

To the Graduate Council:

I am submitting herewith a dissertation written by Bobby W. Cagle entitled "The Comparison of Real-Life Moral Reasoning with Hypothetical Moral Reasoning of Children About Their Spontaneous Physically Aggressive Behaviors." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Educational Psychology and Guidance.

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THE COMPARISON OF REAL-LIFE MORAL REASONING WITH
HYPOTHETICAL MORAL REASONING OF CHILDREN
ABOUT THEIR SPONTANEOUS PHYSICALLY
AGGRESSIVE BEHAVIORS

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ABSTRACT

This study was undertaken to compare children's moral reasoning about real-life behaviors and parallel hypothetical situations. A recently developed rating scale by Eisenberg-Berg and Neal (1979) was used in this study to categorize moral reasoning elicited in children based on probe questioning.

A class of twenty-one kindergarten children was observed over a twelve-week period for spontaneous physically aggressive behaviors. The observer categorized these behaviors into one of five physically aggressive behavior types, then used probe questioning to elicit moral reasoning responses from the subjects justifying their own physically aggressive behaviors. These responses were descriptively recorded by the observer for rater use. Following the real-life observations, each participating subject was presented a maximum of five hypothetical stories. Moral reasoning justifications were elicited through probe questioning and responses were descriptively recorded by the observer, again, for rater use. Raters categorized both the real-life and hypothetical moral reasoning categories in order to determine the consistency among subject justifications. Only ratings with at least two-thirds rater agreement were used in the data analysis.

Data were analyzed by percentage agreement between real-life and hypothetical moral justifications. In addition, the probability of agreement between both real-life and hypothetical moral justifications of preschool children was calculated for each justification category. When comparing the real-life moral reasoning and the hypothetical moral reasoning of preschool children, the major conclusion of the study is that preschool children predominantly used pragmatic moral justifications for their own spontaneous physical aggressions in both real-life and hypothetical situations.

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CHAPTER I

THE NATURE AND PURPOSE OF THE INVESTIGATION

Introduction

During the wake of complaints concerning the decline of standards of conduct, there has been an increasing interest among educators and psychologists about how people learn to think about moral issues. Munson (1979) states the reasons for a revival of interest in moral education:

It began during the Vietnam war and the campus upheavals of the 1960's and gathered momentum during the 1970's, when many people saw a decline in standards of both public and personal conduct--from Watergate and other scandals in high public office and in American business to the breakdown of family loyalties, sexual experimentation, widespread drug use, and increasing youth crime, including the destruction of school property and assaults on teachers.
(p. 49)

In regard to this revival of interest in moral education, Munson also reports that in a 1975 Gallup poll, 79 percent of the Americans polled were willing to turn over some of the responsibility for moral training to the schools. In looking at moral education in the school, Lyons-Ruth (1978) states that very little data have been collected with very young children. Rule, Nesdale, and McCara (1974) stipulate that little is known about the factors affecting moral judgment about aggression. The results from their study demonstrate that girls as young as

five years of age and boys as young as six do distinguish the different bases for aggression in their moral evaluations. However, these researchers looked at intentions underlying aggressive responses in a contrived methodological approach based on stories and not actual spontaneous behaviors. Few researchers have actually examined children's moral judgments about their own real-life active behaviors, and those researchers (e.g., Damon, 1977; Ugurel-Smith, 1952; and DeMersseman, 1976) also used a similarly structured contrived methodology.

In their textbook, Childhood and Adolescence, Stone and Church (1975) state that:

To the best of our knowledge, no one has ever applied a systematic logical analysis to the spontaneous reasoning of school children, but it seems likely to us that children are abundantly guilty of every logical fallacy known to philosophers. (p. 395)

Recently, a new methodology enabling researchers to study the spontaneous moral reasoning of children was developed by Eisenberg-Berg and Neal (1979). The method incorporates a rating scale used to tap young children's moral reasoning about their own real-life behavior(s).

The Eisenberg-Berg and Neal study examined spontaneous prosocial behavior but stipulated that additional research is needed to examine children's reasoning about antisocial behaviors (e.g., aggressions, dishonesty, lack of self-control) and to investigate the relationship of moral

judgments about spontaneous behaviors to similar hypothetical incidents.

Statement of the Problem

Eisenberg-Berg and Neal (1979) point out the need to know how children reason about their physical aggression in real-life situations. Further, there is a need to determine if children's moral reasoning in hypothetical situations involving physical aggression is consistent with actual moral reasoning in real-life situations. However, no research has been done in this particular area. Therefore, the present study is directed toward filling this void.

Hypothesis

From the problem, the following hypothesis, stated in null form, was derived:

There is no difference in the moral reasoning children use when justifying their real-life physical aggression and the moral reasoning they use to justify hypothetical anti-social behavior (physical aggression).

Operational Definition of Physical Aggression Categories

For the purpose of this study, Kramer's (1978) physical aggression behavior categories were adapted because of (a) their utility in a naturalistic setting, and

(b) to develop the parallel hypothetical situations based on children's real-life physically aggressive behaviors. These physical aggression categories are presented in Appendix A.

Significance of the Problem

The research presents an analysis of antisocial moral justifications children use in a naturalistic setting using a new methodology for recording and categorizing observed spontaneous physically aggressive behaviors. Specifically, this research provides insight into the following:

1. What physically aggressive behaviors are exhibited by preschool children?
 2. What types of moral justification(s) do preschool children give for their own physically aggressive behavior(s)?
 3. Do they give the same moral justifications for these physically aggressive behaviors in a parallel hypothetical situation?
 4. Do preschool males justify their physically aggressive behaviors differently than preschool females?
- This information would be helpful in understanding the total realm of moral justifications of young children when compared to the results of the Eisenberg-Berg and Neal prosocial justification categories.

Assumptions and Limitations

The major assumption of this study was that the observed physically aggressive behaviors and moral justifications of the subjects were representative of preschool children in a naturalistic setting. It was also assumed that using an independent observer would increase objectivity of data collection and would remove possible researcher biases.

The major limitation of this study was the small sample size of predominantly male subjects. However, the sample makeup (sex distribution, number, and age range) was approximately equal to Eisenberg-Berg and Neal's initial study on moral justification of prosocial behaviors.

CHAPTER II

REVIEW OF LITERATURE AND RESEARCH

This chapter presents a review of the social learning, psychoanalytic, and cognitive development theories as the three traditional approaches to morality. The following is an overview of relevant literature on moral judgment and behavior research.

Traditional Approaches to Morality

According to the social learning theory, as represented in the work of Bandura (1969), and Bandura and Walters (1963), the young child becomes moral through the processes of imitation, modeling, and reinforcement. The young child observes significant models who convey information to the child about the characteristics of the appropriate response in a given situation. Hence, those responses or behaviors which are consistently reinforced form the bases of morality through observational learning. Advocates of this view say that children's moral orientations can be altered and even reversed by the manipulation of response reinforcement contingencies and by the provision of appropriate social models. Therefore, the social learning theorists (Harris, Mussen, and Rutherford, 1976) explain the association between moral judgment and moral conduct as:

According to theoretical reasoning, social motivations are acquired very early in life and even young children learn that satisfying relationships with peers require cooperation, sharing, and "give-and-take." These behaviors yield rewards and are therefore strengthened and maintained. At the same time, the cognitions attached to them (e.g., thought, motivations, social awareness, intentions, concern about others) become stronger and more influential. With more direct social experiences and rewards, the child becomes more sensitive to the probable effects of his actions on others, and this sensitivity is manifested both in his thinking and in his overt responses. Thus, social learning theorists maintain, more advanced moral judgments are matched with behavior that is congruent with these judgments because both cognitions and actions develop and acquire strength as a result of the same direct social experiences and reinforcements. (p. 132).

In his research review of the social learning approach to morality, Hoffman (1970) stated, "We conclude only that a great deal more research is needed before a definitive statement about the role of identifacatory and modeling processes in moral development may be made" (p. 317).

The psychoanalytic view of moral development cannot be equated with the social learning theory of morality (Hoffman, 1970). However, it shares with this theory the assumption that acquiring morals is a process of internalization of cultural or parental norms. The psychoanalytic theory is like the cognitive developmental theory in that they both postulate stages; however, the classical Freudian stages of the psychoanalytic theory are libidinal-instinctual rather than moral. In the psychoanalytic theory, morality is expressed by the superego which is formed and fixed early in development through

internalizations of parental norms. The superego begins to develop in the course of the child's resolution of Oedipal conflicts during the fifth or sixth year of life. The superego's characteristic modes of operation are laid down in the early years and remain substantially unchanged throughout life. The psychoanalytic theory relies on the defense mechanism of repression in dealing with excess hostility, frustration, and physical harm. Thus, the psychoanalytic view is considered internal rather than external as is the social learning theory, and to some extent, the cognitive developmental theory. Moral thinking is not considered an autonomous, rational process, it is most often the product of unconscious forces, over which the individual has little or no awareness. Freud viewed the conscious as under the control of the unconscious and irrational superego. This superego is acquired through identification with the parents. Morality is measured by behavioral conformity or by guilt association with transgression. Research with this psychoanalytic approach has yielded inconsistent and often contradictory findings. Rebelsky, Allinsmith, and Grinder (1962) found that guilt response of non-cheaters increased more than guilt responses of cheaters.

Another theory of morality is the cognitive-developmental approach. This approach emphasizes specific, progressive stage development in conjunction with age-linked sequential reorganizations in the development of

morality. Among its major advocates are Piaget (1932), Kohlberg (1958), and Damon (1973). Piaget's major contributions to the study of morality were, first, to view morality as developmental and structural in nature. Second, he suggested that moral development was underlaid by cognitive development. Third, the introduction of his clinical interview technique which allowed for scoring of responses into categories of moral development. Fourth, the format was established to further uncover basic trends in the development of moral judgment (White, 1973). Based on these processes he developed the heteronomous and autonomous stages of morality.

The heteronomous stage is characterized by the subject's orientation to power and rule, which he/she considers unchangeable. In this stage, the child views rightness or wrongness of an act on the basis of the consequences. Three things about the child give rise to the heteronomous stage: (a) the child's realism, (b) the child's egocentrism, and (c) the unilateral respect the child holds for adults (Leon, 1976).

In the autonomous stage the child views rules as established and maintained through reciprocal social agreement and subject to modification in relation to human and situational circumstances. The child progresses from the heteronomous stage to the autonomous stage as a result of learning acquired from peer and social interactions.

Following Piaget, Kohlberg (1958) adapted his developmental approach but rejected the substance of the two-stage model and proposed a six-stage model with three levels (Table 1). Each stage of Kohlberg's model, based on interviews derived from 72 boys from 10 to 16 years of age, characterizes a separate type of moral reasoning. He states that stages are types of thinking, not types of persons. In his unpublished scoring manual he defines stage identification as:

To identify a stage we must listen to what a person says in a moral interview using standard dilemmas or in a moral discussion and try to understand what the words mean to the person who is saying them, what that individual is really thinking, and then compare that thinking with the kind of thinking which the manual defines for that stage. (p. 4)

Scores based on these hypothetical, standard, story-type dilemmas can be reported in two ways: one can report a score for each stage (thereby giving a profile of percentage usages of stages), or one can report the dominant stage alone (Kurtines and Greif, 1974).

Harris, Mussen, and Rutherford (1976) relate Kohlberg's application of the cognitive developmental approach to moral development as follows:

Kohlberg . . . ascribes causal role to cognitive variables in accounting for the consistency between moral judgments and moral actions. In this view, the individual's moral judgments determine how he structures the social and moral situations he encounters. This structuring in turn critically influences his overt behavior. That is, the 10-year-old child of high cognitive

Table 1
Kohlberg's Stages of Moral Development

Level I

Moral value resides in external, quasi-physical happenings, in bad acts, or in quasi-physical needs rather than in persons and standards.

Stage 1. Obedience and punishment orientation. Egocentric deference to superior power or prestige, or a trouble-avoiding set. Objective responsibility.

Stage 2. Naively egotistic orientation. Right action is that instrumentally satisfying the self's needs and occasionally others'. Awareness of relativism or value to each actor's needs and perspective. Naive egalitarianism and orientation to exchange and reciprocity.

Level II

Moral value resides in performing good or right roles, in maintaining the conventional order and the expectancies of others.

Stage 3. Good-boy orientation. Orientation to approval and to pleasing and helping others. Conformity to stereotypical images of majority or natural role behavior, and judgment by intentions.

Stage 4. Authority and social-order maintaining orientation. Orientation to "doing duty" and to showing respect for authority and maintaining the given social order for its own sake. Regard for earned expectations of others.

Table 1
(continued)

Level III

Moral value resides in conformity by the self to shared or shareable standards, rights or duties.

Stage 5. Contractual legalistic orientation. Recognition of an arbitrary element or starting point in rules or expectations for the sake of agreement. Duty defined in terms of contract, general avoidance of violation of the will or rights of others, and majority welfare.

Stage 6.^a Conscience or principle orientation. Orientation not only of actually ordained social rules but to principles of choice involving appeal to logical universality and consistency. Orientation to conscience as a direction agent and to mutual respect and trust.

^aKohlberg recently redefined his stages so that Stage 5 incorporates much of what used to be in Stage 6 (Lickona, 1977).

Source: S. L. DeMersseman. (1976) A Developmental Investigation of Children's Moral Reasoning and Behavior in Hypothetical and Practical Situations (unpublished doctoral dissertation, University of California, Berkeley), p. 5.

ability extends his cognitive skills to his thinking about a broad range of problems, including moral dilemmas. He actively processes data from the external environment-interpreting and ordering social and moral events and problems in mature ways, aware of the feelings and welfare of others. Compared with a child of lower level of moral maturity, he is more apt to conceptualize personal interactions in terms of mutuality and of social contract, of "reciprocity and the reciprocal maintenance of expectation by two social partners." (p. 132)

The cognitive-developmental advocate believes that as children interact socially, they develop higher moral cognitions. These social interactions stimulate moral development stage progression by providing general role-taking opportunities. Lickona (1976) stipulates that certain forms of role-taking in familiar and highly motivating natural settings may precede the more complex forms, investigated in the laboratory, by several years. Furthermore, rudiments of role-taking competence may be present before the child is two years of age. In contrast, Piaget (1932) suggests that role-taking begins at approximately age seven to eight. As indicated, there are mixed results concerning the initial age a child is able to take the perspective of other children. However, the empirical studies of Hickey (1972) and Thrower (1972) support the findings that role-taking stages generally parallel moral stages.

Kohlberg (1969), in supporting the cognitive-developmental approach, cites some of the weaknesses in the other approaches. He concluded, ". . . neither early parental handling of basic drives nor amount of various

types of discipline have been found to directly correlate with moral attitudes or behavior in the studies surveyed" (p. 363). Also, Kohlberg (1963) reported little consistency in studies of child rearing antecedents of the variable of guilt, a factor associated with the psychoanalytic view.

Damon (1973) also viewed moral development through stages. He focused on fairness in distributive justice of young children (four through nine years of age) which had been considered "premoral" or lacking in consistent and patterned reasoning. His stages (Table 2) were determined by moral justifications in relation to the child's distributions of material goods that they earn, or did not earn, in a contrived group-orientated task. Like Kohlberg and Piaget, Damon also used story-type dilemmas and the interview technique in assessing the subject's moral reasoning stage.

Eisenberg-Berg and Neal (1979), like their predecessors, developed a stage-type model of morality. This stage model was based on spontaneous, real-life, moral justifications of young children. Their "Moral Considerations Categories" differ from Kohlberg's stages in two major ways: (a) the categories are specific types of reasoning coded separately from other similar types of reasoning (e.g., stereotyped reasoning and approval oriented categories are separate rather than combined, as they are in Kohlberg's Stage 3), and (b) the categories are

Table 2
Justice Stages of Damon

0-A

There is no differentiation between the subject's choice and the justification for the choice. The choice serves the egocentric wishes of the self or those associated with the self. Fairness means "what I want."

0-B

External characteristics such as size and sex are now used to justify choices, but this is an after-the-fact manner and is not prescriptive. Precursory notions of merit may result in distributions based on a one-to-one correspondence. Reasons often fluctuate, however, the egocentric wishes of the self are still central.

1-A

The justification provides a logical basis for the choice. The judgment is now prescriptive. Fairness is viewed as absolute equality, but this is based on the objective consequences such as resulting fighting or trouble. There is a preference for those of social power, but this is not recognized as contradictory to the equality principle.

1-B

The central justification for the choice is reciprocity. Prescriptive judgments are based on merit. Fairness means giving people what they deserve.

2-A

There is now a recognition of the plurality of reasons. Need is now recognized as a form of inequality and attempt is made to equalize people, often through a quantitative compromise. Fairness means giving all consideration, but still no ability is present allowing the selection of the principle appropriate to the situation.

2-B

The claims of equality and reciprocity are coordinated and hierarchized to fit the demands of the situation. There is a consistency between the choice, the considerations excluded, and the conceived function of the reward. Fairness means an end result which is fair to all or which aids the welfare of all.

Source: S. L. DeMersseman. (1976) A Developmental Investigation of Children's Moral Reasoning and Behavior in Hypothetical and Practical Situations (unpublished doctoral dissertation, University of California, Berkeley), p. 7.

not ordered developmentally, that is, no one category is considered more advanced than any other category. These categories were derived from observations of spontaneous behaviors in the naturalistic setting.

Moral Judgment and Behavior Research

Lickona (1976) states that the moral reasoning measure (Kohlberg's) seems to predict incorrectly the moral behavior of about half of the subjects at the lower stages of moral maturity. Consequently, it is hard to justify the claim of a strong link between moral judgment and action. He further states there exists only a modest relationship between behavior and moral reasoning. He concludes that the reasons for inconsistent findings as they relate to hypothetical and practical domains are due to the following: inadequacies of the measures, poor sampling, rater reliability, and other similar methodological problems.

Most moral judgment-action studies have been modeled after the Hartshorne and May experimental study (1928-1930) concerning cheating, lying, or stealing behaviors of students (Hoffman, 1970). The results indicated that moral behavior shifted from situation to situation. Cheating in a test did not predict dishonesty in another situation. Therefore, a low or nonexistent correlation between performance across tasks was found. Lickona (1976) stated that replications of this study have yielded basic findings:

Variations in the situation produce variations in moral behavior. However, contrary to the initial results and replications support, R. V. Burton, about 15 years ago, reanalyzed the original data with the more sophisticated statistical techniques of factor analysis and concluded that there was, indeed, a general underlying trait of honesty, although not a very strong one, as well as specific components in the honesty tests (Mussen and Eisenberg-Berg, 1977). Also, Damon (1977) stated that a major fallacy of this study was that the experimenters never attempted to find out what an act like "cheating" meant to the children who cheated.

Haan (1975) found that actions are not related to a particular stage of moral reasoning. His results indicate that college students at Stages 2 and 6 acted together, but for widely different reasons. Two-thirds of the students used a different stage of reasoning--46 percent higher and 20 percent lower--for the actual situation than they did for the hypothetical dilemmas. Haan's study was based on data from five of the moral interview stories designed by Kohlberg (1969).

Galbraith and Jones (1976) state some generalizations about Kohlberg's stages of moral development. Among their generalizations they include the statement that moral reasoning is related to behavior. They also state that additional evidence must be collected to further support

this generalization and that some research indicates that mature moral judgment is displayed by individuals who also act in genuinely moral ways.

Ambiguous results have been found in using Kohlberg's methodology and his Moral Judgment Scale. Kohlberg investigated the relationship between behavior in the Milgram (1963) study on obedience and moral reasoning, cited in Haan, Smith, and Block (1968). Only 13 percent of the 26 subjects who scored at Stages 1-5 on the Moral Judgment Scale refused to continue to shock the victim, but of those scoring at Stage 6, 75 percent refused to continue shocking the victim. These results indicate that a course of action, at least for the first five stages, is difficult to predict from Kohlberg's stages of moral reasoning.

McNamee (1977) also used Kohlberg's Moral Judgment Scale to assess the consistency between moral behavior and reasoning in an experimental setting with 102 college students. She found that when stage of moral judgment was correlated with stage of reason for action (or inaction) there was a positive correlation of .91, which indicates that hypothetical judgments and reasons are consistent. She also found that when a large sample was used with a less-status authority figure, the analysis of behavior at Stages 1-5 revealed that an increasing percentage of each ascending stage defied authority in order to help someone.

Turiel and Rothman (1972) examined the effects of exposure to moral reasoning on behavior. Forty-three seventh- and eighth-grade boys were pretested to determine their dominant moral reasoning stage. In the second session, each subject was required to choose between two alternative courses of action, after having been exposed to (a) reasoning at the stage below (-1) in support of one alternative and, (b) reasoning at the stage above (+1) in support of the other alternative. In conclusion, a post-test interview was conducted to determine stage status. Reasoning presented did not effect a shift in behavioral choices for Stage 2 and Stage 3, but reasoning at the stage above led to a shift for Stage 4 subjects. The results were consistent with previous studies (Rest, 1969; Turiel, 1966). Cohen (1976) states that as the child develops in age and experience, it is probable that judgment assumes greater control over behavior than at previous ages. However, the role of cognitive elements may be less critical in moral development at early stages in life.

Gunzburger, Wegner, and Anooshian (1977) also used Kohlberg's scale but investigated moral judgments concerning distributive justice in 44 male subjects ages 13-18. They devised five modes of distributive justice: self-interest, parity, equity, social responsibility, and individual responsibility. They concluded that moral stage has a significant value in the prediction of distributive

tactics. Overall, moral thought and action were consistent in relation to moral stage.

Damon (1977), in studying distributive justice in young children (ages 4-9), stated that the relation between hypothetical and real-life social reasoning in children seems to be determined chiefly by the developmental factor, which is responsible for the strong age bonds shared by both types of reasoning. He found that children demonstrate higher levels of positive justice reasoning when considering an imaginary moral story than while engaged in a real-life situation. He concluded that beyond age and developmental factors there is only a moderate connection between children's reasoning in the two domains. In contrast to Damon's results, Piaget (1965), in addressing the issue of hypothetical and practical reasoning, noted that, ". . . the hypothetical simply lags behind the practical moral judgment and shows in an adequate manner a stage that has been superseded on the plane of action" (p. 117). Bearison and Gass (1979) and Cox (1975) found evidence to support Piaget's statements. Ambiguous results, as indicated, have been recorded empirically within hypothetical and real-life reasoning.

DeMersseman (1976) states that the results have been mixed, but a moderate relationship between moral judgment and behavior has been demonstrated. This association has been demonstrated in studies using rating and experimental situations as measures of behavior. The nature of this

connection, however, is not yet sufficiently clear. It is only of moderate strength and appears most consistent at the upper levels of development. In her study of young children (ages 4-9) she used Damon's justice stages to determine the consistency between moral judgments about hypothetical dilemmas as they relate to real-life choices. Her results support a consistency between both domains.

Yarrow and Waxler (1976) found some consistency across settings concerning prosocial behavior (sharing and comforting). Nursery school students (ages 3-7 $\frac{1}{2}$) were studied in both naturalistic and experimental settings. They also found that prosocial and aggressive behaviors were related in different ways. That is, sometimes positively, sometimes negatively, and sometimes unrelated. However, they found a single significant correlation ($= .32$) for girls in the naturalistic data. These correlations are at variance with those of Murphy (1937, p. 251), who found consistent positive associations between sympathetic behavior and aggression. Sears, Rau, and Alpert (1965), in their research of behavior, found that the difference between males and females depended upon whether the measure was of antisocial or prosocial aggression. They found that although males displayed stronger antisocial behaviors than females, females tended to display stronger prosocial aggression.

Krebs (1967), in looking at stage structure and Kohlberg's methodology, found that Stage 4 subjects more often refrained from cheating even in the absence of an authority figure. Stages 3 and 4 subjects were also less likely to engage in delinquent behavior than subjects at Stages 1 and 2.

Candee (1976), in reviewing moral research dealing with the cognitive development point of view, states that, "The major conclusion that can be drawn from these studies is that an empirical relationship between structure and both attitudinal and behavioral choice exists. However, it is not clear whether the effect is abrupt or continuous" (p. 1394).

Summary of the Literature and Research

Previous moral reasoning research shows a lack of common agreement between the three approaches to morality. Ziv (1976) stipulates that each approach can, and does, ignore findings from the other two approaches. Advocates of a specific approach believe in its basic philosophy; however, there is little uniformity even within each approach concerning assessment and research methodology. Many research instruments are devised for a specific research project and they disappear afterwards. Other researchers studying the same question create different instruments, making replications almost impossible.

Kohlberg, the leading advocate of the cognitive-developmental approach has never published his scoring manual for public scrutiny, making research difficult to refine his scoring procedures. In addition to assessment procedures, researchers have dealt mostly with morality in an experimental situation and not in a naturalistic situation. As noted by the studies contained herein, there is little data concerning preschool moral justifications of children. Most of the research has been directed toward stage analysis based on Kohlberg's adult-centered dilemmas.

CHAPTER III

METHODS AND ANALYSES

Subjects

Subjects consisted of twenty-one 54-68-month-old children enrolled in a public kindergarten class at East Lincoln Elementary School in Tullahoma, Tennessee. Geographically, Tullahoma is in the midstate region and has a population of approximately 18,000 residents. The school sample was representative of the town population which has a wide variety of socioeconomic backgrounds. Sex of subjects in the study was 15 males and 6 females.

Procedures

Naturalistic (Real-Life) Observations

Before starting to collect data, the observer visited the school for three weeks, one hour a day at varying intervals, to familiarize herself with the children, teacher, and the physical-social environments. Simultaneously, this provided the children with sufficient time to become accustomed to the presence of the observer. Also, during these three weeks, the observer was trained by the researcher in the procedure to be used in collecting and recording data.

During the 12-week observation period, the observer descriptively recorded spontaneous physically aggressive behaviors and classified them into one of five physically aggressive behavior types. The observer used this observational procedure throughout the 12-week period without knowledge of the data analysis and the parallel hypothetical procedures of the study.

Only the first five of the recorded and categorized behavior types from each subject were used in data analysis. The rationale for this procedure was that if a child exhibited only one reasoning category beyond five incidents, the final analysis would be skewed. Also, the first five aggressive behaviors would reflect enough quantifiable results to determine the consistency of moral reasoning from children.

In addition, the observer recorded descriptively the moral reasoning justifications of the children from the real-life situations (classroom, lunchroom, playground, etc.) without knowledge of the reasoning categories to be used by the raters. The responses were elicited by observer probe questioning, such as, "Why did you do that?" and recorded for future use by the raters. An example of the Aggressive Incident Form prepared for use by the observer during the real-life observations is contained in Appendix B. In certain situations (stressful, immediate discipline, etc.), the observer was advised to use

discretion in order not to interfere with school routine or collect invalid data. She was also instructed not to intimidate or force any subject into giving a moral justification for his behaviors. Consequently, uncoerced moral justifications were elicited and recorded. Also, the observer acted in complete cooperation with the teacher's requests and directions in order not to disrupt the learning process of the subjects. An atmosphere of acceptance of subjects without reprisal was maintained by the observer in order to receive genuine justifications.

At the completion of the observation period, the observer presented each subject with a hypothetical story parallel to his/her prior aggressive behavior type(s). The stories were related through a verbal-picture combination procedure. At the conclusion of each story, the observer used the probe questioning technique to elicit moral reasoning responses and recorded descriptively the responses for rating purposes. An example of the Parallel Story Form and corresponding illustration prepared for use by the observer during the hypothetical portion of the study is contained in Appendix C.

Rationale and Validity for Naturalistic Observational Research

Mussen and Eisenberg-Berg (1977) state the importance of naturalistic observation of children as a means of collecting data:

Naturalistic observation, focused on children's behavior in their "natural" environments, may be in playground, classrooms, nursery schools, clubhouses, and parks while children go about their usual activities. No attempt is made to control or manipulate the situation, but the investigator predetermines the classes of behavior to be observed and defines them precisely. An observer systematically records all manifestations of these responses during specified observation periods, say five minutes, on a number of occasions. Frequency of occurrence of responses is the subject's score in each category.

Naturalistic observation takes a great deal of time and effort, but, in our opinion, it is likely to provide a highly dependable and accurate estimate of the child's propensities to behave prosocially. (pp. 17-18)

Black and Champion (1976) state it is important to see behavior in its natural setting in order to grasp the dynamic, situation-based features of conduct. Some form of observation becomes essential as the primary method of acquiring information. They put forth the following characteristics of observation:

1. It captures the natural social context in which person's behavior occurs.
2. It grasps the significant events and/or occurrences that affect social relations of the participants.
3. It determines what constitutes reality from the standpoint of the observed.
4. It identifies regularities and recurrences in social life by comparing and contrasting data obtained in one study with those obtained in studies of other natural settings. (p. 330)

Bickman and Henchy (1972) presented evidence indicating that field research provides more generalizable results than do other methodologies. They noted that laboratory research suffers from problems of demand characteristics not found in many well-designed observational

studies. Webb, Campbell, Schwartz, and Sechrest (1966) point out a number of factors that decrease the validity of research; however, Bickman and Henchy feel that the majority of these validity problems can be dealt with best by research in the naturalistic setting. Bronfenbrenner (1974), Gagné (1977), Damon (1977), and Nucci and Turiel (1978) are representative of the use and support of naturalistic observation as a valid means of data collection in research.

Moral Reasoning Rater Reliability

Three students from Motlow State Community College were recruited and trained to categorize moral reasoning responses elicited from subjects, as recorded by the observer. Their training consisted of three weeks, one hour a day, of familiarization with rating moral reasoning responses based on examples derived from two kindergarten teachers in relation to the moral justification categories. (See Appendix D for examples.) The following formula (Kramer, 1978) was used to obtain reliability of inter-rater agreement for practice exercises administered at the end of the rater training period prior to rating actual justifications of subjects in this study:

$$\frac{\text{total number of agreements}}{(\text{total number of agreements}) + (\text{total number of disagreements})}$$

Inter-rater reliability of 93.3 percent was obtained on the practice exercises for training purposes. Actual data collection resulted in an inter-rater reliability of 92 percent for real-life justifications and 93.4 percent for hypothetical justifications, yielding a total inter-rater agreement of 92.6 percent for the study. Only ratings of two-thirds moral category agreement among the three raters in both real-life and hypothetical situations were used for parallel comparisons.

Moral Reasoning Rater Participation

During both the real-life and hypothetical portions of this study, rater participation simply involved rating the spontaneous moral reasoning justifications of participating subjects into the Eisenberg-Berg and Neal moral justification categories. Information to be used in rating each of the moral justifications into the categories was provided for each rater on an Aggressive Incident Form prepared by the researcher, using the Aggressive Incident Forms completed by the observer during the real-life observations and hypothetical story interviews. The Aggressive Incident Forms received by the three raters for each physically aggressive behavior incident differed only in color and assigned rater numbers: blue--Rater 1; yellow--Rater 2; and pink--Rater 3. An example of a Rater Aggressive Incident Form for both a real-life and a hypothetical rating is contained in Appendix E. Raters

completed Aggressive Incident Forms weekly during both the real-life and hypothetical portions of the study and returned them to the researcher for data analysis.

Moral Reasoning Categories

The Eisenberg-Berg and Neal (1979) spontaneous moral reasoning categories were used in this study because they illustrate a new methodology for tapping naturally occurring behavior in a preschool environment. These categories also enlarge the data base of each subject from other methods and procedures at the lower spectrum of moral development. The following are Eisenberg-Berg and Neal's spontaneous reasoning categories:

- (a) authority/punishment orientation (references to demands of authorities and/or punishment, i.e., an aspect of Kohlberg's stage 1, 1969)
- (b) hedonistic orientation (child justifies behavior with references to an expected selfish gain)
- (c) orientation to mutual gain (child justifies behavior with reference to resultant gain for both the self and the recipient of aid)
- (d) affectional relationship orientation (child justifies behavior with references to the relationship between the child him/herself and the recipient of aid)
- (e) approval and interpersonal orientation (child assists/shares with another to obtain social approval and/or enhance interpersonal interactions)
- (f) stereotyped good/bad orientation (child justifies behavior with stereotyped reasons such as "it's nice to help")
- (g) stereotype to natural or majority behavior (child justifies behavior by saying that such behavior is natural and/or that anyone would assist in the given situation)

- (h) needs of others orientation or need-orientated reasoning (child refers to another's psychological or physical needs as to justification for behavior, e.g., "he's hungry")
- (i) pragmatic orientation (child justifies behavior with practical, nonmoral reasons)
- (j) "wanted to" orientation (child justifies behavior with verbalizations analagous to "I wanted to")
- (k) unclassified responses (pp. 228-229)

Hypothetical Procedures

At the end of the 12-week observation period of recording physically aggressive incidents and moral reasoning responses, the observer presented each subject with a maximum of five hypothetical stories. At the conclusion of each story, the observer used the probe questioning technique to elicit and descriptively record the moral reasoning response about the aggressive behavior incidents in the story.

Each story was based on a short, concise description of the subject's prior real-life aggressive behavior(s) depicted in a hypothetical situation. A drawing of the same incident as described in the story was used by the observer as a motivational aid and for clarity of the story's action. Both the hypothetical story and the corresponding drawing paralleled the subject's race, sex, and setting of actual spontaneous physically aggressive behavior(s) of the subject as recorded by the observer in the real-life observations (see Appendix C).

Because the stories were presented to the subjects in an individual interview session, the success of eliciting a recordable moral reasoning response depended on how well the subject received and interpreted the meaning of ideas expressed in the story. The hypothetical stories used by the observer were constructed by the researcher with inputs from two kindergarten teachers and a primary grade Title 1 reading teacher for clarity of their appropriateness for the subjects. The sequence of individual subject interviews (story presentations) was scheduled by the kindergarten teacher and researcher in order not to disrupt the school routine and to optimize data collection procedures. The interviews were arranged on a two-week schedule, allowing at least one day between interviews of an individual subject. Simultaneously, any subject with stories based on similar aggressive incidents had interviews scheduled as far apart as possible during the two-week period.

Hillerich and Johnson (1978) state that most children in kindergarten have little difficulty understanding spoken conversation. However, some children, especially those who have not often been read to at home during their preschool years, may have trouble following the more structured sentence patterns of literary language. Therefore, the combination of verbal/picture method was used to optimize understanding with emphasis on proper observer presentation.

This presentation emphasized open communication (question/answer) and acceptance of each subject. To increase the success of the subjects in listening for specific details and comprehending a simple plot, the stories of this study were constructed in a brief, concise form on a verbal level appropriate for the listening skills of a kindergarten child. The sentence structure was conducive to intonation and expression in verbal delivery of spoken conversation rather than more structured literary language. Because of the often short attention span and short auditory memory skills of the young child, the story design provided for repetition of the main story action of an aggressive behavior. Since much of the story discussion between the observer and subject at the conclusion of the story was based on the aggressive incident from the story, it was important that the subject remember it. A colorful drawing corresponding to the story was used by the observer, not only as a motivational tool to obtain the subject's interest in the story, but also to enhance the auditory memory skills of the subject by providing a visual description of the story action. The observer used the drawing in the story discussion to increase the subject's enjoyment of the story and to assist the subject's identification with the aggression character and situation.

Much of the success in eliciting moral reasoning responses from the subjects in the story interviews depended on the effectiveness of the observer's delivery of

the stories. Before starting the hypothetical story interviews, the observer was trained by the researcher in the procedures to be used in the story delivery. During five one-hour training sessions, the researcher used a role-playing technique to rehearse and develop the observer's story delivery techniques.

It was important that the hypothetical story interviews be conducted individually and informally with the subjects in a quiet, relaxed area away from regular classroom activities. The story area provided a physical area conducive to good listening and eye contact between the subject and the observer. This aided the observer in acquiring and maintaining the attention and interest of the subject. During the story interviews, the observer was asked to project an atmosphere of friendliness and warmth, as well as confidence and interest in the subject. Moral justification responses, elicited and recorded by the observer during the hypothetical story interviews, were distributed to raters in order to obtain hypothetical justification ratings to be used in comparison with the real-life ratings.

CHAPTER IV

PRESENTATION OF RESULTS

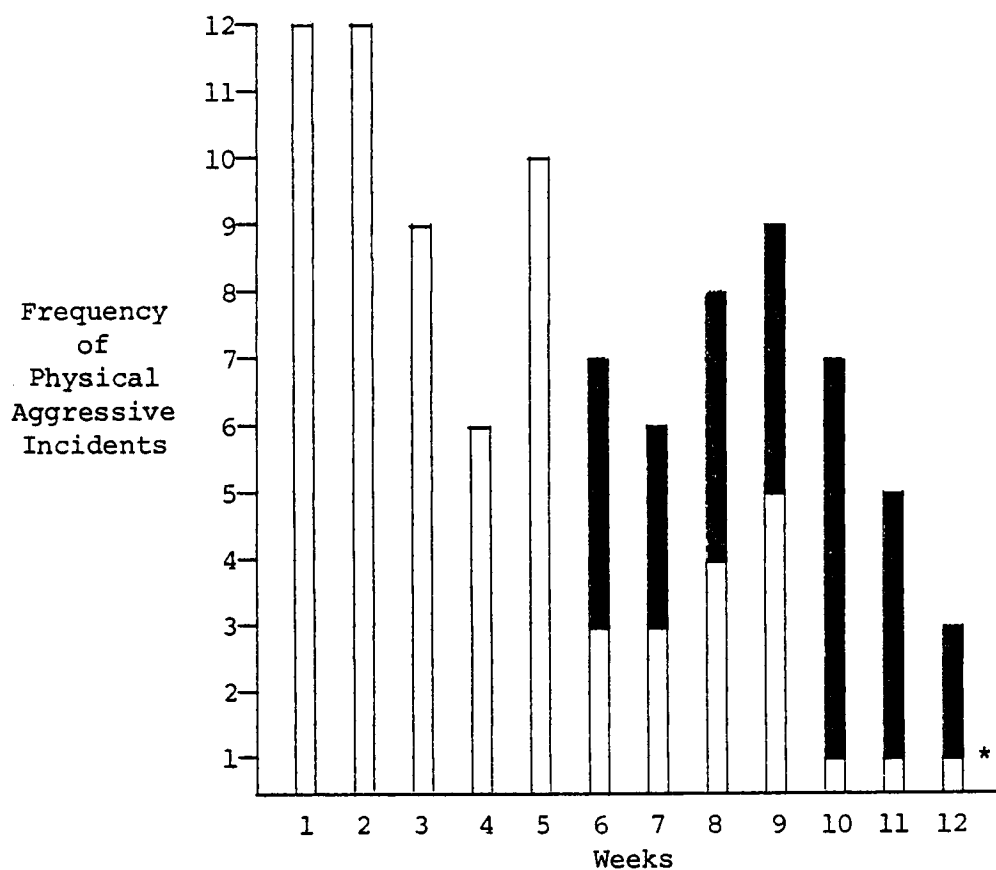
This chapter describes the results and gives an interpretation of the statistical analyses employed in this study.

Data Analysis and Interpretation

Sample Analyses

A sample of 21 subjects, 15 males and 6 females, were used for data collection purposes and analysis in this study. Initially, there were 25 subjects contained in the sample; however, during the data collection process, three withdrew from school and one female did not exhibit any physically aggressive behaviors. Two students entering after the observations began were not included in the study.

A cumulative total of 94 physically aggressive incidents were observed in the real-life situation. The data sampling decreased from 94 to 67 incidents as a result of the researcher's decision to use only the first five physically aggressive incidents and their moral justifications recorded for each subject. Moral justifications for hypothetical situations paralleling these 67 real-life situations were recorded and also rated. One incident did not receive a two-thirds rater agreement; consequently, reducing the data sample to 66 (Figure 1).



□ Subjects with five or less physical aggressive incidents (66)

■ Total physical aggressive incidents over 12 weeks (94)

* Incident not receiving two-thirds rater agreement (1)

Figure 1. Frequencies of physically aggressive incidents over 12 weeks.

For the 66 incidents, the subjects' spontaneous, physically aggressive behaviors were classified as being one of the following behavior types:

1. Hand/Arm Contact.
2. Foot/Leg Contact.
3. Body Contact.
4. Noncontact.
5. Object Contact.

Each subject's moral justification for his/her own behavior(s) was then categorized into one of the Eisenberg-Berg and Neal justification categories. Results indicated that a high frequency of incidents occurred in the first two behavior types; therefore, subjects predominantly used their extremities in their physically aggressive behaviors during this study. Simultaneously, a high frequency of justifications for these behaviors occurred in the Pragmatic (i) category across both the real-life and hypothetical situations (Table 3).

The results further indicate a consistency of moral justifications between males and females about their own physically aggressive behaviors. Subject responses in the three most used justification categories (Hedonistic, Stereotyped Good/Bad, and Pragmatic) represent this consistency between males and females. The remaining eight categories were used infrequently by either sex. Category usage by sex was indicated in percent because of the small female sample size (Table 4).

Table 3

Moral Reasoning Justification Category Use by Situation and Behavior Type

Physical aggressive behavior type (s)	Situation	Moral reasoning justification categories											Total
		a	b	c	d	e	f	g	h	i	j	k	
1. Hand/Arm Contact	Real-life	1	4	0	1	0	2	0	1	37	2	1	49
	Hypothetical	0	5	0	0	0	3	0	0	41	0	1	
2. Foot/Leg Contact	Real-life	0	1	0	0	0	0	0	0	10	0	0	11
	Hypothetical	0	0	0	0	0	0	0	0	10	0	1	
3. Body Contact	Real-life	0	1	0	0	0	0	0	0	3	0	0	4
	Hypothetical	0	1	0	0	0	0	0	0	3	0	0	
4. Noncontact	Real-life	0	0	0	0	0	0	0	0	2	0	0	2
	Hypothetical	0	0	0	0	0	0	0	0	2	0	0	
5. Object Contact	Real-life	(no use for this category)											0
	Hypothetical												
Total sample	Real-life	1	6	0	1	0	2	0	1	52	2	1	56
	Hypothetical	0	6	0	0	0	3	0	0	56	0	1	

Note: Data represents moral justification category use by 66 subjects.

Table 4
Moral Justification Category Usage by Sex

Moral justification categories	Frequency		Percent	
	Male	Female	Male	Female
a. Authority/Punishment orientation	0	1	0	5
b. Hedonistic orientation	9	3	8	14
c. Orientation to Mutual gain	0	0	0	0
d. Affectional Relationship orientation	1	0	1	0
e. Approval and Interpersonal orientation	0	0	0	0
f. Stereotyped Good/Bad orientation	3	2	3	9
g. Stereotype of Majority or Natural Behavior	0	0	0	0
h. Needs of Others orientation	1	0	1	0
i. Pragmatic orientation	92	16	84	73
j. "Wanted To" orientation	2	0	2	0
k. Unclassified	2	0	2	0
Total	110	22	100	100

Note. Frequencies represent total real-life and hypothetical justifications (132) of the 66 subjects.

The results of this study also indicated a consistency between males and females in their type of physical aggression, as both males and females exhibited a frequent use of the Hand/Arm Contact behavior-type. Seventy-four percent of the physically aggressive incidents used for data analysis occurred in this behavior-type category. In addition, both male and female subjects were consistently more aggressive with members of their same sex than with members of the opposite sex (Table 5).

Because of a small sample size, infrequent or no subject use in 8 of the 11 moral justification categories, and the extreme distribution of these justifications in both real-life (52) and hypothetical (56) situations, the researcher analyzed data by total percentage agreement-disagreement of moral justifications in real-life and hypothetical situations. In further analysis, a probability statistic ($P(A \cap B) = P(A) \cdot P(B)$) was calculated on the data in order to determine the significant probability of agreements between real-life and hypothetical identical moral justification categories.

Of the 66 physically aggressive incidents, 49 subject agreements between the real-life and hypothetical moral reasoning justifications resulted in a 74 percent total agreement between moral justification categories. However, of these 49 total category justification agreements, 47 were categorized as Pragmatic (i) and the other two as

Table 5
Distribution of Frequencies by Behavior Type
and Aggressor-Victim Status

Behavior type	+ Male	+ Male	+ Female	+ Female	Percent
	- Male	- Female	- Male	- Female	
1. Hand/Arm Contact	33	5	4	7	74
2. Foot/Leg Contact	7	4	0	0	17
3. Body Contact	4	0	0	0	6
4. Noncontact	1	1	0	0	3
5. Object Contact	0	0	0	0	0
Total	45	10	4	7	100

+ Aggressor.

- Victim.

Hedonistic (b) (Table 6). It should also be noted that within the Pragmatic (i) category for both real-life and hypothetical justifications, there was a higher frequency of subject disagreement between the possible moral justifications.

In further data analysis, a probability of agreement was calculated between the real-life and hypothetical moral justification categories (Table 7). Of the 11 obtained probabilities, only the Pragmatic category was significant, $P(R \cap H) = .67$.

Table 6
Real-Life and Hypothetical Moral Justifications
Agreement and Disagreement of Subjects

		Hypothetical Justifications											
		a	b	c	d	e	f	g	h	i	j	k	
Real-Life Justifi- cations	a									1			1
	b		2*				1			2		1	6
	c												
	d									1			1
	e												
	f									2			2
	g												
	h									1			1
	i		3				2			47*			52
	j		1							1			2
	k									1			1
Total		6			3			56			1	66	

* Moral justification agreements.

Table 7
Probability of Agreement between Real-Life and
Hypothetical Moral Justification Categories

Real-Life agreement	Hypothetical agreement	Real-Life/ Hypothetical probability
$P(RA) = 1/66$	$P(HA) = 0$	$P(RA \cap HA) = 0$
$P(RB) = 6/66$	$P(HB) = 6/66$	$P(RB \cap HB) = .008$
$P(RC) = 0$	$P(HC) = 0$	$P(RC \cap HC) = 0$
$P(RD) = 1/66$	$P(HD) = 0$	$P(RD \cap HD) = 0$
$P(RE) = 0$	$P(HE) = 0$	$P(RE \cap HE) = 0$
$P(RF) = 2/66$	$P(HF) = 3/66$	$P(RF \cap HF) = .00138$
$P(RG) = 0$	$P(HG) = 0$	$P(RG \cap HG) = 0$
$P(RH) = 1/66$	$P(HH) = 0$	$P(RH \cap HH) = 0$
$P(RI) = 52/66$	$P(HI) = 56/66$	$P(RI \cap HI) = .67^*$
$P(RJ) = 2/66$	$P(HJ) = 0$	$P(RJ \cap HJ) = 0$
$P(RK) = 1/66$	$P(HK) = 1/66$	$P(RK \cap HK) = .00022$

* Pragmatic justification category.

CHAPTER V

FINDINGS AND DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS FOR FURTHER RESEARCH

The null hypothesis of this study was presented and discussed as follows: The hypothesis indicated that there is no difference in the moral reasoning children use when justifying their real-life physical aggression and the reasoning they use to justify hypothetical antisocial behavior (physical aggression).

Findings and Discussion

The results of analyses performed on the data have supported the null hypothesis for the pragmatic moral justification category. The high agreement of justifications (71 percent) between pragmatic categories of real-life and hypothetical situations and the significant probability of agreement (.67 percent) between these situations contribute to the acceptance of the null hypothesis. With the insignificant probabilities of all other categories of one situation predicting the same category of the other situation, the researcher can reject the null hypothesis for all categories except pragmatic.

Further analyses indicated that preschool children predominantly use the first two Physically Aggressive

Behavior types (Hand/Arm Contact and Foot/Leg Contact), and male preschool children exhibited more physically aggressive behaviors than did preschool females. However, there is a consistence between sexes in relation to moral justification category usage.

Prosocial and Antisocial Moral Justification

Comparisons

Since Eisenberg-Berg and Neal's (1979) moral justification categories were used in this study, results were compared between their findings concerning prosocial moral justifications and the results of this study concerning antisocial moral justifications of children. Also, a total analysis would provide additional insight and information in the area of moral justifications in similar situations. Eisenberg-Berg and Neal's results indicate that children justify their prosocial behaviors mainly in the following five moral justification categories: (c) Orientation to Mutual Gain, 14.3 percent; (d) Affectional Relationship orientation, 10 percent; (h) Needs of Others orientation, 24.5 percent; (i) Pragmatic orientation, 24.5 percent; and (j) "Wanted To" orientation, 15.5 percent. None of the preschoolers used moral justifications in the (a) Authority/Punishment category or (g) Stereotype of Majority or Natural Behavior category. Children also infrequently justified their prosocial behaviors using (b) Hedonistic, 3.9 percent; (e) Approval and Interpersonal orientation,

4.9 percent; (f) Stereotyped Good/Bad orientation, 1.1 percent; and (k) Unclassified, 1.7 percent. Eisenberg-Berg and Neal concluded that empathic concerns appeared to frequently motivate children's prosocial behaviors.

In contrasting Eisenberg-Berg and Neal's results of prosocial moral justifications, sharing, comforting, and helping, in a naturalistic observational study, with a naturalistic observational study concerning antisocial behavior and moral justifications in a real-life and a hypothetical situation, there appears to be little consistency across most categories (Table 8). Children, when justifying their antisocial behaviors of physical aggression, tend to use Pragmatic moral justifications (82 percent), rather than empathic concerns. However, both studies illustrate that Pragmatic is a high-use category. Children also tend to be more Hedonistic (9 percent) in antisocial moral justifications and reflect more Stereotyped Good/Bad justifications (4 percent). The results indicate that prosocial behavior justifications are more diversified and equally distributed over the justification categories than justifications pertaining to physical aggression incidents, yet both prosocial and antisocial research indicate infrequent or no use of several of the moral justification categories. Improved operational definitions of the moral justification categories would improve the appropriateness for the preschool subject's age and stage of moral development.

Table 8
Comparison of Prosocial and Antisocial
Moral Justifications

Moral justification categories	Prosocial % sharing, comforting, and helping justifications	Antisocial % physically aggressive incidents justifications
a. Authority/Punishment orientation	0	0.8
b. Hedonistic orientation	3.9	9.00
c. Orientation to Mutual Gain	14.3	0
d. Affectional Relationship orientation	10.0	0.8
e. Approval and Interpersonal orientation	4.9	0
f. Stereotyped Good/Bad orientation	1.1	4.00
g. Stereotype of Majority or Natural Behavior	0	0
h. Needs of Others orientation	24.5	0.8
i. Pragmatic orientation	24.5	82.00
j. "Wanted To" orientation	15.5	2.00
k. Unclassified	1.7	2.00
Total	100	100

Note. Prosocial percentages were obtained from Eisenberg-Berg and Neal (1979). Antisocial percentages were obtained from the present study.

Conclusions

This study began as an attempt to compare the real-life with the hypothetical moral reasoning of preschool children about their own spontaneous physically aggressive behaviors. Because of the need for research concerning moral justifications of spontaneous antisocial behaviors, it was anticipated that the present study, combined with previous research on moral justifications for spontaneous prosocial behaviors, would provide insight into understanding the total realm of moral justification of young children. In viewing the total perspective of children's moral justifications for their own physically aggressive behaviors, it is concluded that:

1. Preschool children predominantly exhibit physically aggressive behaviors characterized by the use of their extremities (Hand/Arm and Foot/Leg).
2. Preschool children give practical, nonmoral (Pragmatic) justifications for their own physically aggressive behaviors in real-life situations.
3. Preschool children use practical, nonmoral (Pragmatic) reasoning in parallel hypothetical situations when justifying their own physically aggressive behaviors.
4. Preschool males do not justify their physically aggressive behaviors differently than do preschool females, in that they both mainly use Pragmatic justifications

across all behavior types for both real-life and hypothetical situations.

In addition, the results of this study can be applied to the three traditional approaches to morality. The social learning advocate would conclude that predominant use of pragmatic justifications could be attributed to the child's observation and reinforcement of pragmatic justifications of significant models. Because of the limited exposure of the preschool child in the social world, significant models usually are their own parents. The psychoanalytic approach would conclude, from the results of this study, that the moral pragmatic justifications were used by the child to comply with parental standards and the avoidance of guilt. Finally, the advocate of the cognitive developmental approach would attribute the frequent usage of pragmatic moral justifications to the subject's development of a cognitive structure that had been influenced mainly by pragmatic interactions of the subject with his/her environment.

Implications for Teachers

The results of this study indicate that preschool children use pragmatic reasoning when justifying their own spontaneous physically aggressive behaviors in the school environment. Because pragmatic justifications are characterized by egocentrism, a significant implication for the classroom teacher of preschool children is the need to

provide the child with experiences and interactions that can further develop his/her moral cognitive structures. Role-taking opportunities provided in the school setting can be very influential in fostering moral development. An additional implication is that the teacher should be aware of himself/herself as a significant model which could influence the preschool child's moral justifications, whether they be pragmatic or not. The teacher should be careful not to generalize data about pragmatic moral justifications to all preschool children, because there is no fixed age for any category of moral justifications. Also, pragmatic reasoning can occur at any age.

Recommendations for Further Research

From this study a number of recommendations related to moral justifications of children may be generated:

1. A replication of the present study effort with a larger sample, or samples.
2. The application of Eisenberg-Berg and Neal's moral justification categories to antisocial behaviors at various grade levels to determine chronological age effects on moral justifications and sex distributions.
3. Naturalistic studies need to be expanded into the home environment to assess total moral justifications and their consistency between environments.

4. Compare antisocial moral justifications of young children in different socioeconomic backgrounds from naturalistic settings.

5. Naturalistic observation of verbal aggression related to actual physical aggression of subjects and their justification consistency.

6. Studies in the naturalistic setting of the moral justification given by the victim of a physically aggressive incident.

LIST OF REFERENCES

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- Bandura, A. Social learning of moral judgments. Journal of Personality and Social Psychology, 1969, 11, 275-279.
- Bandura, A., and Walters, R. H. Social learning and personality development. New York: Holt, Reinhart, and Winston, 1963.
- Bearison, D. J., and Gass, S. T. Hypothetical and practical reasoning: Children's persuasive appeals in different social contexts. Child Development, 1979, 50, 901-903.
- Bickman, L., and Henchy, T. Beyond the laboratory: Field research in social psychology. New York: McGraw-Hill, 1972.
- Black, J. A., and Champion, D. J. Methods and issues in social research. New York: John Wiley and Sons, 1976.
- Bronfenbrenner, U. Developmental research, public policy, and the ecology of childhood. Child Development, 1974, 45, 1-5.
- Candee, D. Structure and choice in moral reasoning. Journal of Personality and Social Psychology, 1976, 34(6), 1293-1301.
- Champion, D. J. Basic statistics for social research. [n.p.]: Chandler Publishing, 1970.
- Cohen, S. The development of aggression. Review of Educational Research, 1976, 41, 71-85.
- Cox, M. The other observer in a perspective task. British Journal of Educational Psychology, 1975, 45, 83-85.
- Damon, W. The child's conception of justice as related to logical thought. Unpublished doctoral dissertation, University of California, Berkeley, 1973.
- DeMersseman, S. L. A developmental investigation of children's moral reasoning and behavior in hypothetical and practical situations (Doctoral dissertation, University of California, Berkeley, 1976). Dissertation Abstracts International, 1976, 37(9), 4643B-4644B. (University Microfilms No. 77-4435)

- Eisenberg-Berg, N., and Neal, C. Children's moral reasoning about their own spontaneous prosocial behavior. Developmental Psychology, 1979, 15(2), 228-229.
- Galbraith, R. E., and Jones, T. M. Moral reasoning. Anoka, Minn.: Greenhaven Press, 1976.
- Gagné, E. D. Encouraging generosity: A perspective from social learning theory and research. The Elementary School Journal, 1977, 77(4), 281-291.
- Gunzburger, D. W., Wegner, D. M., and Anooshian, L. Moral judgment and distributive justice. Human Development, 1977, 20, 160-170.
- Haan, N. Hypothetical and actual moral reasoning in a situation of civil disobedience. Journal of Personality and Social Psychology, 1975, 32(2), 255-270.
- Haan, N., Smith, M. B., and Block, J. Moral reasoning of young adults: Political-social behaviour, family background, and personality correlates. Journal of Personality and Social Psychology, 1968, 10(3), 183-201.
- Harris, S., Mussen, P., and Rutherford, E. Some cognitive, behavioral, and personality correlates of maturity of moral judgment. The Journal of Genetic Psychology, 1976, 128, 123-135.
- Hartshorne, H., May, M. A., and Maller, J. B. Studies in science and self-control. New York: Macmillan, 1929.
- Hickey, J. Stimulation of moral reasoning in delinquents. Unpublished doctoral dissertation, Boston University, 1972.
- Hillerich, R. L., and Johnson, T. G. Ready steps teacher's guide. Boston: Houghton Mifflin, 1978.
- Hoffman, M. L. Moral development. In P. H. Mussen (Ed.), Carmichael's manual of child psychology (3rd ed.) (Vol. 2). New York: John Wiley and Sons, 1970.
- Kohlberg, L. The development of modes of moral thinking and choice in years ten to sixteen. Unpublished doctoral dissertation, University of Chicago, 1958.
- Kohlberg, L. The development of children's orientations toward a moral order. Vita Humana, 1963, 6, 11-33.

- Kohlberg, L. Stage and sequence: The cognitive developmental approach to socialization. In D. Goslin (Ed.), Handbook of socialization theory and research. New York: Rand McNally, 1969.
- Kramer, J. R. A field study of observationally facilitated aggression among preschool children (Doctoral dissertation, University of Iowa, 1978). Dissertation Abstracts International, 1978, 39(12), 6125B-6126B. (University Microfilms No. 7912872)
- Krebs, R. Some relationships between moral judgment, attention and resistance to temptation. Unpublished doctoral dissertation, University of Chicago, 1967.
- Kurtines, W., and Greif, E. B. The development of moral thought: Review and evaluation of Kohlberg's approach. Psychological Bulletin, 1974, 81, 453-470.
- Leon, M. Coordination of intent and consequences information in children's moral judgments. Unpublished doctoral dissertation, University of California, San Diego, 1976.
- Lickona, T. How to encourage moral development. Learning, 1977, 5(7), 37-43.
- Lickona, T. (Ed.). Moral development and behavior: Theory, research, and social issues. New York: Holt, Rinehart, and Winston, 1976.
- Lyons-Ruth, K. Moral and personal value judgments of preschool children. Child Development, 1978, 49, 1197-1207.
- McNamee, S. Moral behaviour, moral development and motivation. Journal of Moral Education, 1977, 7(1), 27-31.
- Milgram, S. Group pressure and action against a person. Journal of Abnormal Social Psychology, 1964, 69, 137-143.
- Murphy, L. B. Social behavior and child personality. New York: Columbia University Press, 1937.
- Mussen, P., and Eisenberg-Berg, N. Roots of caring, sharing and helping. San Francisco: W. H. Freeman, 1977.

- Munson, H. Moral thinking--can it be taught? Psychology Today, 1979, 12(9), 48-92.
- Nucci, L. P., and Turiel, E. Social interactions and the development of social concepts in preschool children. Child Development, 1978, 49, 400-407.
- Piaget, J. The moral judgment of the child. New York: Free Press, 1965. (Originally published, 1932.)
- Rebelsky, F., Allinsmith, W., and Grinder, R. Sex differences in children's use of fantasy confession and their relation to temptation. Child Development, 1962, 33, 631-643.
- Rest, J. Hierarchies of comprehension and preference in developmental stage model of moral thinking. Unpublished doctoral dissertation, University of Chicago, 1969.
- Rule, B. G., Nesdale, A. R., and McAra, M. J. The intentions underlying an aggressive act. Child Development, 1974, 45, 794-798.
- Sears, R. R., Rau, L., and Alpert, R. Identification and child-rearing. Stanford, Calif.: Stanford University Press, 1965.
- Stone, L. J., and Church, J. Childhood and adolescence (3rd ed.). New York: Random House, 1975.
- Thrower, J. S. The effects of group home and foster care on development of moral judgment. Unpublished doctoral dissertation, Harvard University, Cambridge, Mass., 1972.
- Turiel, E. An experimental test of the sequentiality of developmental stages in the child's moral judgments. Journal of Personality and Social Psychology, 1966, 3, 611-618.
- Turiel, E., and Rothman, G. The influence of reasoning on behavioral choices at different stages of moral development. Child Development, 1972, 43, 741-756.
- Urugel-Semin, R. Moral behavior and moral judgment of children. Journal of Abnormal and Social Psychology, 1952, 47, 463-474.

Webb, E. J., Campbell, D. T., Schwartz, R. D., and Sechrest, L. Unobtrusive measures: Nonreactive research in the social sciences. Chicago: Rand McNally, 1966.

White, C. D. Moral judgment in college students: The development of an objective measure and its relationship to life experience dimensions. Unpublished doctoral dissertation, University of Georgia, 1973.

Yarrow, M. R., and Waxler, C. Z. Dimensions and correlates of prosocial behavior in young children. Child Development, 1976, 47, 118-125.

Ziv, A. Measuring aspects of morality. Journal of Moral Education, 1976, 5, 189-201.

APPENDICES

APPENDIX A

AGGRESSION CATEGORIES

Hand/Arm Contact (1)

Any time the aggressor's hand or arm makes contact with another: hit, poke, punch, push, grab, hold, pull, pinch, shake, pick up, slap, or squeeze.

Foot/Leg Contact (2)

Any time the aggressor's foot or arm makes contact with another: kick, step on, hold with legs, push with feet or knees, or trip.

Body Contact (3)

Any time the aggressor makes contact using his/her body other than hand/arm or foot/leg contact: push with body, bump, nudge, butt, block movement or progress, fight, wrestle/roll, bite, pin, lie on, or sit on.

Noncontact (4)

Any time an attempt is made at physical aggression without actual contact: throw object at, hold object out of reach, hit at with object, spit at, or kick object at.

Object Contact (5)

Any time the aggressor uses an object to make contact with another: hit with object, fight with object, pull with object, cover with object, push object against, move object subject is on, or tug or pull object another is holding.

APPENDIX B

OBSERVER AGGRESSIVE INCIDENT FORM

Date 11/27/79

Rater No. _____

Aggressor No. 16

Week No. 8

Location Group Activities (Alpha time)

Time 1:05

Description of Spontaneous Aggressive Behavior:

Male No. 16 hit male No. 24 on the back. Male No. 24 was sitting in front of No. 16 on the floor.

Aggressive Behavior Type (check one):

- ☒ 1. Hand/Arm Contact
- ☐ 2. Foot/Leg Contact
- ☐ 3. Body Contact
- ☐ 4. Noncontact
- ☐ 5. Object Contact

Aggressor's Spontaneous Reasoning Response(s):

They (No. 10 and No. 24) were leaning back on me and bouncing on me.

APPENDIX C

PARALLEL STORY FORM AND ILLUSTRATION

Date 11/27/79

Story No. 67

Aggressor No. 16

Week No. 8

Location Group Activities (Alpha time)

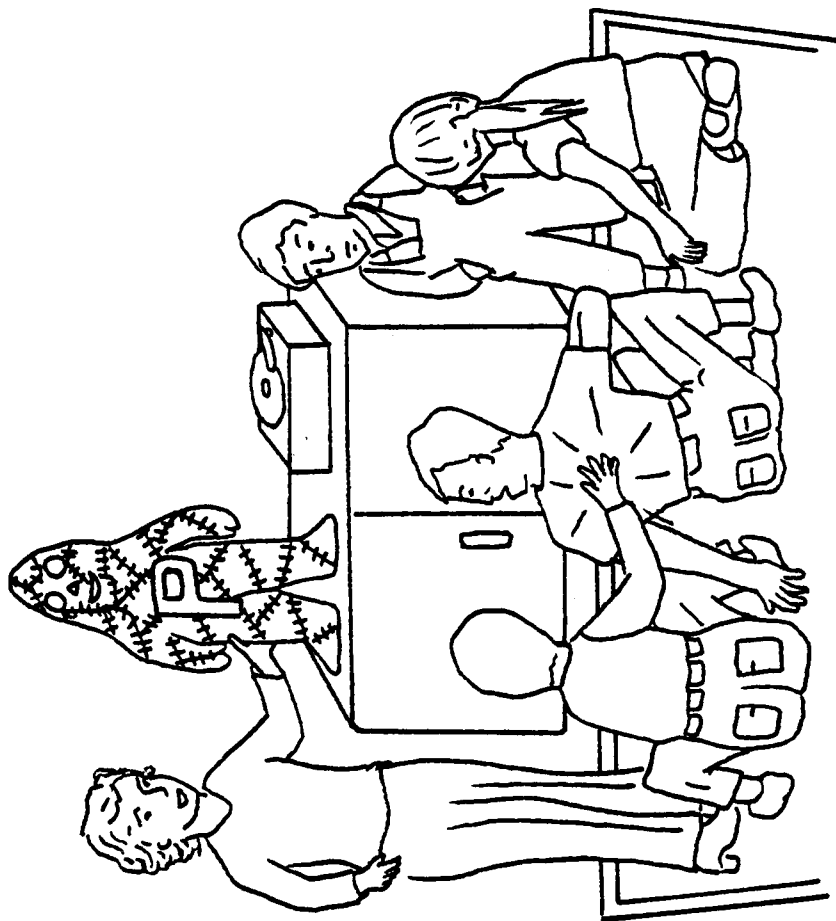
Time 1:05

Parallel Story:

It was a very special day for the kindergarten because today after rest time there would be a new letter person for all the boys and girls to see. Mrs. Smith, the teacher, called all the boys and girls to the listening square to talk about the new letter. Almost everyone was sitting very quietly ready to listen to the teacher. Billy was sitting in front of John, then all of a sudden, John reached up and hit Billy in the back. I wonder why John would hit Billy in the back when they were supposed to be sitting quietly in the listening square? Why do you think John would hit someone like that? I want you to pretend (play-like) you are John in this story and you just hit Billy, the boy who was sitting in front of you. Why do you think you would hit Billy?

Spontaneous Reasoning Response(s):

Billy might have hit him first.



APPENDIX D

EXAMPLES OF ELICITED REASONING RESPONSES

He hit me first.

He was bothering my stuff (or me).

My mother/dad said I could/should hit him back if he hit me first.

I don't have any crayons at home and I want his.

My brother/sister doesn't have any crayons and he/she wants these (possession of third party).

I don't like him. He's not my friend.

Teacher doesn't want him to do that.

He's a bully.

He is mean.

He won't play right with us (my friends and me).

He's dumb.

My sister does that to me all the time.

He shouldn't have done what he did.

He hurt (third party).

We like to fight each other.

The other kids wanted/expected us to fight.

Just because.

He makes noise.

I don't mean to.

They told me to.

He won't listen.

Because I wanted to.

He said something I didn't like. He said a dirty word.

He broke it.

Teacher will keep all of us in for recess if he doesn't stop.

I didn't want to do my work.

He called me/third party a name.

I was just playing.

I didn't really do it.

I learned how to do that from TV 'cause the Incredible Hulk does it.

He won't help me.

It wasn't his turn. It was my time.

I was mad.

He broke the class rule.

He hit my little brother on the playground.

I pinched him because he pinched me.

He told a lie.

It was his fault.

He was bothering (third party) and (third party) doesn't feel good.

I let her use my crayons and I didn't want him (third party) to bother them because he will break them.

APPENDIX E

RATER AGGRESSIVE INCIDENT FORM (REAL-LIFE)

Date 11/27/79

Rater No. _____

Aggressor No. 16

Week No. 8

Location Group Activities (Alpha time)

Time 1:05

Description of Spontaneous Aggressive Behavior:

Male No. 16 hit male No. 24 on the back. Male No. 24 was sitting in front of No. 16 on the floor.

Aggressive Behavior Type (check one):

- ☒ 1. Hand/Arm Contact
- ☐ 2. Foot/Leg Contact
- ☐ 3. Body Contact
- ☐ 4. Noncontact
- ☐ 5. Object Contact

Aggressor's Spontaneous Reasoning Response(s):

They (No. 10 and No. 24) were leaning back on me and bouncing on me.

Spontaneous Moral Reasoning Categories (check one)

- ☐ a. Authority/Punishment
- ☐ b. Hedonistic
- ☐ c. Mutual Gain
- ☐ d. Affectional Relationship
- ☐ e. Approval and Interpersonal
- ☐ f. Stereotyped Good/Bad
- ☐ g. Stereotype of Natural or Majority Behavior
- ☐ h. Needs of Others
- ☒ i. Pragmatic
- ☐ j. "Wanted To"
- ☐ k. Unclassified Responses

Rater Aggressive Incident Form (Hypothetical)

Date _____

Rater No. 1Aggressor No. 16Week No. 8Location Group Activities (Alpha time) Time 1:05

Description of Spontaneous Aggressive Behavior:

Male No. 16 hit male No. 24 on the back. Male No. 24 was sitting in front of No. 16 on the floor.

Aggressive Behavior Type (check one):

- ☒ 1. Hand/Arm Contact
- ☐ 2. Foot/Leg Contact
- ☐ 3. Body Contact
- ☐ 4. Noncontact
- ☐ 5. Object Contact

Aggressor's Spontaneous Reasoning Response(s):

Billy might have hit him first.

Spontaneous Moral Reasoning Categories (check one):

- ☐ a. Authority/Punishment
- ☐ b. Hedonistic
- ☐ c. Mutual Gain
- ☐ d. Affectional Relationship
- ☐ e. Approval and Interpersonal
- ☐ f. Stereotyped Good/Bad
- ☐ g. Stereotype of Natural or Majority Behavior
- ☐ h. Needs of Others
- ☒ i. Pragmatic
- ☐ j. "Wanted To"
- ☐ k. Unclassified Responses

VITA

Bobby W. Cagle was born in Detroit, Michigan, on August 26, 1943. He was reared in McMinnville, Tennessee, where he graduated from McMinnville City High School in 1961. He served in the United States Air Force from 1962-1966. His Bachelor of Science degree in Health, Physical Education and Recreation was granted from Middle Tennessee State University, Murfreesboro, in December, 1968. He received the Master of Arts degree in Psychology in 1970 from Middle Tennessee State University, Murfreesboro. He then worked as a guidance counselor at Motlow State Community College, Tullahoma, Tennessee, and entered the doctoral program in Educational Psychology and Guidance at The University of Tennessee, Knoxville, during the summer of 1974. He was awarded a departmental teaching assistantship from January to June, 1977. He was granted the Doctor of Education degree with a major in Educational Psychology and Guidance in March, 1980.