "issue judgment" method of moral stage assessment. Marcus Lieberman (1976) however, suggested that an 80% to 90% interjudge agreement was a reasonable goal for most research. In the present study, 87% interjudge agreement was obtained for moral reasoning assessment.

Participation in Youth Sports

A focused interview provided data related to the children's participation in youth sports. An internalization of social values can take place as children come to relate these values to comprehend the social order. The fundamental factor causing such a cognitive structuring is social participation. Inasmuch as verbal and nonverbal articulation of personal social values transpires between children in youth sport activities, the amount of active youth sports participation by the subjects was considered important as this exchange related to prosocial play behavior patterns. Because of the rapid moral stage

transition that takes place between the ages of nine to twelve (Kohlberg, 1963, 1969), and the availability for participation in organized sports by this group, the current investigation included as a variable the frequency of youth sports participation by the children during these years.

Each child was asked to respond to questions probing: (a) the type and frequency of youth sports participation, (b) the type of leadership of the youth sports organization, and (c) the schedule of practices and/or contests (see Appendix F). Children's participation in youth sports data were translated into a frequency scale as follows:

1. Extensive participation in youth sports referred to participation on four or more youth teams within the past two years. This amount of participation was assigned a value of three points.

2. Moderate participation in youth sports referred to participation on two or three youth teams within the past two years. This amount of participation was assigned a value of two points.

3. Limited participation in youth sports referred to participation on one or no youth teams within the past two years. This amount of participation was assigned a value of one point.

Perception of Sportsmanship

Various techniques for the assessment of sportsmanship attitudes are available (Haskins, 1960; Johnson, 1966;

McAfee, 1955). However, research on children's knowledge or perception of sportsmanship has been sparse. Bovyer (1963) assessed children's perception of sportsmanship. He asked fourth, fifth, and sixth grade children to write as much as they knew about the concept sportsmanship. His pencil and paper test, however, placed constraints on those children with limited verbal and writing skills. His method also did not permit an investigator to probe the children's responses. Jantz (1975) used the interview technique and probed children's responses to questions regarding the origin and nature of rules for the game of basketball. His research dealt only with rules and did not consider the general concept of sportsmanship.

The concept of sportsmanship often tends to be equated, by fifth and sixth grade children, with a mutual respect regarding human relations (Bovyer, 1963). In the present study the method of assessing the children's perception of sportsmanship paralleled the assessment of moral reasoning and focused on human relations in a sports situation. A structured interview, using a sports dilemma story as a basis, was used to elicit and probe responses to selected questions. The sports dilemma story and questions were written by the investigator to reflect the Kohlberg (1976) issues of: (a) affiliative roles and relations, and (b) contract, trust, and justice in exchange. In addition the investigator sought to elicit the children's rationale for

adhering to rules of games. This issue is reflected in the Kohlberg issue of "Rules and Laws." The sports dilemma story and the corresponding questions are contained in Appendix G. The preliminary validation of the sports dilemma story and the interview questions to include the prescribed issues, was made by a logical content analysis using an independent judge who was experienced in the Kohlberg assessment technique.

Children's perception of sportsmanship data were in the form of answers to specific questions relating to the sports dilemma. Analysis of the children's responses determined their orientation toward the concept of sportsmanship. Their orientation was equated with one of the six levels of reasoning described by Kohlberg (1976). This orientation was translated into a numerical score with a possible range of 100 to 600 points. The assessment of the children's responses and assignment of a level of sportsmanship reasoning was made by the investigator. In order to reduce the risk of rater bias in assessing the children's sportsmanship reasoning, a random selection of 30 children's interview protocols was assessed by an independent scorer. This procedure resulted in an 83% interjudge agreement for the assessment of children's perception of sportsmanship.

Pilot Study

A pilot study was conducted in the early spring of 1978 in order to determine the feasibility of the procedures. Specifically, the investigator sought to determine:

1. The amount of time needed for a classroom teacher to assess the prosocial play behavior of 25 children using the "Prosocial Play Behavior Inventory."

2. If the range of scores within a classroom was reflective of high, low, and mid-range abilities in prosocial play behavior.

3. The amount of time needed to conduct individual interviews.

4. If questions relating to the moral dilemma story were specific enough to elicit responses from children.

5. If questions relating to participation in youth sports were specific enough to elicit responses from children.

6. If questions relating to the sports dilemma story were specific enough to elicit responses from children.

7. If responses to questions regarding the moral dilemma and sports dilemma stories paralleled those prototypical responses in the Kohlberg manual of moral assessment.

The following schedule was followed in the pilot study data collection process:

1. One fifth grade teacher rated each of the children in her class using the prosocial play behavior inventory.

2. Each child's prosocial play behavior score was determined by totaling the points circled for each of the 10 behaviors.

3. The selection of three children to be interviewed in the pilot study was made by the school testing coordinator (counselor). The three children who were selected represented three levels of prosocial play behavior, both sexes, and different races.

4. Subjects were interviewed individually during the school day using a predetermined interview format. The format was the same for each child. First, the moral dilemma story was read to the child followed by questions relating to the story. Second the child was asked questions regarding the type and frequency of participation in youth sports activities. Last, the sports dilemma story was read to the child followed by questions relating to the story.

After all these procedures were completed, a stage analysis of the children's responses to the moral and sports dilemma questions was performed.

The results of the pilot study showed that a classroom teacher could rate 25 children using the prosocial play behavior inventory in a total of four hours. Realizing that teachers would perform this task during "after school

hours," a decision was made to allow subsequent teachers to rate their entire class using a two-day schedule. The range of scores of the piloted class using the prosocial play behavior inventory was reflective of high, medium, and low range abilities in prosocial play behavior.

Individual interviews were found to take about 25 minutes. Certain questions relating to the moral dilemma story, and to the sports dilemma story had to be rephrased in order to elicit responses from the children. The refined list of questions relating to the moral dilemma story is contained in Appendix E. The refined list of questions relating to the sports dilemma story is contained in Appendix G. Questions relating to participation in youth sports activities were specific enough to elicit responses from the children.

A revised format of the sports dilemma story was needed to make it more manageable in an interview. The revised story is contained in Appendix G.

Responses to questions regarding the moral and sports dilemma stories were found to be parallel to those prototypical responses in the Kohlberg manual of moral assessment.

Collection of Data

The following procedures were implemented in order to preserve the integrity and confidentiality of all the participants in the present study: (a) verbal permission

to pursue research was obtained from the appropriate public school administrative personnel in Greensboro, North Carolina, (b) parental permission was obtained for the 63 children selected to be in the study (see Appendix H), (c) the teachers involved in the study signed and retained a copy of the "Teacher's Release of Responsibility Form" (see Appendix I), and (d) permission to pursue research was granted by the "Committee for Human Subject Research" in the School of Health, Physical Education, Recreation and Dance, of the University of North Carolina at Greensboro.

Selection of Subjects

The prosocial play behavior inventory was used in selecting the subjects for the study. The children selected to participate in this study were 63 fifth and sixth grade boys and girls at J. C. Price Elementary School in Greensboro, North Carolina. In order to determine the children's prosocial play behavior scores, four fifth and five sixth grade teachers rated each of the children in their classrooms using the prosocial play behavior inventory. The total number rated was 245 children. A stratified random sampling process with allowance for a proportionate distribution of sexes, races, grade levels, and membership in various classrooms was used to select the children for the study. The selection of subjects as representing high, medium, and low prosocial play behavior abilities was made by the school testing coordinator

(counselor). The selection of the children by the testing coordinator helped to ensure the objectivity of the interview process as the investigator was not aware of the prosocial play behavior scores of the children at the time of the interviews.

The range of scores on the prosocial play behavior inventory was from 10 to 40 points. There were 20 children in the high prosocial play behavior group. The range of scores for this group was from 37 to 40 points. Their mean score was 39.3 points. Twenty-one children were in the middle prosocial play behavior group. The range of scores for this group was from 26 to 36 points. Their mean score was 31.28 points. There were 22 children in the low prosocial play behavior group with scores ranging from 10 to 25 points. The mean score for this group was 18.3 points. The mean score for the entire sample was 29.3 points. See Table 1 for group data.

Table 1
Means, Standard Deviation, Range, and Standard Error of the Means for Three Prosocial Play Behavior Groups

Prosocial Groups	Number of Children	Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
High	20	39.3	1.08	37-40	.24
Medium	21	31.28	3.2	26-36	.7
Low	22	18.3	4.4	10-25	.93

Interviews

Each child was individually interviewed during the school day in a room adjacent to the elementary school media center. The interviews were tape recorded. The tape recorder was in view of the child. It was felt that attempting to conceal the tape recorder was neither necessary nor desirable. The children were told that the tape recorder would expedite the interview process but that, if they preferred, the investigator would take notes during the interview rather than use the recorder. All of the children preferred to have the recorder running during the interview and expressed a desire to have parts of the interview "played back" at the completion of the session. A cordial and accepting atmosphere was maintained throughout the interview sessions. This was initiated by the investigator who asked preliminary questions regarding what had happened in school that day, and what types of activities the child had planned for after school hours. When it was felt that the child was in a relaxed mood, the structured interview was begun. The interview format was as follows:

- (A) Moral dilemma story (read by the investigator)
Moral dilemma questions and discussion (see Appendix E)
- (B) Questions regarding participation in youth sports
(see Appendix F)
- (C) Sports dilemma story (read by the investigator)
Sports dilemma questions and discussion (see Appendix G)

To reduce the reactive effect from the interview order, sections (A) and (C) were reversed on the odd numbered interviews.

In addition to the variables previously defined, supplementary demographic data were obtained through the interviews and from personal student files which were maintained by the public school the children attended. The demographic data were comprised of four categories as follows: (a) personal characteristics, (b) family size and structure, (c) education and occupation of parents, and (d) children's play partners and patterns. See Appendixes J, K, L, M.

Analysis of the Data

Organization of the Data for Analysis

The purpose of this study was to explore the relationship of selected prosocial play behaviors in children to three developmental and environmental factors. Specifically:

Is prosocial play behavior associated with a child's level of moral reasoning?

Is prosocial play behavior associated with a child's participation in youth sports?

Is prosocial play behavior associated with a child's perception of the concept of sportsmanship?

The prosocial play behavior inventory yielded data for three groups of children as follows: (a) data for children who tend to display prosocial play behaviors, (b) data for children who scored in the mid-range on the inventory, and

(c) data for children who tend not to display prosocial play behaviors.

In order to further explore the relationships of the variables prosocial play behavior, moral reasoning, participation in youth sports, and perception of sportsmanship, each of these variables was successively reclassified as the independent variable. First, data of children scoring at three different levels of moral reasoning were considered. The assigning of three groups was consistent with the Kohlberg assessment technique of moral reasoning. Kohlberg et al. (1976) stated that a first stage of moral reasoning is represented by a score between 100 and 199 points. A score between 250 and 299 points indicates a transitional period in a subject's moral reasoning from a preconventional to a conventional mode of reasoning. Using this framework, the following groupings were determined for analysis: (a) Low moral reasoning group, 100 to 199 points, (b) Middle moral reasoning group, 200 to 249 points, and (c) High moral reasoning group, 250 points and higher.

Second, data of children with varying experiences in youth sports participation were considered. The following groupings were determined for analysis: (a) extensive participation, value of 3 points, (b) moderate participation, value of 2 points, and (c) limited participation, value of 1 point.

Third, data of children scoring at three different levels of perception of sportsmanship were considered. Because the underlying issues and methodology for assessing moral reasoning and perception of sportsmanship were similar, the determination of the three groups of perception of sportsmanship was parallel to moral reasoning. The following groupings were determined for analysis: (a) low perception of sportsmanship group, 100 to 199 points, (b) middle perception of sportsmanship group, 200 to 249 points, and (c) high perception of sportsmanship group, 250 points and higher.

In addition to the variables previously defined, the means and frequencies of demographic data were tallied and appear in Appendixes J, K, L, M. These data were collected in an exploratory endeavor. They refer to variables not previously hypothesized which might lend insights to discussion.

Statistical Treatment of the Data

The data were analyzed in stages. First, the appropriate nonparametric (Kendall tau) and parametric statistics (Pearson product-moment, one way ANOVA, and Scheffé post hoc analysis) were calculated.

The non-parametric statistic was employed to test the hypothesis that sample scores were drawn from the same population. The Kendall tau coefficient was used for its

ability to calculate a large number of tied scores. As a nonparametric measurement it utilizes ordinal level scores and was therefore appropriate for an analysis involving the variable participation in youth sports. The combination of scores using a nonparametric technique provided a gross analysis of the four variables.

Parametric statistics were employed for their increased power and versatility over the ordinal correlation techniques. This statistical treatment also permitted a comparison of the group means for the variables. A Pearson correlation coefficient was obtained for the variables: prosocial play behavior, moral reasoning, and perception of sportsmanship. The Pearson correlation has the advantage of being more powerful than a nonparametric technique as it is more sensitive to the absolute magnitude of the raw scores.

In order to further explore the relationships of the four variables, each of the variables was successively reclassified as the independent variable and an analysis of variance was performed. The ANOVA procedure permitted the investigator to explore the possibility of significant relationships among group scores for the variables.

The reclassification of each of the variables as the independent variable often resulted in unequal numbers of children in each of the new definitions of the three experimental groups. Although unequal numbers of children in the redefined groups tended to vitiate the results of the

parametric analysis, the reclassification of the variables aided the investigator in seeking to gain a deeper understanding of the theoretical relationship between prosocial play behavior, moral reasoning, participation in youth sports, and perception of sportsmanship. This analysis technique is consistent with Kerlinger's (1973) proposal that additional relations in research data should be sought and tested. He stated that the investigation of unpredicted relationships "may throw light on aspects of the problem not anticipated when the problem was formulated" (p. 154).

When it was found that a significant relationship existed for a particular independent variable, a Scheffé post hoc comparison of group means was utilized in order to further identify group differences. Downie and Heath (1970) recognized that the Scheffé test is one of the more rigorous methods of post hoc analysis in that it reduces the probability of making a type I error.

In both the parametric and nonparametric procedures, a probability level of .05 or less was considered as statistically significant. The General Linear Models Procedure of the Statistical Analysis System--SAS--(Barr, Goodnight, Sall, & Helwig, 1976) was used for all ANOVA procedures.

In the second stage of analysis, group profiles were developed as representative of those children who tended to display prosocial play behavior, and those children who did not. The profiles are both verbal and graphic. They are

based on: (a) calculated T-scores showing group comparisons, (b) mean scores where there were significant differences between groups and among variables, and (c) prototypical statements relating to moral reasoning and perception of sportsmanship where there were significant differences between groups.

CHAPTER IV
PRESENTATION OF THE FINDINGS

The purpose of this study was to explore the relationship of selected prosocial play behaviors in children to three developmental and environmental factors. Specifically,

Is prosocial play behavior associated with a child's level of moral reasoning?

Is prosocial play behavior associated with a child's participation in youth sports?

Is prosocial play behavior associated with a child's perception of the concept of sportsmanship?

This chapter includes statistical findings germane to the three questions in this study. The relationship of the variables was first analyzed by determining the correlation coefficients. In order to further explore the relationships of the four variables in the study, each of the variables was successively reclassified as the independent variable and a one-way analysis of variance was performed. The reclassification of each of the variables as the independent variable often resulted in unequal numbers of children in each of the three experimental groups. Although unequal numbers of children in groups tended to vitiate the results of the analysis, the reclassification of the variables aided the

investigator in seeking to gain a deeper understanding of the theoretical relationships between the four variables. When it was found that a significant relationship existed between groups for a particular independent variable, a Scheffé post hoc comparison of group means was performed.

The following groups of data were analyzed: 1) data of children who scored at three levels on the prosocial play behavior inventory, 2) data of children who scored at three different levels of moral reasoning, 3) data of children with three different amounts of youth sports participation, and 4) data of children at three different levels of perception of sportsmanship.

Also included in this chapter are the group profiles of those children who tended to display prosocial play behavior as well as those children who did not. These profiles are both graphic and verbal.

Subjects were selected for the study through teacher observations using a rating scale for assessing the children's prosocial play behavior. The rating inventory consisted of 10 behavior statements to which the teacher responded for each of the children in the classroom. A child's prosocial play behavior score was determined by totaling the points circled for each of the 10 behavior statements. Those children who displayed prosocial play behaviors received more points than those who did not display the behaviors. The

children selected to participate in the study were 63 fifth and sixth grade boys and girls who attended a public elementary school in Greensboro, North Carolina. The investigation included 20 children who scored high on the prosocial play behavior inventory, 22 children who scored low, and 21 children who scored within the mid-range on the inventory.

Prosocial Play Behavior and Moral Reasoning

Is prosocial play behavior associated with a child's level of moral reasoning?

Main Findings

Three groups of children who scored either high, medium, or low on the prosocial play behavior inventory were identified. The analysis of data for these three groups concerned both their scores for prosocial play behavior and their scores for moral reasoning. The two sets of data were analyzed for two reasons: (a) to show the degree of correlation between the scores for the variables, and (b) to identify significant differences in the moral reasoning scores among the three groups of children. Both a non-parametric Kendall tau and a parametric Pearson r correlation coefficient were obtained for the data. The resulting coefficients (Kendall tau = .40; Pearson r = .55) were significant at the .01 level (see Table 2).

An ANOVA was performed to determine if moral reasoning scores for the high, medium, and low prosocial play behavior

Table 2
 Matrixes Showing the Results of Kendall tau and
 Pearson r Correlations for All Four Variables

<u>Kendall Correlations</u>				
	Prosocial Play Behavior	Moral Reasoning	Participa- in Sports	Perception of Sports- manship
Prosocial Play Behavior	---	.40 (.01)	.06 (.5)	.48 (.01)
Moral Reasoning		---	.18 (.07)	.56 (.01)
Participation in Sports			---	.25 (.01)
Perception of Sportsmanship				---

<u>Pearson Correlations</u>			
	Prosocial Play Behavior	Moral Reasoning	Perception of Sports- manship
Prosocial Play Behavior	---	.55 (.01)	.63 (.01)
Moral Reasoning		---	.75 (.01)
Perception of Sportsmanship			---

groups varied significantly. See Table 3 for the descriptive statistics of the moral reasoning scores according to the three prosocial play behavior groups. The obtained F value of 14.73 was significant at the .01 level (see Table 4). A Scheffé post hoc comparison of group means was performed in order to further isolate group differences. The obtained F values indicated that the high prosocial play behavior group differed significantly ($p < .01$) from both the medium and the low groups on moral reasoning. However, the medium and the low prosocial play behavior groups did not differ significantly ($p < .05$) from each other on moral reasoning. See Table 5 for Scheffé F scores.

Table 3
Descriptive Statistics of Moral Reasoning Scores
According to Three Prosocial Play
Behavior Groups

Prosocial Groups	Number of Children	Moral Reasoning Scores			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
High	20	247.6	46.5	150-333	10.4
Medium	21	207.	40.3	150-275	8.8
Low	22	183.8	26.2	150-241	5.5

Table 4
Results of the ANOVA of Moral Reasoning Scores
for Three Prosocial Play Behavior Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	P
Between-Groups	43338.7	2	21669.3	14.73	($p < .01$)
Within-Groups	<u>88236.9</u>	<u>60</u>	1470.6		
Total	131575.7	62			

Table 5
Results of the Scheffé Post Hoc Comparison of Moral Reasoning Scores for the High, Medium, and Low Prosocial Play Behavior Groups

Prosocial Play Groups	with	Prosocial Play Groups	F	P
High	x	Medium	11.51	($p < .01$)
High	x	Low	28.98	($p < .01$)
Medium	x	Low	3.91	not significant ($p < .05$)

Secondary Findings

In order to further explore the relationship of the variables prosocial play behavior and moral reasoning, three groups of moral reasoning scores (high, medium, and low)

were reclassified as the independent variable. An analysis of variance and post hoc analysis were performed to identify significant differences in the prosocial play behavior scores for the three moral reasoning groups. There were 11 children in the high moral reasoning group, 23 in the medium group, and 29 children in the low moral reasoning group. See Table 6 for the descriptive statistics of prosocial play behavior scores according to the three moral reasoning groups.

Table 6
Descriptive Statistics of Prosocial Play Behavior
Scores According to Three Moral
Reasoning Groups

Moral Reasoning Groups	Number of Children	Prosocial Play Behavior Scores			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
High	11	37.6	3.4	28-40	1.1
Medium	23	31.6	8.4	15-40	1.7
Low	29	24.2	8.2	10-40	1.5

The obtained F value of 13.00 for the ANOVA was significant at the .01 level (see Table 7). A Scheffé post hoc comparison of group means was performed in order to further isolate group differences. The obtained F values indicated that the high moral reasoning group differed significantly

($p < .01$) from the low group on prosocial play behavior scores. The medium moral reasoning group also differed significantly ($p < .01$) from the low group on prosocial play behavior scores. The medium moral reasoning group did not differ significantly ($p < .05$) from the high group on prosocial play behavior scores. See Table 8 for Scheffé F scores.

Table 7

Results of the ANOVA of Prosocial Play Behavior Scores for Three Moral Reasoning Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	P
Between-Groups	1623.7	2	811.8	13.00	($p < .01$)
Within-Groups	3747.5	60	62.4		
Total	5371	62			

Table 8

Results of the Scheffé Post Hoc Comparison of Prosocial Play Behavior Scores for the High, Medium, and Low Moral Reasoning Groups

Moral Reasoning Groups	with	Moral Reasoning Groups	F	P
High	x	Medium	4.26	not significant ($p < .05$)
High	x	Low	22.82	($p < .01$)
Medium	x	Low	11.2	($p < .01$)

Prosocial Play Behavior and Participation in Youth Sports

Is prosocial play behavior associated with a child's participation in youth sports?

Main Finding

Data for the variable participation in youth sports were represented at the ordinal level. In order to explore the relationship between the scores for prosocial play behavior and participation in youth sports, a Kendall rank order correlation coefficient was calculated. The obtained coefficient of .06 was not significant at the .05 level (see Table 2).

Secondary Findings

In order to further explore the relationship of the variables prosocial play behavior and participation in youth sports, three groups of participation in youth sports (Extensive, Moderate, and Limited) were classified as the independent variable. An analysis of variance was performed to identify significant differences in the prosocial play behavior scores for the three groups of participation in youth sports. There were 14 children in the extensive participation group, 13 children in the moderate group, and 36 children in the limited participation in youth sports group. See Table 9 for the descriptive statistics of prosocial play behavior scores according to the three participation in youth sports groups.

Table 9
Descriptive Statistics of Prosocial Play Behavior
Scores According to Three Participation
in Youth Sports Groups

Participation Groups	Number of Children	Group Means	Prosocial Play Behavior Scores		
			Standard Deviation	Range of Scores	Standard Error of the Means
Extensive Participation	14	32.2	8.65	15-40	2.4
Moderate Participation	13	26.8	7.1	11-40	2.03
Limited Participation	36	29.	9.8	10-40	1.66

The obtained F value of 1.19 indicated that a nonsignificant difference ($p < .05$) in scores for prosocial play behavior existed among the three participation in youth sports groups. See Table 10 for the results of the analysis of variance of prosocial play behavior scores for three participation in youth sports groups.

Prosocial Play Behavior and Perception of Sportsmanship

Is prosocial play behavior associated with a child's perception of the concept of sportsmanship?

Main Findings

Three groups of children who scored either high, medium, or low on the prosocial play behavior inventory

were identified. The analysis of data for these three groups concerned both their scores for prosocial play behavior and their scores for perception of sportsmanship. The two sets of data were analyzed for two reasons: (a) to show the degree of correlation between the scores for the variables, and (b) to identify significant differences in the perception of sportsmanship scores among the three groups of children. Both a nonparametric Kendall tau and a parametric Pearson r correlation coefficient were obtained for the data. The resulting coefficients (Kendall tau = .48; Pearson r = .63) were significant at the .01 level (see Table 2).

Table 10
Results of the ANOVA of Prosocial Play Behavior
Scores for Three Participation
in Youth Sports Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	P
Between-Groups	205.7	2	102.8	1.19	not significant ($p < .05$)
Within-Groups	5165.5	60	86.09		
Total	5371.2	62			

An ANOVA was performed to determine if perception of sportsmanship scores for the high, medium, and low prosocial play behavior groups varied significantly. See Table 11 for the descriptive statistics of perception of sportsmanship scores according to the three prosocial play behavior groups. The obtained F value of 18.25 for the analysis of variance was significant at the .01 level (see Table 12). A Scheffé post hoc comparison of group means was performed in order to further isolate group differences. The obtained F values indicated that significant differences existed among all the group comparisons. The high prosocial play behavior group differed significantly ($p < .01$) from both the medium and the low prosocial groups on the variable perception of sportsmanship. The medium and the low prosocial play behavior groups differed from each other at the .05 level. See Table 13 for Scheffé F scores.

Table 11

Descriptive Statistics of Perception of Sportsmanship
Scores According to Three Prosocial Play Behavior
Groups

Prosocial Groups	Number of Children	Perception of Sportsmanship Scores			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
High	20	261.6	45.1	150-325	10.09
Medium	21	218.3	39.9	155-305	8.7
Low	22	183.1	41.1	116-250	8.7

Table 12
Results of the ANOVA of Perception of Sportsmanship
Scores for Three Prosocial Play Behavior Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	P
Between-Groups	64643.6	2	32321.8	18.25	($p < .01$)
Within-Groups	106282.09	60	1771.3		
Total	170925.7	62			

Table 13
Results of the Schéffé Post Hoc Comparison of
Perception of Sportsmanship Scores for the
High, Medium, and Low Prosocial Play
Behavior Groups

Prosocial Play Groups	with	Prosocial Play Groups	F	P
High	x	Medium	10.82	($p < .01$)
High	x	Low	36.48	($p < .01$)
Medium	x	Low	7.53	($p < .05$)

Secondary Findings

In order to further explore the relationship of the variables prosocial play behavior and perception of

sportsmanship, three groups of perception of sportsmanship scores (high, medium, and low) were reclassified as the independent variable. An analysis of variance and post hoc analysis were performed to identify significant differences in the prosocial play behavior scores for the three perception of sportsmanship groups. There were 14 children in the high perception of sportsmanship group, 29 in the medium group, and 20 children in the low perception of sportsmanship group. See Table 14 for the descriptive statistics of prosocial play behavior scores according to the three perception of sportsmanship groups.

Table 14
Descriptive Statistics of Prosocial Play Behavior
Scores According to Three Perception of
Sportsmanship Groups

Sportsman- ship Groups	Number of Children	Prosocial Play Behavior Scores			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
High	14	38.2	2.5	27-40	.71
Medium	29	30.3	7.2	15-40	1.3
Low	20	21.4	8.2	10-40	1.9

The obtained F value of 24.17 for the ANOVA was significant at the .01 level (see Table 15). A Scheffé post

hoc comparison of group means was performed in order to further isolate group differences. The obtained F value indicated that significant differences existed ($p < .01$) among all of the perception of sportsmanship group comparisons on prosocial play behavior scores. See Table 16 for the Scheffé results.

Table 15
Results of the ANOVA of Prosocial Play Behavior
Scores for Three Perception of
Sportsmanship Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Square	F	P
Between-Groups	2396.6	2	1198.3	24.17	($p < .01$)
Within-Groups	2974.6	62	49.5		

Table 16
Results of the Scheffé Post Hoc Comparison of Prosocial
Play Behavior Scores for the High, Medium, and
Low Perception of Sportsmanship Groups

Perception of Sportsmanship Groups	with	Perception of Sportsmanship Groups	F	P
High	x	Medium	11.94	($p < .01$)
High	x	Low	47.13	($p < .01$)
Medium	x	Low	19.04	($p < .01$)

Additional Findings

By successively reclassifying each of the four variables as the independent variable, additional investigations into the relationship of prosocial play behavior, moral reasoning, participation in youth sports, and perception of sportsmanship were performed. These investigations were tangential to the three primary questions and included the following: (a) the relationship of moral reasoning scores to scores for perceptions of sportsmanship, (b) the relationship of scores for participation in youth sports to scores for children's moral reasoning, and (c) the relationship of scores for participation in youth sports to scores for perception of sportsmanship.

Moral Reasoning and Perception of Sportsmanship

Scores

In order to explore the relationship of the variables moral reasoning and perception of sportsmanship, three groups of children who scored either high, medium, or low on moral reasoning were identified. The analysis of data for these three groups concerned both their scores for moral reasoning and their scores for perception of sportsmanship. The two sets of data were analyzed for two reasons: (a) to show the degree of correlation between the scores for the variables, and (b) to identify significant differences in the perception of sportsmanship scores for the three groups of children. Both a nonparametric

Kendall tau and a parametric Pearson r correlation coefficient were obtained for the data. The resulting coefficients (Kendall tau = .56; Pearson r = .75) were significant at the .01 level (see Table 2).

There were 11 children in the high scoring moral reasoning group, 23 in the medium group, and 29 children in the low scoring moral reasoning group. See Table 17 for the descriptive statistics of perception of sportsmanship scores according to the three moral reasoning groups. An ANOVA was performed to determine if perception of sportsmanship scores for the high, medium, and low moral reasoning groups varied significantly. The obtained F value of 39.99 was significant at the .01 level (see Table 18). A Scheffé post hoc comparison of group means was performed in order to further isolate group differences. This analysis revealed significant F values ($p < .01$) for differences among all three moral reasoning groups (see Table 19).

Table 17
Descriptive Statistics of Perception of Sportsmanship
Scores According to Three Moral Reasoning Groups

Moral Reasoning Groups	Number of Children	Perception of Sportsmanship Scores			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
High	11	282.9	26.5	233-325	8.4
Medium	23	239.3	39.5	166-311	8.4
Low	29	180.3	31.8	116-250	6.02

Table 18
Results of the ANOVA of Perception of Sportsmanship
Scores for Three Moral Reasoning Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F	P
Between-Groups	97664.7	2	48832.3	39.99	($p < .01$)
Within-Groups	73260.9	60	1221.01		
Total	170925.6	62			

Table 19
Results of the Scheffé Post Hoc Comparison of Perception
of Sportsmanship Scores for the High, Medium,
and Low Moral Reasoning Groups

Moral Reasoning Groups	with	Moral Reasoning Groups	F	P
High	x	Medium	11.56	($p < .01$)
High	x	Low	68.66	($p < .01$)
Medium	x	Low	36.53	($p < .01$)

In order to further explore the relationship of the variables moral reasoning and perception of sportsmanship, three groups of perception of sportsmanship scores (high medium, and low) were reclassified as the independent

variable. There were 14 children in the high scoring perception of sportsmanship group, 29 in the medium group, and 20 children in the low scoring perception of sportsmanship group. See Table 20 for the descriptive statistics of moral reasoning scores according to the three perception of sportsmanship groups. An ANOVA was performed to determine if moral reasoning scores for the high, medium, and low perception of sportsmanship groups varied significantly. The obtained F value of 33.82 was significant at the .01 level (see Table 21). A Scheffé post hoc comparison of group means was performed in order to further isolate group differences. This analysis revealed significant F values ($p < .05$; $p < .01$) for differences among all three perception of sportsmanship groups (see Table 22).

Table 20
Descriptive Statistics of Moral Reasoning Scores
According to Three Perception of
Sportsmanship Groups

Perception of Sportsmanship Groups	Number of Children	Moral Reasoning Scores			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
High	14	269.4	30.3	233-333	8.4
Medium	29	207.3	37.1	150-283	7.02
Low	20	178.1	21.3	150-233	4.8

Table 21
Results of the ANOVA of Moral Reasoning Scores
for Three Perception of Sportsmanship Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F	P
Between-Groups	69725.5	2	34862.7	33.82	($p < .01$)
Within-Groups	61850.1	60	1030.8		
Total	131575.7	62			

Table 22
Results of the Scheffé Post Hoc Comparison of
Moral Reasoning Scores for the High, Medium,
and Low Perception of Sportsmanship Groups

Perception of Sportsmanship Groups	with	Perception of Sportsmanship Groups	F	P
High	x	Medium	35.32	($p < .01$)
High	x	Low	66.59	($p < .01$)
Medium	x	Low	9.79	($p < .01$)

Participation in Youth Sports and Moral Reasoning Scores

In order to explore the relationship of the variables participation in youth sports and moral reasoning, three groups of children with varying amounts of youth sports

participation were identified. The groups included the following: extensive participation, moderate participation, and limited participation. The analysis of data for these three groups concerned both their scores for participation in youth sports, and their scores for moral reasoning. The two sets of data were analyzed for two reasons: (a) to show the degree of correlation between the scores for the variables, and (b) to identify significant differences in the moral reasoning scores for the three groups of children. Because of the ordinal level of the data for participation in youth sports, only a Kendall tau correlation coefficient was obtained for the data. The Kendall tau coefficient of .18 was not significant at the .05 level (see Table 2).

There were 14 children in the extensive participation group, 13 in the moderate participation group, and 36 children in the limited participation in youth sports group. See Table 23 for the descriptive statistics of moral reasoning scores according to the three participation in youth sports groups. An ANOVA was performed to determine if moral reasoning scores for the extensive, moderate, and limited participation groups varied significantly. The obtained F value of 3.64 was significant at the .05 level (see Table 24). A Scheffé post hoc comparison of group means was performed in order to further isolate group differences. This analysis indicated that differences between the three participation groups was not significant at the .05 level (see Table 25).

Table 23
Descriptive Statistics of Moral Reasoning Scores
According to Three Participation in Youth
Sports Groups

Participation Groups	Number of Children	Moral Reasoning Scores			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
Extensive Participation	14	238.9	44.9	166-333	12.4
Moderate Participation	13	196.4	31.5	150-250	9.1
Limited Participation	36	206.8	45.9	150-333	7.7

Table 24
Results of the ANOVA of Moral Reasoning Scores for
Three Participation in Youth Sports Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F	P
Between-Groups	14229.9	2	7114.9	3.64	($p < .05$)
Within-Groups	<u>117345.7</u>	<u>60</u>	1955.7		
Total	131575.7	62			

Table 25
Results of the Scheffé Post Hoc Comparison of Moral
Reasoning Scores for the Extensive, Moderate,
and Limited Participation in Youth
Sports Groups

Participation Groups	with	Participation Groups	F	P
Extensive	x	Moderate	6.23	not significant ($p < .05$)
Extensive	x	Limited	5.31	not significant ($p < .05$)
Moderate	x	Limited	.53	not significant ($p < .05$)

Participation in Youth Sports and Perception
of Sportsmanship Scores

In order to explore the relationship of the variables participation in youth sports and perception of sportsmanship, three groups of children with varying amounts of youth sports participation were identified. The groups included the following: extensive participation, moderate participation, and limited participation. The analysis of data for these three groups concerned both their scores for participation in youth sports and their scores for perception of sportsmanship. The two sets of data were analyzed for two reasons: (a) to show the degree of correlation between the scores for the variables, and (b) to identify significant differences in the perception of sportsmanship scores for the three groups of children. Because of the ordinal level of the data for participation in youth sports, only a Kendall tau correlation coefficient was obtained for the data. The Kendall tau coefficient of .25 was significant at the .01 level (see Table 2).

There were 14 children in the extensive participation group, 13 children in the moderate group, and 36 children in the limited participation in youth sports group. See Table 26 for the descriptive statistics of perception of sportsmanship scores according to the three participation in sports groups. An ANOVA was performed to determine if perception of sportsmanship scores for the extensive, moderate,

and limited participation groups varied significantly. The obtained F value of 5.49 was significant at the .01 level (see Table 27). A Scheffé post hoc comparison of group means was performed to further isolate group differences. This analysis revealed an F value that was significant ($p < .01$) between the extensive and the limited participation in youth sports groups. See Table 28 for Scheffé F values.

Table 26
Descriptive Statistics of Perception of
Sportsmanship According to Three
Participation in Youth Sports
Groups

Participation Groups	Number of Children	Perception of Sportsmanship			
		Group Means	Standard Deviation	Range of Scores	Standard Error of the Means
Extensive Participation	14	258.	47.4	166-325	13.13
Moderate Participation	13	219.3	42.1	150-294	12.17
Limited Participation	36	208	50.5	116-300	8.54

Table 27
 Results of the ANOVA of Perception of Sportsmanship
 Scores for Three Participation in Youth
 Sports Groups

Source of Variation	Sum of Squares	Degrees of Freedom	Mean Squares	F	P
Between-Groups	26456.01	2	13228.	5.49	($p < .01$)
Within-Groups	144469.6	60	2407.8		
Total	170925.71	62			

Table 28
 Results of the Scheffé Post Hoc Comparison of
 Perception of Sportsmanship Scores for the
 Extensive, Moderate, and Limited
 Participation in Youth
 Sports Groups

Participation Group	with	Participation Group	F	P
Extensive	x	Moderate	6.11	not significant ($p < .05$)
Extensive	x	Limited	10.47	($p < .01$)
Moderate	x	Limited	.04	not significant ($p < .05$)

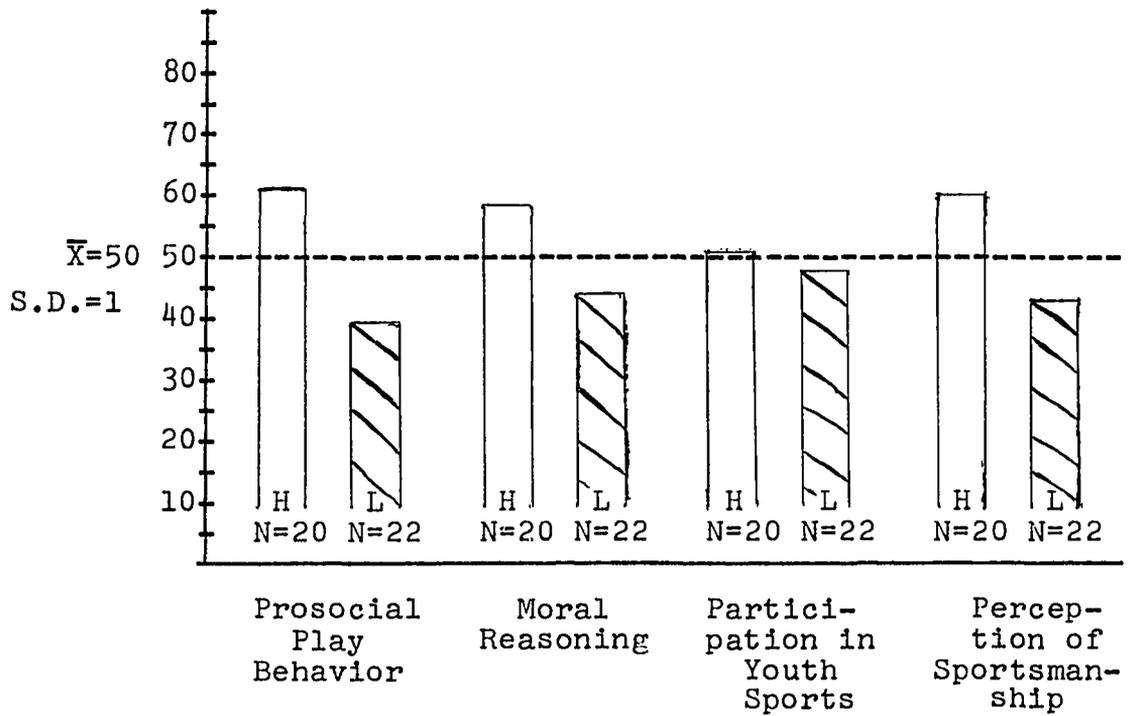
Group Profiles of the High and Low Prosocial
Play Behavior Groups

In this second stage of analysis, group profiles were developed as representative of those children who tended to display prosocial play behavior, and those children who did not. The profiles are based on: (a) calculated T-scores showing group comparisons, (b) mean scores where there were significant differences between groups and among variables, and (c) prototypical statements relating to moral reasoning and perception of sportsmanship.

T-Scores

T-scores were calculated for children in the high and low prosocial play behavior groups for each of the variables. The T-score was an indication of how their scores stood in relation to the mean of the distribution. Fifty points was added to each child's z-score for each of the four variables. In this way the sample mean was determined to be 50 points and the standard deviation equal to 1 point. The high and low prosocial play behavior groups' means for T-scores was calculated for the following variables: prosocial play behavior, moral reasoning, participation in youth sports, and perception of sportsmanship.

The group means of T-scores for the high and low groups of prosocial play behavior are presented in Table 29 and Figure 1.



H = High Prosocial Play Behavior Group

L = Low Prosocial Play Behavior Group

Figure 1. High and low prosocial play behavior groups' mean T-scores for: prosocial play behavior, moral reasoning, participation in youth sport, and perception of sportsmanship.

Table 29

High and Low Prosocial Play Behavior Groups' Mean T-Scores for: Prosocial Play Behavior, Moral Reasoning, Participation in Youth Sports, and Perception of Sportsmanship

Prosocial Groups	Prosocial Play Behavior	Moral Reasoning	Participation in Youth Sports	Perception of Sportsmanship
High	60.95	57.9	50.1	58.0
Low	38.18	44.5	48.1	43.0

Significant Differences Between the High and Low Groups

The following group profiles are based on mean scores where there were significant differences between the high and the low prosocial play behavior groups for the variables.

High prosocial play behavior group. The high group had a range of scores from 37 to 40 on the prosocial play behavior inventory, and a mean score of 39.3 points. For the variable moral reasoning, the high group had a mean score of 247.6 points. This score was significantly different ($p < .01$) from the low group mean score of 183.8 points. The mean score for the high prosocial play group indicated that the average member of the group was approaching a transitional stage of moral reasoning from a pre-conventional to a conventional mode of reasoning.

For the variable participation in youth sports, the high group had a mean score of 1.65 points. The results of the nonparametric statistics indicated that the high prosocial play behavior group did not differ significantly ($p < .05$) from the low group for this variable.

For the variable perception of sportsmanship, the high group had a mean score of 261.6 points. This score was significantly different ($p < .01$) from the low group mean of 183.1 points. The high group mean score indicated that the average member of the group was in a transitional stage of reasoning. The average group member was beginning to use a conventional mode of reasoning.

Low prosocial play behavior group. The low group had a range of scores from 10 to 25 points on the prosocial play behavior inventory, and a mean score of 18.3 points. The low group had a mean score of 183.3 for the variable moral reasoning. This score was significantly different ($p < .01$) from the high prosocial play group mean of 247.6 points. The low group mean indicated that the average member of the group was utilizing a preconventional mode of moral reasoning, and beginning to exercise a developmentally second stage rationale for making moral decisions.

For the variable participation in youth sports, the low group had a mean score of 1.50 points. This score was not significantly different ($p < .05$) from the high group.

For the variable perception of sportsmanship, the low group had a mean score of 183.1 points. This score was significantly different ($p < .01$) from the high group's mean of 261.6 points. The low group's mean score indicated that the average member of the group was utilizing a preconventional mode of reasoning. Their score indicated an emerging second stage rationale for their perception of sportsmanship.

Prototypical Statements of High and Low Groups

In determining prototypical statements for the high and low prosocial play behavior groups it was necessary to calculate the mean moral reasoning score and the mean perception of sportsmanship score. Children's statements relating to the moral dilemma story and the sports dilemma story were reflective of stage 1, 2, 3, and 4 reasoning. Typical statements representing these stages for this study are found in Appendixes N and O. A "pure" stage 1 reasoning level is represented by a score of 100 points. A stage 2 reasoning level by a score of 200 points, and a stage 3 level is represented by a score of 300 points.

High prosocial play group. The range of moral reasoning scores for the high prosocial play behavior group was from 150 to 333 points. The mean score for moral reasoning was 247 points. The range of perception of sportsmanship scores was from 150 to 325 points. The mean score for perception

of sportsmanship was 261 points. Group mean scores of 247 points and 261 points indicated that children in the high prosocial play behavior group utilized both a stage 2 and a stage 3 rationale for answering the moral reasoning and perceptions of sportsmanship questions. The typical responses to questions regarding moral reasoning and perception of sportsmanship made by the high prosocial play behavior group were as follows:

Moral reasoning stage 1 statements

Louise should not tell on Judy because Judy might do her a favor in the future.

A mother should try to treat her children right because the children might do things for her like obey or like her more.

Louise and Judy should respect their mother because she has brought them up, fed them, and clothed them.

It's important to keep promises because if you don't people won't like you or believe you. You could get a bad reputation.

If you don't keep promises you could make people feel bad.

You should keep promises because other people may do a favor for you or keep promises to you.

Moral reasoning stage 3 statements

A good daughter should respect, honor, or obey her parent.

Good mothers and daughters should try to understand each other and respect each other's feelings.

Mothers and daughters should try to see each other's point of view.

It's important to keep promises so that others will think you are trustworthy and will have a good impression of you.

It's important to keep promises to maintain trust between people.

Perception of sportsmanship stage 2 statements

Coaches and players should keep agreements and promises they make in games because if they don't people won't like them. You could get a bad reputation, and people won't play with you.

You should keep agreements in games because if you do then the other players may do a favor for you or keep promises and agreements with you.

The coach should let Pat play in the game because Pat may help him to win the game (or) the coach may need Pat in the future as a substitute.

You should treat other players nice and fair so that they will treat you in the same way.

You should follow the rules so that people will like you and you'll have more friends.

You should follow the rules because you would want others to follow the rules.

Rules are needed to stop fights and arguments.

Perception of sportsmanship stage 3 statements

The coach should keep agreements with players because trust is important on teams.

Pat should play in the game because (s)he worked hard and deserved or earned the right to play.

There should be trust and respect between players and coaches. That's important for teams.

Communication is important between players and coaches.

Coaches and players should try to understand and respect each other's feelings or see each other's point of view.

A good coach or a good player should set a good example for others on the team.

Rules help to make games go smoothly so that there is not confusion.

Low prosocial play group. The range of moral reasoning scores for the low prosocial play behavior group was from 150 to 241 points. The mean score for moral reasoning was 183 points. The range of perception of sportsmanship scores for the low prosocial play group was from 116 to 250 points. The mean score for perception of sportsmanship was also 183 points. The group mean scores of 183 points indicated that children in the low prosocial play behavior group utilized both a stage 1 and a stage 2 rationale for answering the moral

reasoning and perception of sportsmanship questions. The typical statements which represent a stage 2 level of moral reasoning and perception of sportsmanship have been presented above. The typical statements made by children which reflect a stage 1 orientation are as follows:

Moral reasoning stage 1 statements

A daughter should obey her mother because she is older and knows what is best.

A daughter should obey her mother because she will get punished if she doesn't.

Mothers are bigger than daughters and they are the boss (authority) and they know more.

You should keep promises because if you don't then you are a liar.

If you don't obey your parents then you could get in trouble. Someone could tell on you.

Louise shouldn't tell on Judy because Judy would get her back.

Perception of sportsmanship stage 1 statements

Coaches should keep agreements they make with players because they are just supposed to.

Pat should not go to the game because the coach is the boss and tells players what to do.

Players are just supposed to obey the coach.

Players should follow the rules of the game so that they don't get hurt.

We shouldn't break the rules because it just isn't right.

Shouldn't break the rules of the game because you might
get caught.

Shouldn't break the rules of the game because if the other
team finds out you might get caught and get beaten
up.

Rules help players from getting hurt.

Players should follow the directions of the coach
because he could "bench you" or keep you from playing.

CHAPTER V
DISCUSSION OF THE FINDINGS

The purpose of this study was to explore the relationship of selected prosocial play behaviors in children to moral reasoning, participation in youth sports, and perception of sportsmanship.

The children selected to participate in this study were 63 fifth and sixth grade boys and girls in a North Carolina elementary school. The identification of the children as representing high, medium, and low prosocial play behavior abilities was made by nine classroom teachers who rated 245 children using the prosocial play behavior inventory. The random selection of the 63 children included in the study was made by the school testing coordinator (counselor). Because the investigator was employed at the elementary school and knew the students in the sample, the selection of the children by the testing coordinator helped to encourage the objectivity of the following interview process.

Each of the 63 children was individually interviewed during the school day during the period from May 19 to June 9, 1978. Through this process data were gathered relating to the child's level of moral reasoning, participation in youth sports, and the child's level of perception

of sportsmanship. In addition to these variables, supplementary demographic data were obtained through the interviews and from the personal student files which were maintained by the public school the children attended.

This chapter includes a discussion of the statistical findings germane to the relationship of prosocial play behavior, moral reasoning, participation in youth sports, and perception of sportsmanship.

Mean T-scores for the high and the low prosocial play behavior group scores for the variables moral reasoning, participation in youth sports, and perception of sportsmanship were calculated. A discussion of these mean T-scores as well as a discussion of the prototypical statements regarding moral reasoning and perception of sportsmanship for the high and the low prosocial play behavior groups is included in this chapter.

Construct validity of the prosocial play behavior inventory was determined both logically and empirically. A discussion of this validation is included in this chapter.

Children's demographic data indicated a tentative relationship between certain of these factors and the four variables included in this study. This chapter includes a brief discussion of these demographic attributes.

Prosocial Play Behavior and Moral Reasoning

Is prosocial play behavior associated with a child's level of moral reasoning?

Several investigations have shown the relationship between moral judgment and altruistic behavior (Emler & Rushton, 1974; Rubin & Schneider, 1973; Rushton, 1975). Kohlberg (1976) reported that "moral stage is a good predictor of action in various experimental and naturalistic settings" (p. 32). This is supported by Krebs (1971) who found that 75% of the conventional and pre-conventional level children that he studied cheated on at least one of the four cheating tests that he administered, while only 20% of the principled children did so. Brown, et al. (1969) also found that approximately one-half of the conventional level college students cheated as compared to 11% of students whose moral reasoning level was at the post-conventional level. Studies by Selman (1974) and Campagna and Harter (1975) indicated that social delinquency in boys is negatively associated with a child's level of moral reasoning.

Findings in the present study support the contention that moral reasoning is associated with prosocial behavior. A positive and significant correlation was found between the children's scores for moral reasoning, and their scores for prosocial play behavior. An ANOVA of moral reasoning scores indicated that moral reasoning was significantly different among those groups of children who displayed high, medium, and low prosocial play behavior. An ANOVA also indicated that children's prosocial play

behavior scores were significantly different for those groups of children who achieved high, medium, and low scores for moral reasoning.

Simpson (1976) and Mischel and Mischel (1976) observed that predictive accuracy from moral reasoning scores to prosocial behavior is more precise for extreme indices of behavior. In the present study, a post hoc comparison of group means supported their contention. Significant F values indicated that the mean score for moral reasoning of the high prosocial play behavior group differed from the mean scores of both the medium and the low prosocial play behavior groups. A significant difference, however, was not found between the medium and the low play behavior groups on moral reasoning.

The distinction between the moral reasoning scores for the high prosocial play behavior group and the medium and low prosocial play behavior groups is best characterized through examples of children's typical responses to interview questions. The low and medium play behavior group often utilized a stage 1 rationale for their responses to questions. Examples are: "A daughter should obey her mother because she will get punished if she doesn't"; and "If you don't obey your parents, then you could get in trouble. Someone could tell on you." See Appendix N for additional stage 1 statements offered by the children. Kohlberg (1964) recognized these statements

as representing a punishment orientation to making moral decisions. In determining correct behavior, children at this stage of reasoning first assess the possibility of being punished for their subsequent behavior. Correct behavior is therefore determined by an avoidance of punishment.

Children in the high prosocial play behavior group often utilized a stage 2 rationale for their responses to questions. Examples are: "It's important to keep promises because if you don't people won't like you"; and "You should keep promises because other people may do a favor for you." See Appendix N for additional stage 2 statements from the sample interviewed. Kohlberg (1964) asserted that statements such as these represent an instrumental purpose orientation to making moral decisions. Children at a stage 2 orientation act when it is in their own best interest. Correct behavior at this level is influenced by the possibility of a reciprocal action by others which would in turn benefit them.

Prosocial Play Behavior and Participation in Youth Sports

Is prosocial play behavior associated with a child's participation in youth sports?

Several theories and studies have suggested that participation in social groups facilitates moral development and perspective taking and thus enhances the

probability of positive social behavior. Piaget (1932) and Kohlberg (1976) suggested that it was through social participation that the rules of social conduct are assimilated. Selman (1976) and Flavell (1968) observed that role taking skills were encouraged through social participation. Bandura (1963) demonstrated that positive modeling experiences accelerated the development of mature social judgment. Several authors proposed that desirable social values and concepts are accrued through membership on teams, and participation in games and sports (Alley, 1974; Boudreaux, 1972; Spring, 1974). Whiteman and Krosier (1964) however, found that there was no relationship between a child's ability to make mature moral judgments and membership in religious or social organizations.

The findings in the present study indicated that participation in youth sports organizations is not reflected in the scores for selected prosocial play behaviors. The correlation coefficient between the scores for the variables prosocial play behavior and participation in youth sports was not significant. An ANOVA also indicated that the scores for prosocial play behavior did not vary significantly among the extensive, moderate, and limited experience groups for participation in youth sports. The extent of participation in youth sports in each of the three groups ranged from extensive to limited

and did not reflect differentiated abilities in prosocial play behavior during recreational game play activities.

Perhaps additional demographic factors may be influencing the lack of relationship between prosocial play behavior abilities and participation in youth sports. Demographic data relating to the personal characteristics of the children, and the children's play partners and patterns (see Appendixes J and M) may be influencing the amount of participation by children in youth sports.

A possible explanation for the lack of relationship between prosocial play behavior and participation in youth sports may lie in the quality of the youth sports experience rather than in the number of teams on which the child participated. The types of personal interactions and the type of adult leadership of the youth sports team may influence a child's subsequent prosocial play behavior patterns. These features of youth sports participation however were not considered in the present study.

Prosocial Play Behavior and Perception of Sportsmanship

Is prosocial play behavior associated with a child's perception of sportsmanship?

Jersild (1954) suggested that an increase in knowledge of proper behavior precedes behavior change. Jantz (1975) and Bovyer (1963) studied children's perception of the rules of a game, and children's knowledge of

sportsmanship. Jantz found that children demonstrated a developmental pattern of reasoning in their understanding of the rules of a game. His study of children in grades three through six supported the Piagetian framework of children's reasoning. Piaget (1932) found that young children's orientations to rules of games reflect a morality of constraint in which rules are perceived as inflexible and emanating from an adult authority. Older children reflect a morality of cooperation and perceive rules as a rational outgrowth of the social group. Bovyer found that there was a significant difference between fourth and sixth grade children's knowledge of the concept "sportsmanship." He also found that within each grade level, those children who were rated by their teachers and peers as being "good sports," tended to score higher on the knowledge of sportsmanship test than those rated as "poor sports."

The results of the present study support the contention that perception of sportsmanship is associated with prosocial play behavior. The findings also suggest that there may be a developmental tendency in children's perception of sportsmanship. A positive and significant correlation was found to exist between the children's scores for perception of sportsmanship and their scores for prosocial play behavior. An ANOVA of perception of sportsmanship scores indicated that the children's perception of sportsmanship varied significantly among those

groups of children who displayed high, medium, and low prosocial play behavior. In a post hoc comparison of group means it was found that children scoring at all three levels on the prosocial play behavior inventory differed significantly in their scores for perception of sportsmanship. An additional ANOVA also indicated that children's prosocial play behavior scores were significantly different for those groups of children who displayed high, medium, and low scores for perception of sportsmanship.

Magowan and Lee (1970) found that the type of story used in assessing children's levels of moral reasoning had a bearing on research findings. They suggested that children give more immature responses to stories with unfamiliar as opposed to familiar settings. Findings in the present study supported this contention. Although the framework and method of assessment of both the children's stage of moral reasoning and level of perception of sportsmanship were similar, the children tended to give more mature responses to questions relating to the sports dilemma story than to questions relating to the moral dilemma story. This tendency could have been encouraged by the possible reality of the events depicted in the sports story. Several children stated that they had heard of situations in their Little League experiences similar to those related in the sports dilemma story.

The distinction between the perception of sportsmanship scores for the high, medium, and the low prosocial play behavior groups is best characterized through examples of children's typical responses to interview questions. The low scoring play behavior group often utilized a stage 1 rationale for their responses to the sports dilemma questions. Examples are: "Players are just supposed to obey the coach," "You shouldn't break the rules of the game because you might get caught," and "Rules help keep players from getting hurt." See Appendix O for additional stage 1 statements of the children. Kohlberg (1964, 1976) asserts that statements such as these represent a punishment orientation to making moral decisions, and reflect a preconventional (stages 1 and 2) mode of reasoning. A child in a preconventional mode of reasoning recognizes and respects the ultimate right of authority figures to dictate rules and regulations. A child representing a preconventional mode of reasoning would suggest that all players must obey the coach because they are "just supposed to."

Children in the medium scoring prosocial play behavior group often utilized a stage 2 rationale for their responses to the sports dilemma questions. Although their statements were also representative of a pre-conventional mode of reasoning, their answers to the sports dilemma questions reflected a second stage orientation.

Typical examples of the medium scoring play behavior responses are: "The coach should let Pat play in the game because (s)he may help him to win the game, and the coach may need Pat in the future as a substitute," and "You should follow the rules of games because you would want others to follow the rules." See Appendix 0 for additional stage 2 statements made by the children in the study. Kohlberg (1964, 1976) noted that statements such as these represent an instrumental purpose orientation to making decisions. Correct behavior at this stage is influenced by the possibility of a reciprocal action by others which would in turn benefit them.

Children in the high scoring prosocial play behavior group often utilized a stage 3 rationale for their responses to the sports dilemma questions. Examples are: "There should be trust and respect between players and coaches. That's important for teams," and "Rules help to make games go smoothly so that there is not confusion." See Appendix 0 for additional stage 3 statements offered by the sample group. Kohlberg (1964, 1976) asserts that statements such as these represent a maintaining of good relations orientation to making decisions. The stage 3 statements reflect a conventional mode of reasoning. A child in a conventional mode of reasoning (stages 3 and 4) has internalized the rules and expectations of others,

and has learned to subordinate the needs of the individual to the needs of the group or of the shared relationship.

Additional Findings

Moral Reasoning and Perception of Sportsmanship

The results of the present study suggest that children's moral reasoning and perception of sportsmanship are related. Both the nonparametric and the parametric correlation statistics were significant at the .01 level. An ANOVA indicated that scores for perception of sportsmanship varied significantly among the groups of children who achieved high, medium and low scores for moral reasoning. A post hoc comparison of group means revealed significant F values for differences between all three moral reasoning groups on perception of sportsmanship scores.

By reclassifying perception of sportsmanship as the independent variable, an ANOVA and then a post hoc comparison of the three sportsmanship groups were performed. These analyses revealed that the moral reasoning scores for the high, medium, and low perception of sportsmanship groups differed significantly.

These findings, although based on ANOVA procedures and post hoc comparisons of unequal group sizes, indicated that the construct perception of sportsmanship was closely related to the construct moral reasoning. These findings also suggested that perception of sportsmanship may be a

developmental construct which is reflective of stages of moral reasoning.

It is interesting to note the similarity of these statistical findings to Gulick's descriptions of children's games playing offered more than fifty years ago. He observed a developmental difference between "cooperation" and "team-work" in preadolescent's game-playing behavior (see Gulick, p. 48).

Participation in Youth Sports and Moral Reasoning

The results of the present study suggest that participation in youth sports and moral reasoning are not related. The correlation coefficient of $r = .18$ for the scores for moral reasoning and the scores for participation in youth sports was not significant at the .05 level. An initial ANOVA indicated that scores for moral reasoning varied significantly ($p < .05$) among the extensive ($N = 14$), moderate ($N = 13$) and limited ($N = 36$) participation in youth sports groups. This analysis was based on unequal group sizes. The rigorous and conservative Scheffé post hoc comparison of group means, however, revealed that there were no significant differences ($p < .05$) between the extensive, moderate, and limited participation in sports groups on moral reasoning scores.

The inconsistencies in the findings suggest that in the present study a spurious relationship existed between participation in youth sports and moral reasoning. This

may have been attributed to the statistical artifact of unequal group sizes.

Participation in Youth Sports and Perception of Sportsmanship

The results of the present study suggest that participation in youth sports is related to a child's perception of sportsmanship. The Kendall correlation coefficient was significant at the .01 level. An ANOVA indicated that scores for perception of sportsmanship varied significantly ($p < .01$) among the extensive ($n = 14$), moderate ($n = 13$), and limited ($n = 36$) participation in youth sports groups. Although based on unequal group sizes, a post hoc comparison of group mean scores for perception of sportsmanship indicated a significant difference ($p < .01$) between those children who had extensive participation and those who had limited participation on youth sports teams.

The unequal numbers of children in the participation groups tended to produce spurious results in the ANOVA procedure used. A survey of the demographic data revealed certain characteristics of the children which may have influenced the relationship between the scores for participation in youth sports and perceptions of sportsmanship. Children scored highest on both participation in youth sports and perception of sportsmanship in each of the following demographic categories: (a) children

in the oldest age group, (b) children with high I.Q.'s, (c) white children, (d) second born children, (e) subjects from two-children homes, (f) children from homes of two or three adults, (g) children from a two-parent family structure, (h) children whose parent received a high occupational prestige rating, and (i) children who reported that they and their parents played together "often."

It is plausible to note that perception of sportsmanship could be a situation specific construct. Thus participation in youth sports may be truly associated with perception of sportsmanship while the more general construct of moral reasoning does not emerge as being significantly related to participation per se.

In addition, the concept of perception of sportsmanship was considered in light of the issue, "laws and rules of games." This was not the case with moral reasoning. The addition of this issue may have initiated a line of reasoning in the children which was not considered in the construct moral reasoning, and thus influenced their scores.

High and Low Prosocial Play Behavior Group Profiles Mean T-Scores

Mean T-scores for the high and the low prosocial play group scores for the variables moral reasoning, participation in youth sports, and perception of sportsmanship were calculated. See Table 29 and Figure 1 for the

scores. The T-scores were an indication of how the scores for all the variables stood in relation to the mean of a standard distribution. The sample mean was determined to be 50 points, and the standard deviation equal to one point. A comparison of the group mean T-scores complements the results of the preceding analysis of variances, and post hoc comparison of group means.

The difference between the mean T-scores for the high and the low prosocial play behavior groups was 22.77 points. This point differential represents the process of selecting those children who scored both high and low on the prosocial play behavior inventory. The difference between the mean T-scores of the high and low prosocial play behavior groups for moral reasoning scores was 13.4 points. This point differential represents a 13.4 standard deviation difference and is indicative of the previously revealed significant difference between the high and the low prosocial play behavior groups on moral reasoning scores. The difference between the mean T-scores of the high and the low play groups for participation in youth sports was 2. points. This relatively small point differential is indicative of the lack of the significant difference between the high and the low prosocial play behavior groups on scores for participation in youth sports. The difference between the mean T-scores of the high and low prosocial play groups for perception of sportsmanship was 15. points. This

point differential represents a 15. standard deviation difference, and is indicative of the previously revealed significant difference between the mean scores of the high and low prosocial play behavior groups on perception of sportsmanship.

The graphs depicted in Figure 1 illustrate profiles of the highest and lowest prosocial play behavior groups with all variables having a common mean and standard deviation. It would be possible to construct such a profile for any child in the sample. This was not done because groups rather than individuals represented the unit of analysis.

Prototypical Statements of the High and the Low Groups

Kohlberg (1976) asserts that most children under the age of nine, and some adolescents utilize a preconventional mode of moral reasoning. The preconventional mode includes moral states one and two. A preconventional child views rules and social expectations as something external to the self.

A conventional mode of reasoning includes moral stages of three and four. Kohlberg (1976) observed that the conventional mode is utilized by most adolescents and adults in our society in making moral decisions. A child at a conventional level has typically internalized the rules and expectations of others, especially those in authority.

Low Prosocial Play Behavior Group. The moral reasoning and perception of sportsmanship scores for the high and the low prosocial play behavior groups were found to differ significantly. In the low prosocial play behavior group the mean stage level scores for moral reasoning and perception of sportsmanship were 183.3 and 183.1 respectively. These scores indicated that the average child in this group was utilizing a preconventional mode of reasoning at a stage 1 level. Kohlberg (1964, 1976) contends that children at a first stage of moral reasoning are egocentric in their point of view, and generally do not recognize others' interests as being just as important as their own. A child at this level of reasoning often determines correct behavior to be that which aids in the avoidance of punishment or of personal physical harm.

Although children in the low prosocial play behavior group utilized both a stage one and a stage two rationale for answering the moral dilemma and the sports dilemma questions, the majority of the responses reflected stage one reasoning. Examples of stage one responses to questions regarding the moral dilemma story and the sports dilemma story are found in Appendixes N and O. The most often recorded responses for the children in the low prosocial play behavior group were as follows: "A daughter should obey her mother because she will get punished if she doesn't." "If you don't obey your parents then you could get in

trouble. Someone could tell on you." "Players should follow the direction of the coach because he could 'bench you' or keep you from playing." Several of these statements represent a punishment orientation to determine correct behavior. Children in the low prosocial play behavior group often suggested that Pat should not play in the upcoming game. They supported the coach's actions because he was the coach and he had the right to make the decisions regarding who should play in the game and who should not. They often rationalized their support for the coach by stating that "He's the boss," or "He's older or bigger." An unquestioning respect for an authority figure is typical of children at the preconventional level.

High Prosocial Play Behavior Group. In the high prosocial play behavior group the mean stage level scores for moral reasoning and perception of sportsmanship were 247.6 and 261.6 respectively. These scores indicated that the average child in this group often utilized a pre-conventional mode of reasoning at a stage 2 orientation. Kohlberg (1964, 1976) contends that children at a stage 2 of moral reasoning are oriented toward acting in a manner which is in their own immediate interests. Correct behavior at this stage is motivated by the possibility of reciprocal action by others which would in turn benefit them. Examples of stage 2 responses to questions regarding the moral dilemma story and the sports dilemma story are

found in Appendixes N and O. The most often recorded stage 2 responses for the children in the high prosocial play behavior group were as follows: "It's important to keep promises because if you don't people won't like you or believe you," "You should keep promises because other people may do a favor for you or keep promises to you," "The coach should let Pat play in the game because (s)he may help the coach to win the game (or) the coach may need Pat in the future as a substitute," and "You should follow the rules so that people will like you and you'll have more friends."

Children in the high prosocial play behavior group often utilize a conventional mode of reasoning at a stage 3 orientation. Kohlberg (1976) characterized this mode in interpersonal relations by stating: "The conventional individual subordinates the needs of the single individual to the viewpoint and needs of the group or the shared relationship" (p. 36). The distinction between the high and the low prosocial play behavior groups appears to be only subtle when the group means are considered. The differences between the two groups becomes more significant when we consider that the high play group is beginning to orient toward a conventional mode of reasoning. Children utilizing a stage 3 rationale for moral decisions are interested in maintaining good relations with others. This stage is often referred to as the "good boy" stage

(Kohlberg, 1964, p. 400). Examples of stage 3 responses to questions regarding the moral dilemma story and the sports dilemma story are contained in Appendix N and O. The most often recorded stage three responses for the children in the high prosocial play behavior group were as follows: "Good mothers and daughters should try to understand each other and respect each other's feelings"; "It's important to keep promises so that others will think you are trustworthy and will have a good impression of you"; and "There should be trust and respect between players and coaches"; "Rules help to make the game go smoothly so that there is not confusion"; and "Coaches and players should try to understand and respect each other's feelings or see each other's point of view."

Ten of the children in the high prosocial play behavior group at times recorded stage 4 responses to questions regarding the moral dilemma story and the sports dilemma story. Kohlberg (1964, 1976) contends that stage 4 children are oriented toward maintaining social rules and social order. Personal behaviors and beliefs are directed toward contributing to society, or to the immediate group welfare. Examples of stage 4 responses to questions regarding the moral and sports dilemma story are contained in Appendix N and O. The most often recorded stage 4 responses for the ten children in the high prosocial play behavior group

were as follows: "Members of a family have a responsibility to work out problems as a group"; "Promises are important to people because they help keep families or groups together and help them to get along with each other"; "Members of a team should do their best and cooperate for the good of the team"; "Rules for games provide order and structure and help in the organization of the activity"; and "Rules provide everyone with the same and equal chance to win." Children's stage 4 statements reflected an interest in maintaining the organization of the family or the team. These children often viewed themselves as a contributing member of the group with certain responsibilities for the maintenance of the group activity.

The most obvious distinction between the low prosocial play behavior group and the high prosocial play behavior group is realized by contrasting the moral reasoning and perception of sportsmanship of those children who registered high and low scores. Those children who scored at a stage 1 level were oriented toward avoiding punishment or physical harm. This primarily was their rationale in responding to moral reasoning and perception of sportsmanship questions. Those children who scored at a stage 4 level were oriented toward maintaining social rules and order. Their rationale for their answers reflected an interest in contributing to the welfare of the social group.

Construct Validation of the Prosocial Play
Behavior Inventory

Construct validation is an inferential process of determining what factors or constructs account for variance in test performance (Cronbach & Meehl, 1955; Kerlinger, 1973). Kerlinger (1973) stated that "construct validation and empirical scientific inquiry are closely allied. It is not simply a question of validating a test. One must try to validate the theory behind the test" (p. 461). Construct validation has a preoccupation with theory, theoretical constructs, and empirical inquiry into hypothesized relations. It is more than the predicting of a criterion. It is an attempt to understand why or what factors make a prediction possible. Kerlinger (1973) proposed that both convergence and discriminability are required in assessing construct validity of a test. Convergence is evidence that the administering of the measuring instrument to different groups yields similar meanings, and if not, accounts for differences. Discriminability means that one can differentiate the construct from other constructs that may be similar, and that one can point out what is unrelated to the construct.

In the present study, construct validation of the prosocial play behavior inventory was achieved by administering the inventory to 25 children (pilot study), and to 245 children (total population). Convergence was found in that

differentiated prosocial play behavior patterns were discernible. Discriminability of the construct was shown as follows: Prosocial play behavior patterns of 5th and 6th grade children have been identified by 10 classroom teachers and 6 teachers of elementary physical education. In the present study, these patterns have been shown to relate to the children's abilities in moral reasoning and perception of sportsmanship, but not to the children's participation in youth sports. The underlying theory which has been shown to have some measure of validity can be stated as follows: Differentiated patterns of prosocial play behavior of 5th and 6th grade children in recreational game playing situations are discernible; and such patterns are a function of the child's ability in moral reasoning and the child's perception of sportsmanship, but are not a function of recent past experiences in youth sports participation.

Demographic Data

Demographic data were obtained through the interviews with the children and from the personal files maintained by the public school the children attended. These data are contained in Appendixes J, K, L, and M. The mean scores and rank order of the demographic data in relation to the four variables suggested that the scores on the variables are at least partially associated with: (a) I.Q., (b) race, (c) sex, (d) birth order, (e) size of the family, (f) number

of adults in the home, (g) family structure, (h) parents educational level, (i) occupational prestige of the parent, (j) number of playmates, and (k) age of playmates.

Although these demographic factors were not controlled in the present study, the tendencies suggest that additional developmental and environmental characteristics may be operating which may influence children's prosocial play behavior patterns in recreational game play activities. These factors seem worthy of consideration in further research under more controlled sampling procedures.

CHAPTER VI
SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

The purpose of this study was to explore the relationship of selected prosocial play behaviors in children to three developmental and environmental factors.

Specifically,

Is prosocial play behavior associated with a child's level of moral reasoning?

Is prosocial play behavior associated with a child's participation in youth sports?

Is prosocial play behavior associated with a child's perception of the concept of sportsmanship?

Data were obtained for the four variables. Classroom teacher observations using a rating scale was the method used for assessing the children's prosocial play behavior. In developing a prosocial play behavior inventory, the investigator adapted the procedures suggested by Smith and Kendall (1963) and developed a behaviorally anchored rating scale jointly with the classroom teachers. Ten classroom teachers as well as six elementary physical education teachers rated each of the prosocial play behaviors on a proposed list as either "easily observable,"

"at times difficult to observe," or "very difficult to observe." Through teacher agreement, the final list consisted of 10 behavioral statements. The final pro-social play behavior inventory included the 10 statements and utilized a "forced choice" response format suggested by Schaefer and Edgerton (1977). A child's prosocial play behavior score was determined by totaling the points circled for each of the 10 behavioral statements. Those children who displayed prosocial play behaviors received more points than those children who did not display the behaviors. The prosocial play behavior scores ranged from 10 to 40 points. The reliability of the inventory was determined using the split-half method for estimating the internal consistency of a test. For the 63 children in the final sample the reliability coefficient was $r = .98$; and a reliability coefficient of $r = .96$ was obtained for a random sample of 50 children from the total school population.

A structured interview was used as the method for assessing the children's level of moral reasoning. A cognitive-developmental approach to the study of morality has been discussed by Kohlberg (1964) and Piaget (1932). Both authors identified characteristics of moral reasoning which change with children's development. The method of assessing the children's level of moral reasoning was that described by Kohlberg et al. (1976). In a structured

interview format, a hypothetical moral dilemma was read to the child and then the child was questioned regarding the rationale for making value decisions relating to the story. The investigator assessed the level of moral reasoning used to justify the child's responses to the questions by equating the verbal exchange with normative responses. The investigator used a moral dilemma which was relevant to the ages of the children, and which incorporated the following issues: (a) personal roles of affiliation and relations, and (b) contract, trust, and justice in exchange. The range of moral reasoning scores for the children in the study was from 150 points to 333 points. A random selection of 30 children's moral interview protocols was assessed by an independent scorer. An 87% inter-judge agreement was obtained for the assessment of the children's moral reasoning.

A focused interview provided data related to the children's participation in youth sports. Inasmuch as verbal and nonverbal articulation of personal values transpires between children in youth sports activities, the amount of participation by children in these activities was considered as it related to prosocial play behavior patterns. A value of 3 points indicated that a child had participated on four or more youth sport teams within the past two years. A value of 2 points indicated that a child had participated on two or three teams, and a value of

1 indicated that the child had participated on one or no youth sport teams within the past two years. Scores for children's participation in youth sports ranged from 1 to 3 points.

A structured interview was also used as the method for assessing the children's perception of sportsmanship. The concept of sportsmanship often tends to be equated by fifth and sixth grade children with a mutual respect regarding human relations (Bovyer, 1963). The method of assessing the children's perception of sportsmanship paralleled the assessment of moral reasoning. Using a hypothetical sports dilemma story as a basis for discussion, the investigator elicited and probed children's responses to selected questions. The sports dilemma story and questions were written by the investigator to reflect the issues of (a) personal roles of affiliation and relations, (b) contract, trust, and justice in exchange, and (c) rules and laws. The validation of the sports dilemma story and the questions to include the prescribed issues, was made through a logical analysis by an independent judge who was experienced in the Kohlberg assessment technique. The investigator assessed the level of orientation to the concept of sportsmanship by equating the verbal exchange with normative responses which paralleled the moral reasoning paradigm. The range of perception of sportsmanship scores for the children in the study was from 116 points to 325 points.

A random selection of 30 children's interview protocols was assessed by an independent scorer. An 83% interjudge agreement was obtained for the assessment of the children's perception of sportsmanship.

The children selected to participate in this study were 63 fifth and sixth grade boys and girls at an elementary school in Greensboro, North Carolina. In order to determine the children's prosocial play behavior scores, four fifth and five sixth grade teachers rated each of the children in their classrooms using the prosocial play behavior inventory. The total number of children rated was 245 boys and girls. A stratified random sampling process with allowance for a proportionate distribution of sexes, races, grade levels, and membership in various classrooms was used to select the children for the study. The children were selected as representing high, medium, or low prosocial abilities. There were 20 children in the high group, 21 children in the medium group, and 22 children in the low prosocial play behavior group.

Each of the 63 children was individually interviewed. A tape recorder was used to record their statements. The interview included the following: (a) moral dilemma story and questions, (b) questions regarding participation in youth sports, and (c) sports dilemma story and questions. In addition to the four variables, supplementary demographic data were obtained through the interview and from personal

student files which were maintained by the public school the children attended. These data included the following: (a) personal characteristics, (b) family size and structure, (c) education and occupation of parents, and (d) children's play partners and patterns.

The relationship of the major variables under consideration was first analyzed by determining the correlation coefficients. In order to further explore the relationships of the variables in the study, each of the variables was successively reclassified as the independent variable and a one-way analysis of variance was performed. The reclassification of the variables often resulted in unequal numbers in the experimental groups. This tended to vitiate the results of these secondary analyses. The following groups of data were analyzed: (a) data of children who scored at three levels on the prosocial play behavior inventory, (b) data of children who scored at three different levels of moral reasoning, (c) data of children with three different amounts of youth sports participation, and (d) data of children who scored at three different levels of perception of sportsmanship.

Prosocial Play Behavior and Moral Reasoning

Both a nonparametric and a parametric correlation coefficient were obtained for the children's prosocial play behavior scores and their scores for moral reasoning. The

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resulting coefficients (Kendall tau = .40; Pearson $r = .55$) were significant at the .01 level. An ANOVA was performed to determine if moral reasoning scores for the high, medium, and low prosocial play behavior groups varied significantly. The obtained F value of 14.73 was significant at the .01 level. A Scheffé post hoc comparison of group means indicated that the high prosocial play behavior group differed significantly from both the medium and the low groups on moral reasoning scores.

Three groups of moral reasoning scores were reclassified as the independent variable. The moral reasoning groups were unequal in number containing: high ($n = 11$), medium ($n = 23$) and low ($n = 29$) children. An analysis of variance and a post hoc comparison of group means were performed to identify significant differences in the prosocial play behavior scores for the three moral reasoning groups. The obtained ANOVA F score of 13.00 was significant at the .01 level. A Scheffé post hoc comparison of group means indicated that the high moral reasoning group differed significantly from the low group, and the low group differed significantly from the medium group.

Prosocial Play Behavior and Participation in Youth Sports

A nonparametric correlation coefficient was obtained for the children's prosocial play behavior scores and their scores for participation in youth sports. The resulting coefficient (Kendall tau = .06) was not

significant at the .05 level. Three groups of scores for participation in youth sports were reclassified as the independent variable. The participation groups were unequal in number containing the following: extensive participation (n = 14), moderate participation (n = 13), and limited participation (n = 36). An ANOVA was performed to determine if prosocial play behavior scores for the three sports participation groups varied significantly. The obtained F value of 1.19 indicated that a non-significant ($p < .05$) difference in scores existed among the three participation groups on scores for prosocial play behavior.

Prosocial Play Behavior and Perception of Sportsmanship

Both a nonparametric and a parametric correlation coefficient were obtained for the children's prosocial play behavior scores and their scores for perception of sportsmanship. The resulting coefficients (Kendall tau = .48; Pearson $r = .63$) were significant at the .01 level. An ANOVA was performed to determine if perception of sportsmanship scores for the high, medium, and low prosocial play behavior groups varied significantly. The obtained F value of 18.25 was significant at the .01 level. A Scheffé post hoc comparison of group means indicated that significant differences existed among all of the prosocial play behavior groups on perception of sportsmanship scores.

Three groups of scores for perception of sportsmanship were reclassified as the independent variable. The

perception of sportsmanship groups were unequal in number containing the following: high perception group ($n = 14$), medium perception group ($n = 29$), and low perception group ($n = 20$). An ANOVA was performed to determine if prosocial play behavior scores for the three perception of sportsmanship groups varied significantly. The obtained F value of 24.17 was significant at the .01 level. A Scheffé post hoc comparison of group means indicated that significant differences existed between all of the perception of sportsmanship groups on prosocial play behavior scores.

Moral Reasoning and Perception of Sportsmanship

In order to explore the relationship of the variables moral reasoning and perception of sportsmanship, three groups of moral reasoning scores were reclassified as the independent variable. The moral reasoning groups were unequal in number containing the following: high ($n = 11$), medium ($n = 23$), and low ($n = 29$). Both a nonparametric and a parametric correlation coefficient were obtained for the children's moral reasoning scores and their scores for perception of sportsmanship. The resulting coefficients (Kendall tau = .56; Pearson $r = .75$) were significant at the .01 level. An ANOVA was performed to determine if perception of sportsmanship scores for the three moral reasoning groups varied significantly. The obtained F value of 39.99 was significant at the .01 level. A Scheffé post hoc comparison of group means

indicated that significant differences existed among all of the moral reasoning groups on perception of sportsmanship scores.

In order to further explore the relationship of the variables moral reasoning and perception of sportsmanship, three groups of perception of sportsmanship scores were reclassified as the independent variable. The perception of sportsmanship groups were unequal in number containing the following: high ($n = 14$), medium ($n = 29$), and low ($n = 20$). An ANOVA was performed to determine if moral reasoning scores for the three perception of sportsmanship groups varied significantly. The obtained F value of 33.82 was significant at the .01 level. A Scheffé post hoc comparison of group means indicated that significant differences existed among all of the perception of sportsmanship groups on moral reasoning scores.

Participation in Youth Sports and Moral Reasoning

In order to explore the relationship of the variables participation in youth sports and moral reasoning, three groups of participation in sports were reclassified as the independent variable. The participation groups were unequal in number containing the following: extensive participation ($n = 14$), moderate participation ($n = 13$), and limited participation ($n = 36$). A nonparametric correlation coefficient was obtained for the children's participation in sports scores and their scores for moral

reasoning. The resulting coefficient (Kendall tau = .18) was not significant at the .05 level. An ANOVA was performed to determine if moral reasoning scores for the three participation groups varied significantly. The obtained F value of 3.64 was significant at the .05 level. A Scheffé post hoc comparison of group means, however, indicated that differences between the three participation groups was not significant at the .05 level on moral reasoning scores.

Participation in Youth Sports and Perception of Sportsmanship

In order to explore the relationship of the variables participation in youth sports and perception of sportsmanship, three groups of participation in youth sports were reclassified as the independent variable. The participation groups were unequal in number containing the following: extensive participation ($n = 14$), moderate participation ($n = 13$), and limited participation ($n = 36$). A nonparametric correlation coefficient was obtained for the children's participation in sports scores and their scores for perception of sportsmanship. The resulting coefficient (Kendall tau = .25) was significant at the .01 level. An ANOVA was performed to determine if perception of sportsmanship scores for the three participation in sports groups varied significantly. The obtained F value of 5.49 was significant at the .01 level. A Scheffé post hoc comparison

of group means indicated a significant difference existed between the extensive and the limited participation in youth sports groups on perception of sportsmanship scores.

Comparison of the High and the Low Prosocial Play Behavior Groups

A comparison of the high and the low prosocial play behavior groups revealed that they were significantly different ($p < .05$) on moral reasoning scores and perception of sportsmanship scores, but not on scores for participation in youth sports. The mean moral reasoning and perception of sportsmanship scores of the low prosocial play behavior group were 183.3, and 183.1 respectively. These scores indicated that the average children in the low group were utilizing a preconventional mode of reasoning in answering the interview questions. These average scores place the children in this group at a stage one level of orientation in moral reasoning and perception of sportsmanship.

The mean moral reasoning score and perception of sportsmanship score for the high prosocial play behavior group were 247.6 and 261.6 respectively. These scores indicated that the average child in the high group was also utilizing a preconventional mode of reasoning in answering the interview questions. The average scores of this group however, place the children at a stage two level of orientation in moral reasoning and perception of sportsmanship.

Construct Validation

Through conceptual convergence and discriminability as described by Kerlinger (1973), construct validity of prosocial play behavior was achieved. The underlying theory of this study was that differentiated patterns of prosocial play behavior of fifth and sixth grade children in recreational game playing situations are discernible; and such patterns are a function of the child's ability in moral reasoning and perception of sportsmanship, but are not a function of past experiences in youth sports participation.

Demographic Data

The mean scores and rank order relationship of certain demographic factors suggest that they may be associated with the four variables in the present study. These demographic data include: (a) I. Q., (b) race, (c) sex, (d) birth order, (e) size of the family, (f) number of adults in the home, (g) family structure, (h) parent educational level, (i) occupation of parent, (j) number of playmates, and (k) the age of playmates. It was suggested that these variables be controlled in future studies.

Conclusions

Based on the population studied and the sampling techniques utilized, the following conclusions can be drawn:

1. Scores for moral reasoning were positively related to scores for prosocial play behavior.

2. Scores for participation in youth sports were not related to scores for prosocial play behavior.

3. Scores for perception of sportsmanship were positively related to scores for prosocial play behavior.

4. The procedures of achieving content and construct validity supported the utility of the prosocial play behavior inventory in determining prosocial play behavior abilities in the upper elementary school population.

5. The interrelatedness of moral reasoning scores and perception of sportsmanship, as measured through a sports dilemma story and interviews, reflects a developmental construct in children's stages of moral reasoning.

Recommendations

Based on the population studied, the sampling techniques used, and the methodology employed in the present study, the following recommendations are made:

1. The prosocial play behavior inventory may be used by teachers to rate upper elementary school children for prosocial play behavior. In using the inventory, the teacher should base the assessment of children on several observational experiences. It is recognized however, that further tests of validation and reliability of the instrument are needed if the tool is to be used in further research.

2. An investigation into the relationship of the demographic factors in this study to patterns of prosocial play behavior may reveal underlying variables not considered

in the present study. These demographic factors should be considered in further research under more controlled sampling procedures.

3. The use of sports dilemma stories and interviews provides a viable means of encouraging upper elementary school children to reflect on the concept of sportsmanship. The procedures described in this study may be adapted for curricular use or for further research.

4. The nature of the findings leads the investigator to recommend that prosocial play behavior is a promising area for further research and curriculum development in elementary physical education. For example, activities could be included in upper elementary school physical education programs which encourage interpersonal communications and social perspective taking for their supportive relationship to children's moral reasoning and perception of sportsmanship. Such activities would include small group problem solving and students' reciprocal teaching activities.

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APPENDIX A

Directions for Teacher Observations

Dear Teachers,

I am in the process of developing a list of prosocial play behaviors (Good Sportsmanship) and antisocial play behaviors (Poor Sportsmanship) for fifth and sixth grade boys and girls. I would appreciate your help with this project.

I am asking the teachers to complete the attached observation form.

Children's social behavior is thought to vary with changing environments. Before completing the observation form would you please observe the children in your class in a combination of recreational settings. Please observe the children in your class when they are involved in both "high" and "low" organizational games; and under three supervisory conditions (Extensive Supervision, Moderate Supervision, and Limited Supervision).

- A. High Organizational Patterns of games*--are games in which all children are required to play the same game and in which the rules of the game are predetermined.
- B. Low Organizational Patterns of Games**--are games selected and often improvised by the children. Children are encouraged in this mode to select individual games and play partners.
 - 1. Extensive Supervision--the teacher is directly involved in the organization and progress of the class's game (often acts as the referee). Children's conflicts and rules decisions are resolved by the teacher.
 - 2. Moderate Supervision--the teacher remains on the perimeter of the play group(s) and enters only to resolve conflicts and to settle rules disputes.
 - 3. Limited Supervision--the teacher remains on the perimeter of the play group. The teacher encourages the children to resolve their own conflicts and rules disputes.

Before completing the observation form, please observe the children in your class in the following combinations of settings: A-1; A-2; A-3; B-1; B-2; B-3.

Thank you,

Mr. Horrocks

*This term later redefined as "Teacher-organized games."

**This term later redefined as "Child-organized games"

APPENDIX B
Teacher Observation Form

Directions: Please indicate if you have found the following behaviors: (E-0) easily observable, (D-0) at times difficult to observe, or (VD-0) very difficult to observe.

Students who:

- Avoided an argument
- Helped to resolve an argument
- Won a game without "gloating"
- Accepted defeat without complaining
- Offered consolation when a group member made a mistake
- Shared equipment readily
- Shared the activities of the game
- Took turns readily
- Abided by the rules of the game
- Accepted referee's decisions
- Accepted constructive criticism and suggestions from peers
- Acted interested in the activities
- Acted pleased with his/her performance
- Will sacrifice for the good of the team
- Volunteer to perform game maintenance activities--keep score, collect equipment
- Pay attention to the activities
- Are often asked to be team captain

Students who:

- Do not pay attention to the activities
- Initiate arguments
- Persist in arguments
- "Gloat" when his/her team wins
- Complain when their team lost
- Sulk when their team loses
- Condemn group members when they make a mistake
- Tease group members when they make a mistake
- Do not share the equipment
- "Hog" the activities of the game
- Do not take turns
- Bend the rules of the game to gain an advantage
- Complain about the rules of the game
- Complain about the referee's decisions
- Reject constructive criticism and suggestions from peers
- Act disinterested in the activities
- Refuse to play the game selected by the other students
- Often quit when they are losing

APPENDIX C

Survey Form for Elementary Physical Education Teachers

Dear Colleague,

I am in the process of developing a list of prosocial play behaviors (Good Sportsmanship) for fifth and sixth grade boys and girls. I would appreciate your help with this project.

Please indicate if you have found the following recreational play behaviors: (E-O easily observable, (D-O) at times difficult to observe, or (VD-O) very difficult to observe.

Students who:

- () Avoided an argument
- () Won a game without "gloating"
- () Will sacrifice for the good of the team
- () Accepted defeat without complaining
- () Offered consolation when a group member made a mistake
- () Shared equipment readily
- () Abided by the rules of the game
- () Shared the activities of the game
- () Accepted the referee's decisions
- () Take turns readily
- () Volunteer to perform game maintenance activities--keep score, collect equipment
- () Accepted constructive criticism and suggestions from peers

Thank you,

Please return to: Robert Horrocks
J. C. Price School

APPENDIX D
 Prosocial Play Behavior Inventory

Child's Name _____

INSTRUCTIONS

Please describe as accurately as possible how the above student behaves during recreational game playing activities by circling one of the four responses to each question. Please respond to every item and base your responses upon YOUR PERSONAL OBSERVATIONS AND EXPERIENCE.

<u>THE CHILD:</u>	<u>THE STATEMENT IS:</u>			
	<u>Not at all</u> like the child	<u>Very little</u> like the child	<u>Somewhat</u> like the child	<u>Very much</u> like the child
1. Avoids arguments.	1	2	3	4
2. Wins without "gloating."	1	2	3	4
3. Accepts defeat without complaining.	1	2	3	4
4. Offers consolation when a group member makes a mistake.	1	2	3	4
5. Shares equipment readily.	1	2	3	4
6. Abides by the rules of the game.	1	2	3	4
7. Shares the activities of the game (does not "hog" the ball).	1	2	3	4
8. Accepts referee's decisions.	1	2	3	4
9. Takes turns readily.	1	2	3	4
10. Accepts constructive criticism and suggestions from peers	1	2	3	4

APPENDIX E

Moral Dilemma Story and Questions

"Judy and the Rock Concert"

Judy was a twelve-year-old girl. Her mother promised her that she could go to a special rock concert coming to their town if she saved up from babysitting and lunch money for a long time so she would have enough money to buy a ticket to the concert. She managed to save up the \$5 the ticket cost plus another \$3. But then her mother changed her mind and told Judy that she had to spend the money on new clothes for school. Judy was disappointed and decided to go to the concert anyway. She bought a ticket and told her mother that she had only been able to save \$3. That Saturday she went to the performance and told her mother that she was spending the day with a friend. A week passed without her mother finding out. Judy then told her older sister, Louise, that she had gone to the performance and had lied to her mother about it. Louise wonders whether to tell their mother what Judy did.

Should Louise, the older sister, tell their mother that Judy had lied about the money or should she keep quiet? Why?

Should Louise think about the fact that Judy is her sister in deciding what to do? Why? Why not?

Judy earned the money. Should the mother consider this? Why? Why not?

Judy earned the money all by herself. Is this important? Why? Why not?

The mother promised Judy she could go to the concert if she earned the money. Is that promise something very important for the mother or Louise, the sister, to consider? Why? Why not?

Why should promises be kept?

Is it important to keep promises with someone you don't know well and probably won't see again? Why? Why not?

What do you think is the most important thing for a good daughter or son to think about in the way they get along with their parents? Why?

Why should sons and daughters obey their parents?

Was Judy's mother being a good mother? Why? Why not?

What do you think is the most important thing for a good mother to think about in the way they treat their sons and daughters? Why?

APPENDIX F

Participation in youth sports--Questions

To the subject:

Are you in a youth sports program or on a youth team at this time (i.e. baseball, soccer, swimming, softball)?

Tell me about it.

Is there an adult coach?

Do you have a schedule for practices or games?

Were you in a youth sports program or on a youth team this past winter?

Tell me about it. Was there an adult coach?

Did you have a schedule for practices or games?

Were you in a youth sports program or on a youth team last fall?

Tell me about it. Was there an adult coach?

Did you have a schedule for practices or games?

Were you in a youth sports program or on a youth team last summer?

Tell me about it. Was there an adult coach?

Did you have a schedule for practices or games?

Were you in a youth sports program or on a youth team last year?

Tell me about it. Was there an adult coach?

Did you have a schedule for practices or games?

APPENDIX G

Sports Dilemma Story and Questions
"Pat and the Coach"

Pat is eleven years old and a member of a softball team called the "Angels." Pat is very proud to be an Angel. Although not a very good player, Pat wants to improve. Bill is the coach of the team, and is also Pat's older brother. In the beginning of the softball season Bill told the players: the league rule stated that if they came to every practice, they would play in every game, even just for one inning. Pat likes this rule because it is fun to play in the games on Saturdays. Because of this Pat has not missed a single practice.

It was the end of the season and the Angels were playing the "Falcons" on Saturday for the championship. Bill comes to Pat and says that he doesn't think that the Angels will beat the Falcons if he lets some of the "weaker" members of the team play. He says that he does not want Pat to play and asks Pat to stay home and not come to the game on Saturday. Pat wonders what to say to Bill.

- Should Pat come to the game on Saturday? Why? Why not?
 Did Pat earn the right to play?
 Is it important for the coach to consider that Pat earned the right to play? Why? Why not?
 Is the fact that Bill is Pat's brother important? Why? Why not?
 Was a promise made?
 Why is it important to keep agreements and promises in games?
 Should promises and agreements in games be kept with a boy or girl you don't know very well? Why? Why not?
 What is an important thing for Pat to think about in getting along with the coach or with other members of the team? Why?
 What is an important thing for a coach to think about when he makes rules for the players on his team? Why?
 What is an important thing for players to think about in following the rules of the team, of the league, or of the game they are playing? Why?
 What if there wasn't a coach of the team, and the captain of the team (someone your own age) asked you not to play? What would you say? Why?
 Why do we have rules of games? of leagues?
 Why should you follow rules of games in school? in your neighborhood games?
 Are rules important? Why?
 Why shouldn't you break rules of games?
 Are there times when it is O.K. to break rules of games?
 Are there times when it is O. K. to change rules of games?
 Can you give me an example of poor sportsmanship?

APPENDIX H

J. C. Price
400 West Whittington St.

PARENTAL CONSENT FORM

Dear Parent,

Your child _____ has been selected for a doctoral study to be conducted by Mr. Horrocks, the physical education teacher at J. C. Price School. The purpose of the study is to determine various types of children's sportsmanship behaviors (prosocial behavior), and children's understandings of the concept "sportsmanship." In order to determine this Mr. Horrocks will interview your child. The interview will take approximately one-half hour.

PARENT

I understand that the purpose of this study is to determine various types of children's sportsmanship behaviors (prosocial behavior), and children's understandings of the concept "sportsmanship."

I understand that participation is entirely voluntary

I understand that I may withdraw my consent and terminate my child's participation at any time during the project.

I have been informed of the procedures that will be used in the project and understand what will be required of my child.

I understand that my child may withdraw from this study on his/her own volition.

I understand that a summary of the results of the project will be made available to me at the completion of the study if I so request.

I understand that all of my child's responses during the interview will remain anonymous.

I wish to give my consent for my child to participate in the research study.

Please return to:

Mrs. Moscoso (counselor)

J. C. Price School

parent's signature

address

date

APPENDIX I

Release of Responsibility form

TEACHERS

I understand that the purpose of this study is to describe selected prosocial play behaviors in children in relation to several developmental and environmental factors.

Specifically:

Is prosocial play behavior associated with a child's level of moral reasoning.

Is prosocial play behavior associated with a child's participation in youth sports.

Is prosocial play behavior associated with a child's perception of the concept of sportsmanship.

I confirm that my participation as a teacher-rater is entirely voluntary.

I understand that my role in the study-project is that of a "rater" only.

I understand that all of my responses on the "Prosocial Play Behavior Inventory" will remain completely anonymous.

I understand that neither in the final project report nor in subsequent publications will teacher's or children's actual names be used.

(signed) Robert Horrocks

Investigator

teacher-rater

date

APPENDIX J

Personal Characteristics of Children

Personal characteristics of the children included the following: Age, I.Q., sex, and race. These demographic data were considered in relation to the four variables under study. The following tables describe frequencies, means, and rank order relationships of demographic groups as well as demographic data as it described the three prosocial play behavior groups.

For purposes of presentation, the ages of subjects were represented in months and were divided into three groups: (130-140 months), (141-146 months), and (147-163 months). This division was made to approximate an equal number of children in each group. The age range of the sample was 130-160 months and the mean age was 142.7 months. Using these age groupings, means were calculated for each of the variables under study.

Table A
Mean Scores on Variables for Children
of Varying Age Groups

Age Group	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
147-163 months	22	30.09	223.09	1.86	233.09
141-146 months	18	26.89	209.06	1.67	212.39
130-140 months	23	30.43	203.3	1.43	212.91

Note: Age is represented in months.

Table A shows that older children (147-163 months) scored higher on the variables moral reasoning (MR), perception of sportsmanship (PS), and participation in youth sports (PYS), than the other two groups. Younger children scored highest on the variable prosocial play behavior (PPB), and lowest on the variables MR and PYS. The middle aged children (141-146 months) scored lowest on the variables PPB and PS.

Children's I.Q. scores were considered. Their scores were determined from the "Short Form Test of Academic Aptitude" which was administered to all fourth, fifth, and sixth grade children in the Spring of 1977. The test means was 100, and the standard deviation was 16 points. The possible range of scores on the test was from 60 to 150 points. For purposes of comparison, children's I.Q. scores were divided into three groups as follows: Group 1 (111-136 I.Q.), Group 2 (91-110 I.Q.), and Group 3 (74-90 I.Q.). These divisions were made to approximate an equal number of children in each group. The mean I. Q. score for the sample was 99.5 points. Using these divisions, group means were calculated for each of the variables under study.

Table B
Mean Scores on Variables for Three I.Q. Groups

I.Q. Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
111-136 I.Q.	20	35.35	242.05	1.95	259.35
91-110 I.Q.	21	29.1	212.71	1.48	213.14
74- 90 I.Q.	22	24.	183.59	1.55	190.23

Table B indicates that children with the highest I.Q. scores (111-136) scored highest on all four variables. Children with the lowest I.Q. scores scored the lowest on the variables PPB, MR, and PS. The children with an I.Q. score in the (91-110) range, scored the lowest on PYS.

The sample of children in the study was composed of 51% females and 49% males. Group means were determined by sex for each of the variables.

Table C
Mean Scores on Variables for Male and Female Children

Sex Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
Female	32	30.72	217.94	1.47	226.56
Male	31	27.84	205.58	1.84	212.84

The average score for females was higher than that for males on the variables PPB, MR, and PS. The average male score of 1.84 on PYS was higher than the average score of 1.47 for females. See Table C.

Children in this study included those classified racially as "black" or "white." Based on this dichotomy, group means were calculated for each of the four variables.

Table D
Mean Scores on Variables for Black and White Children

Race Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
White	33	31.44	224.06	2.03	238.41
Black	30	26.79	197.55	1.21	198.

Table D shows that the average white child scored higher on each of the four variables than the average black child.

A composite of the demographic data: Age, I.Q., race, and sex, for each of the three prosocial play behavior groups is presented in Table E. The number of the children in the high prosocial play behavior group was 20, the number in the medium group was 21, and there were 22 children in the low scoring prosocial play behavior group. Group means and frequencies for each of the demographic data were calculated for each of these groups.

Table E
Three Prosocial Play Behavior Groups' Means
and Frequencies for Age, I.Q.,
Race, and Sex

Prosocial Groups	<u>n</u>	Age Means	I.Q. Means	Race		Sex	
				Black	White	Male	Female
High Group	20	142.75	106.6	9	11	8	12
Medium Group	21	142.67	102.1	9	12	11	10
Low Group	22	142.73	90.6	12	10	12	10

Note: Age is represented in months.

APPENDIX K

Children's Family Size and Structure

The children's family size and structure included the following: Birth order of the child, number of children in the family, size of the extended family, number of adults in the home, and two parent or single parent/grandparent family structure. The following tables describe frequencies, means, and rank order relationships of demographic groups, and of the three prosocial play behavior groups.

The children's birth order in their families was considered. Thirty-eight percent of the subjects were first born, 22% were second born, 21% were third born, and 19% were born fourth or later in their families. The mean birth order was 2.46 for the sample. Group means indicated that 2nd born children scored highest on all four variables, whereas 3rd born children scored lowest on the variables PPB, MR, and PYS. Fourth or later born children scored lowest on PS. See Table F.

Table F

Mean Scores on Variables for Children's Birth Order

Birth Order Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
1st Born	24	28.5	207.2	1.78	220.1
2nd Born	14	31.64	228.2	1.86	240.7
3rd Born	13	27.85	203.4	1.38	216.8
4th or later Born	12	29.67	211.	1.42	206.

The number of children in the subjects' families ranged from 1 to 9 children. The mean number of children in a family was 3.3 for the sample.

Table G
Mean Scores on Variables for Subjects with
Varying Number of Children in Family

Children in Family Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
1 child	5	22.2	189.6	1.4	198.6
2 children	20	30.6	219.25	1.9	233.85
3 children	14	29.5	208.57	1.71	225.29
4 children	10	31.2	233.1	1.4	226.4
5 or more children	14	28.43	197.36	1.5	197.14

Table G shows that the mean score of children from four-children families was highest for the variables PPB, and MR. Those subjects from two-children families scored highest on PS, and PYS. Subjects from families of five or more children scored lowest on PS, whereas those from one or four-children families scored lowest on PYS. Children who were the only child in the family scored lowest on PPB and MR.

The size of the children's extended families was considered as containing permanent members of the household. These included: parents, grandparents, brothers and sisters who had not moved to another residence, and cousins. The mean of the extended family membership was 4.75 for the sample. Because there were only two children living in a family of two (child and parent only), these were combined with an extended family of three people.

Table H
Mean Scores on Variables for Children
from Varying Sizes of
Extended Families

Family Size Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
2 and 3 People	9	28.22	212.88	1.66	225.1
4 People	23	31.13	220.26	1.65	238.17
5 People	19	28.15	208.42	1.57	210.41
6 or more People	12	28.4	200.4	1.58	195.5

Table H reveals that children from extended families of four scored highest on PPB, MR, and PS. Subjects from families of 2 or 3 people scored highest on PYS. Those children who were members of a family of five scored lowest on PPB and PYS, whereas children from families of six or more scored lowest on MR and PS.

The number of adults in the child's home included parents and grandparents. None of the subjects reported living with adult relatives such as aunts, uncles, or older brothers and sisters. Because there were only three subjects living in a home with three adults, these were included in the two adult group. The mean home membership for the sample was 1.86 adults.

Table I
Mean Scores on Variables for Children from Homes
of One, Two, or Three Adults

Adults in Homes Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
1 Adult	12	27.92	206.17	1.17	202.33
2-3 Adults	51	29.63	213.2	1.76	223.92

Table I indicates that mean scores for children living in homes with two or three adults were higher than for subjects living with one adult in the home.

In considering family structure, it was found that a larger percentage of subjects lived in a family consisting of both parents. Seventy-one percent of the children were from a two-parent family structure as compared with 29% from a single parent or grandparents family structure. Using this division, group means were calculated for each of the variables.

Table J
Mean Scores on Variables for Children from Two-Parent
or Single Parent/Grandparents Family Structure

Family Structure Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
Two Parent	45	30.78	218.16	1.84	227.4
Single Parent Grandparents	18	25.61	196.11	1.17	200.83

Table J shows that children from a two-parent family structure scored higher on all four variables than children from single parent or grandparent family structures.

A composite of the demographic data: Birth order of the child, number of children in the family, size of the family, number of adults in the home, and two-parent or single-parent/grandparent family structure, is presented in Table K. There were 20 children in the high prosocial play behavior group. There were 21 children in the medium group, and 22 children in the low prosocial play behavior group. Means and frequencies of the demographic data were calculated for each of these groups.

Table K

Three Prosocial Play Behavior Groups' Means and Frequencies for: Birth Order, Children in Family, Family Size, Adults in the Home, Two-Parent, and Single-Parent/Grandparent-Families

Pro-social Groups	n	Birth Order	Children in Family	Family Size	Adults in the Home	Two Parent Family	Single Parent/Grandparent Family
High Group	20	2.8	3.6	4.5	1.8	16	4
Medium Group	21	2.1	3.1	4.9	1.8	16	5
Low Group	22	2.5	3.2	4.7	1.9	13	9

APPENDIX L

Education and Occupation of Children's Parents

The education and occupation of the children's parents included the following: Years of schooling of the primary provider, and occupational prestige of the primary provider. The following tables describe frequencies, means, and rank order relationships of demographic groups, and of the three prosocial play behavior groups.

The achieved educational level of the children's "primary provider" was considered. The primary provider was the adult in the child's home primarily responsible for the economic income of the household. The mean number of years of schooling for the children's parents was 13.56 or approximately 1 1/2 years of post-high school education. The range was from 5 years of schooling to 22 years. For purposes of comparison, four arbitrary groups were determined as follows: (5 to 11 years of schooling), (12 years of schooling), (13 to 16 years of schooling), and (17 or more years of schooling).

Table L
Mean Scores on Variables for Children Whose Primary
Providers Had Varying Educational Levels

Parent Schooling Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
17 or more years of school	9	33.8	243.33	1.88	243.55
13-16 years of school	21	31.28	225.23	2.23	245.85
12 years of school	14	26.5	214.7	1.14	213.2
5-11 years of school	19	27.	180.	1.26	184.63

Table L indicates that the mean scores for subjects whose primary provider engaged in post-high school education. (Thirteen to 16 years of schooling, or 17 or more years of schooling), were higher than the mean scores for those whose primary provider did not.

As a measure of social standing within their communities, the occupational prestige of the children's primary provider was determined. In a 1964 article Hodge, et al., reported a replication of the "National Opinion Research Center's" 1947 study of prestige positions accorded to 90 occupations. Six hundred and fifty-one respondents were asked to judge an occupation as having: excellent, good, average, somewhat below average, or poor standing. A corresponding numerical value of 100, 80, 60, 40, and 20 was assigned to each of these value positions. Calculating the numerical averages of these arbitrarily assigned values over all respondents yields the "NORC" prestige score. The mean NORC score for children's primary providers in this study was 67.03 points. The range of scores was 34 to 93 points. For purposes of comparison, the occupation of the children's primary provider was assigned to one of three groups with a corresponding NORC score range of: (34 to 59), (60 to 79) and (80 to 93). High, medium, and low groups were determined as an approximation of equal numbers of providers in each group. See Table N for occupational listings. Using these divisions, group means were calculated for each of the variables under study.

Table M
Mean Scores on Variables for Children Whose Primary
Provider Had Varying "NORC" Scores

NORC Score Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
80-93 NORC Score	26	32.58	232.27	2.19	247.
60-79 NORC Score	14	28.64	224.86	1.43	232.43
34-59 NORC Score	13	26.	180.87	1.17	181.39

Note: NORC Score = Occupational prestige score

Table M shows that the mean scores for subjects whose primary provider was assigned a high NORC score was higher on all four variables than those who received lower NORC scores. This distinction appeared on all variables.

Table N
Occupational Groups Based on "NORC" Occupational
Prestige Scores

(34 to 59)	(60 to 79)	(80 to 93)
Janitor	Corporal in the army	Public school teacher
Taxi driver	Plumber	Owner of factory
Restaurant waitress	Traveling salesman	Building contractor
Laborer	Mail carrier	Accountant
Filling station attendant	Carpenter	Engineer
Clerk in a store	Manager small store	Minister
Maintenance worker	Trained mechanic	College professor
Garage mechanic	Factory foreman	Physician
	Office supervisor	Banker

A composite of the demographic data: Years of schooling of the child's primary provider, and occupational prestige of the primary provider, is presented in Table 0. There were 20 children in the high prosocial play behavior group. There were 21 children in the medium group, and 22 children in the low pro-social play behavior group. Means and frequencies for each of the demographic data were calculated for each of these groups.

Table 0
Three Prosocial Play Behavior Groups' Means for:
Parents' Years of Schooling, and Occupational
Prestige Score

Prosocial Groups	<u>n</u>	Primary Provider	
		Years of Schooling	Occupational Prestige Score
High group	20	14.6	72.2
Medium group	21	13.2	66.2
Low group	22	12.8	63.1

APPENDIX M

Children's Play Partners and Patterns

Children's play partners and patterns included the following: The amount of play with their parents, the number of neighborhood playmates, and the ages of neighborhood playmates. The following tables describe frequencies, percentage scores, means, and rank order relationships of demographic groups, and of the three prosocial play behavior groups.

The amount of the children's play with their parents was considered. Children were asked to respond to the amount of play engaged in with their parents or other adults in the home. Play referred to both indoor inactive type play (i.e., cards, checkers, monopoly, etc.) and outdoor active play (i.e., having a catch with a ball, playing tennis, playing tag, etc.). Children were asked to select one of three choices indicating the amount of play engaged in jointly by themselves and their parents or other adults living in their home. The choices were: "often," "sometimes," and "hardly ever." Fifty-two percent of the children reported that play with their parents could be categorized as "sometimes," 30% reported as "hardly ever," and 18% reported "often."

Table P

Mean Scores on Variables for Children with Varying
Amounts of Play with Their Parents

Amount of Parents' Play Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
Often	11	29.55	228.91	2.	238.45
Sometimes	33	30.27	215.85	1.7	222.21
Hardly Ever	19	27.4	195.	1.37	204.8

Table P indicates that those who reported that they engaged in play "often" or "sometimes" scored higher on all four variables than those who reported that they and their parents "hardly ever" played together.

Children in the study reported various numbers of neighborhood playmates. Neighborhood playmates were those children with whom the subjects entered into "street" or "backyard" games. This excluded members of youth sports teams who are often considered by children to be playmates. The mean number of playmates for the sample was 4.27 with a range of from zero to 12 playmates. For purposes of comparison, the children's number of playmates was considered in six groupings as follows: 0, 1, 2, 3, 4, and 5 or more neighborhood playmates. Using these groupings, means were calculated for each of the four variables.

Table Q
Mean Scores on Variables for Children with Varying
Numbers of Neighborhood Playmates

Playmate Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
0 Playmates	6	26.6	181.5	2.	201.1
1 Playmate	5	30.4	216.6	1.6	230-8
2 Playmates	11	34.2	230.	1.55	248.8
3 Playmates	5	25.8	170.2	1.2	158.2
4 Playmates	9	28.	214.5	1.44	209.5
5 or more Playmates	27	28.7	217.1	1.77	224.9

It was found that the mean score for children who reported having two neighborhood playmates was highest for the variables PPB, MR, and PS. Children who reported having no playmates scored highest on PYS. Children reporting three playmates scored lowest on the variables PPB, PS, and PYS. See Table Q

The age of the children's playmates was considered. Only children who reported that they played with same age children only, older children only, or younger children only were considered for comparison. Therefore, only 35 of the children were considered in this comparison as all other children reported playing with children of varying ages.

Table R
Mean Scores on Variables for Children with Older,
Same Age, and Younger Playmates

Age of Playmates Groups	<u>n</u>	PPB Means	MR Means	PYS Means	PS Means
Older Age Playmates	8	32.88	217.5	1.5	240.63
Same Age Playmates	18	28.67	205.44	1.44	198.22
Younger Age Playmates	9	29.67	212.67	1.56	225.89

Table R shows that the mean score for children who played with older children only, was highest for the variables PPB, MR, and PS. Children who played with younger children only, scored highest on PYS. The mean score for children who reported playing with same age children only, was lowest on all four variables.

A composite of the demographic data: Amount of play with parents, number of neighborhood playmates, and the ages of neighborhood playmates are presented in Tables S and T. There were 20 children in the high prosocial play behavior group. There were 21 children in the medium group, and 22 children in the low prosocial play behavior group. Means, frequencies, and percentages, for each of the demographic data were calculated for each of these groups.

Table S
Three Prosocial Play Behavior Groups' Frequencies
and Percentages for: Amount of
Play with Parents

Prosocial group	<u>n</u>	Play with Parents		
		Never ^a	Sometimes ^a	Often ^a
High group	20	4 (20)	13 (65)	3(15)
Medium group	21	7 (33)	10 (48)	4(19)
Low group	22	8 (36)	10 (46)	4(18)

Note: ^aNumbers in parentheses indicate the percentage.

Table T

Three Prosocial Play Behavior Groups' Means, Frequencies, and Percentages for:
Number and Ages of Playmates

Prosocial Groups	<u>n</u>	Number of Play- mates	No Play- mates ^a	Age of Playmates to the Subject						
				Younger ^a	Same ^a	Older ^a	Younger and Same ^a	Same and Older ^a	Younger Same Older ^a	Younger and Older ^a
High group	20	4.5	0 (0)	4 (20)	6 (30)	4 (20)	3 (15)	3 (15)	0 (0)	0 (0)
Medium group	21	4.3	3 (14)	1 (5)	6 (28)	2 (10)	6 (28)	2 (10)	1 (5)	0 (0)
Low group	22	4.8	3 (14)	3 (14)	6 (27)	2 (9)	1 (4.5)	4 (18)	2 (9)	1 (4.5)

Note. ^a Numbers in parentheses indicate the percentage.

APPENDIX N

Typical stage responses to questions relating
to moral dilemma story

Stage I

A daughter should obey her mother because she will be punished if she doesn't.
 A daughter should always obey her mother because she is older, and knows what is best.
 Mothers are bigger than daughters and they are the authority and know more.
 You should keep promises because if you don't then you are a liar.

Stage II

Louise should not tell on Judy because Judy might do her a favor in the future.
 A mother should try to treat her children right because the children might do things for her like obey her or like her more.
 Louise and Judy should respect their mother because she has brought them up, fed them, and clothed them.
 It's important to keep promises because if you don't people won't like you or believe you. You could get a bad reputation.
 If you don't keep promises you could make other people feel bad.
 You should keep promises because other people may do a favor for you or keep promises to you.

Stage III

A good daughter should respect, honor or obey her parent.
 Good mothers and daughters should try to understand each other and respect each other's feelings.
 Mothers and daughters should try to see each other's points of view.
 It's important to keep promises so that others will think you are trustworthy and will have a good impression of you.
 It's important to keep promises to maintain trust between people.

Stage IV

Judy is learning to work hard for things. This will make her responsible later in life.

Members of a family have a responsibility to work out problems as a group.

Promises are important to people because they help keep families or other groups together and help them get along with each other.

Everyone has a responsibility to live up to commitments. If no one kept promises society would not be well off.

APPENDIX O

Typical level responses to questions relating
to sportsmanship dilemma story

Level I

Coaches should keep agreements they make with players because they are just supposed to.
 Pat should not go to the game because the coach is the boss and tells the players what to do.
 Players are just supposed to obey the coach.
 Players should follow the rules of the game to keep from getting hurt.
 We have rules for games so that no one gets hurt.
 Shouldn't break the rules because it just isn't right.
 Shouldn't break the rules of the game because you might get caught.
 Shouldn't break the rules of the game because if the other team finds out you might get caught and get beaten up.

Level II

Coaches and players should keep promises and agreements they make in games because if they don't people won't like you--you'll get a bad reputation--and people won't play with you.
 You should keep agreements in games because if you do then the other players may do you a favor or keep promises and agreements with you.
 The coach should let Pat play in the game because Pat may help him to win the game (or) the coach may need Pat in the future as a substitute.
 You should treat other players nice and fair so that they will treat you the same way.
 Should follow the rules so that people will like you (have more friends).
 Should follow the rules because you would want others to follow rules too.
 Rules are needed to stop fights and arguments.

Level III

Coach should keep agreements with players because trust is important.
 Pat should play in the game because (s)he worked hard and deserved or earned the right to play.
 There should be respect and trust between players and coaches.

Communication is important between players and coaches. Coaches and players should try to understand and respect each other's feelings or see each other's point of view.

A good coach or a good player should set a good example for others.

Rules help to make games go smoothly so that there is not confusion.

Level IV

The coach and players have a responsibility to live up to game agreements.

The members of a team should do their best and cooperate for the good of the team.

The coach has a responsibility for training good character and citizenship in members of the team.

Rules for games provide order and structure and help in the organization of the activity.

All should follow the rules. They are set up so that no one is given an unfair advantage.

Rules provide everyone with the same and equal chance to win.