1978

Relationships between parental behaviors and children's moral reasoning

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These consist of pages:

120-127,
MULLIS, RONALD LYNN
RELATIONSHIPS BETWEEN PARENTAL BEHAVIORS AND CHILDREN'S MORAL REASONING.

IOWA STATE UNIVERSITY, PH.D., 1978
Relationships between parental behaviors
and children's moral reasoning

by

Ronald Lynn Mullis

A Dissertation Submitted to the
Graduate Faculty in Partial Fulfillment of
The Requirements for the Degree of
DOCTOR OF PHILOSOPHY

Major: Child Development

Approved:

Signature was redacted for privacy.

In Charge of Major Work

Signature was redacted for privacy.

For the Major Department

Signature was redacted for privacy.

For the Graduate College

Iowa State University
Ames, Iowa

1978
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INTRODUCTION

Socialization of children within our society continues to be a major function of the family unit. Within the context of this unit the child is expected to learn the prohibitions, proscriptions and associated values and beliefs of the surrounding cultures. Developmental theorists attribute a great deal of importance to parents' role in the way they influence different aspects of the child's behavior and development. Schaefer (1959) identified two basic dimensions of parental behavior that may influence their child's development: Love vs. Hostility and Autonomy vs. Control. These two dimensions portray relationships among a number of parent behaviors.

The above mentioned relationships suggest possible links between parent behaviors and resulting child behaviors. Although Schaefer (1959) included only behaviors exhibited by mothers, Becker and Krug (1964) showed that a similar two dimensionsl circumplex could be obtained for both father-and-mother ratings with respect to their female and male children.

The conceptual contributions of Schaefer to the study of parent-child relationships provide a means for categorizing parental behaviors. However, still lacking are instruments for assessing the interactive network between parent and child.

Recent research has brought about a shift in focus from the child being viewed solely as a consequence of parental behaviors to a view
of the parent-child relationship as an interactive system. That is, the child serves as a stimulus for the parent's behavior as well as parent serving as a stimulus for the child's behavior. For instance, White and Watts (1973) have studied the development of competency in children and note that the way parents interact with their children is equally as important to fostering competence as are other kinds of environment the parent provides the child.

Within this interactive familial system, many aspects of a child's development have been associated with parental practices. The features of socialization that exert strain on parent-child relations include those in which the child is expected to make moral decisions about self or other's behaviors and actions. Hoffman (1970) has pointed out that in a large number of studies various indices of moral development have been associated with parental practices. These indices include moral attributes formulated by Piaget (1932, 1965) such as intentions vs. consequences, conformity to peer expectations vs. obedience to adult authority, and an objective view of punishment vs. immanent justice.

Piaget places some emphasis on the role of parents and significant others in the development of moral judgment in the young child. He states that maturation affords the child with cognitive capacities and that experience with parents and peers helps the child move to higher levels of moral functioning. Piaget maintains also that the progression of the child through stages of moral development is
invariant and basically holds despite cultural differences. Thus, parental authority and parental rules become, for the young child, the modifiers for those moral interpretations the child often uses in interacting with the environment.

Relating moral development to parental practices has proven to be an ambitious task. There is evidence suggesting that differences in children's moral behavior is partly due to different discipline patterns and affects of parents (Saltzstein, 1976). Higher levels of moral reasoning in children have been related to the extent to which parents encourage their child to participate in family discussions of moral situations (Hoffman and Saltzstein, 1967). In effect, Hoffman and Saltzstein were interested in how parents help their children focus on intentions of a person's behavior rather than solely on the consequences of that person's behavior. Sears, Maccoby, and Levin (1957) report that parents try to teach children to respond less aggressively to accidental than to intentional provocation. However, absent in investigations of these parental influences have been clear operational definitions for parental behaviors and a distinction between father and mother behaviors. In addition, moral development indices have been developed for preadolescent and adolescent children, ignoring for the most part the moral development of younger children within the family context.

There appears to be a link between parental behaviors and children's development of moral judgment. Despite the existence of Piaget's (1932)
moral judgment measure for the last 45 years, few researchers have attempted to delineate specific parental behaviors influential to the moral judgment level of the child. There is, therefore, a need to investigate further the influence of parental behaviors on their children's moral development.

Statement of Purpose

This study proposed to differentiate between children who use intentions in their moral judgments and those who do not, and to determine relationships between parental behaviors and their child's level of intentionality. Variables included children's performance on the Moral Judgment Test, parental responses to the Iowa Parent Behavior Inventory, and teacher rating of child behavior in school, sex of child and sex of parent.

Parental behaviors were measured by the Iowa Parent Behavior Inventory (IPBI) (Crase, Clark, and Pease, 1978). The presence or absence of intentionality was determined by Piagetian-type stories (Piaget, 1932, 1965) as presented in the Moral Judgment Test (MJT). The teacher rating scale was devised specifically for the study in order to assess children's general achievement and general classroom behavior.

For the purpose of this study, the dimension of "intentionality" for an act refers to the degree to which the act was intended or was accidental. Consequences of an act refer to the end result of a
child's action and are categorized either as moderate or severe.

Moral reasoning refers to the cognitive process utilized by the child to make moral judgments based on either the intentions of an actor or the consequences of an act.

The null hypotheses for investigation are:

1. There is no relationship between children's responses to intention based stories and children's responses to consequence based stories on the MJT.

2. There is no relationship between children's performance on the MJT and their mother's and father's responses to the Iowa Parent Behavior Inventory.

3. There is no relationship between children's performance on the MJT and their sex.

4. There is no relationship between children's performance on the MJT and their classroom behavior as rated by their teachers.
REVIEW OF LITERATURE

Theory on Children's Development of Moral Judgment

Moral development has been studied historically from three major positions in developmental psychology. The psychoanalytic approach views moral standards as largely unconscious products of irrational motives and as based on the need to keep antisocial impulses from conscious awareness. The social learning approach emphasizes moral conduct. It defines morality in terms of specific acts and avoidances which are learned on the bases of rewards and punishments. Finally, the cognitive developmental approach concentrates on moral judgment and reasoning. A moral act is defined by a cognitive developmentalist as one based on a conscious prior judgment of its rightness or wrongness. Higher mental processes and thought structures are seen to underlie such judgments.

Psychoanalytic theory

The psychoanalytic approach to the study of morality has been interpreted to deal with moral emotions. A major proponent of this approach has been Sigmund Freud. His model of the structure of personality provides the basis on which he has offered his explanation of moral development. According to Freud (1930), the id is the storehouse of all psychic energy and the source of all impulses, and the ego is the rational arbitrator between the id and the superego. It is the superego which knows the rules and regulations of society and
guides the person's feelings with respect to what he should and should not do. The superego arouses guilt and shame in the person if he considers extending beyond the rules and regulations. Freud sees moral character as developing through identification, a process of internalizing the standards of significant adults. Psychoanalysts, according to Freud, feel that it is through guidance and restraint of the child's emotions that externally enforced standards become internally enforced.

**Social learning theory**

In social learning theory emphases are on overt behaviors and the morality of those behaviors. Specific areas studied by social learning researchers include modeling, resistance to temptation and resistance to deviation (Hoffman, 1970).

Bandura and MacDonald (1963) found children to change their moral decisions when reinforced directly, especially by adult models.

In support of the assumption that learning plays an important role in shaping moral conduct, Walters, Parke and Cane (1965) reported results of a study examining the effects of punishment and imitation on resistance to temptation in young children. Eighty kindergarten and first grade boys with a mean age of six years five months served as subjects. The subjects were shown films of an adult female and a young child playing with toys. This basic scene was varied to produce four film conditions and two timing-of-punishment conditions (early
and late). The four film conditions showed an adult female make a motion with her hand to a child that he should not play with toys. For two of the four film conditions, either a reward (praise by the adult) or punishment (scolding by the adult) were added. The other two film conditions were not provided with an ending. The four basic film conditions were presented with two timing of punishment conditions to produce a total of eight film conditions. Boys were randomly assigned to view one of the eight film conditions (ten boys per film condition). Following this procedure, the boys were placed in a room with toys to test for resistance to deviation. An observer recorded which subject touched or ceased to touch individual toys when instructed by the experimenter. Significant differences were found among subjects under the eight film conditions. Two groups in the early and late model-punishment conditions showed relatively high resistance to deviation, ceasing to touch individual toys when instructed to do so. These two groups differed from the other film condition groups in deviation to temptation resulting in F values of 3.37 (p < .025) for early punishment and 23.91 (p < .0001) for late punishment. The findings seem to indicate that punishment may effect the degree to which children resist temptation, but that the effectiveness of punishment is contingent on its timing.

Aronfreed and Reber (1965) utilizing a similar paradigm to Walters, et al. (1965) found that when the late-timed punishment was accompanied by a verbal rationale, the late punishment was as effective an inhibitor as an early-timed punishment.
These behavioral studies lend support to the conclusion that judiciously timed punishment can be effective in controlling human behavior and moreover, that such punishment plays an important role in children’s resistance to temptation.

**Cognitive development approach**

In contrast to the psychoanalytic and social learning theorists is the cognitive developmental approach. The major theorists associated with this approach are Jean Piaget and Lawrence Kohlberg. Piaget (1932, 1965) has been interested in the developmental shift in the basis of two aspects of morality including both the individual’s respect for the rules of social order and his sense of justice. As the child is actively involved with his environment, he develops new skills enabling him to categorize, differentiate and understand rules.

The sense of justice has been investigated by Piaget through the use of a story telling technique. This involves telling the child (six to 12 years of age) stories about persons who committed various transgressions and asking the child such questions as why the acts are wrong and which of the two acts is worse. Using this procedure, Piaget developed a two stage theory of moral development: heteronomous morality and autonomous morality. In the former stage, often referred to as moral realism or morality of constraint, the child feels a strong need to comply with adult limits and rules. The child views behaviors as totally right or wrong. According to the theory, a sense of justice and reciprocity replaces blind obedience in middle childhood. The
stage consists of two parts. During the heteronomous stage the child judges actions of others on the basis of the magnitude of consequences. During the autonomous stage, mutual respect among equals and a recognition of the importance of motives and intentions predominate. Piaget believes this second stage refines with maturity, and that it is not actually replaced by subsequent stages.

Piaget (1932, 1965) proposed that the development of moral judgment follows an orderly sequence: a child goes from a stage of heteronomy to one of autonomy through the processes of differentiation and integration. For Piaget, moral judgment is based on the external factors of adult constraint and peer group influences. The child's cognitive structures necessarily change with such external influences. If a child has not reached the stage of cognitive capacity that permits certain external influences to be assimilated, their effects cannot be accommodated by the developing cognitive structures. Thus, Piaget is asserting that growth in moral judgment is necessarily a concomitant of intellectual development.

Many dimensions of moral judgment have been identified by Piaget (1932, 1965). These include children's understanding of punishment, fairness, relativism of judgment, immanent justice, restitution and intentionality. According to Piaget, both maturation and experience play roles in the transition from one stage of moral judgment to the next. Maturation affords the child with cognitive capacities and experience provides essential give and take with parents and peers which help the child move through moral realism to moral autonomy.
Intentionality is considered by Piaget to be an important dimension of moral judgment. The intentionality of an act refers to whether an act was committed deliberately or accidentally. Further, Piaget suggests that young children do evaluate the badness of what they believe to be a moral offense. Piaget (1932) found that children younger than eight years of age judge actions in terms of observable, physical aspects and consequences rather than in terms of the actor's intent. When the child reaches eight to ten years of age, Piaget observed that they begin to consider intentions in making moral judgments of another person's behavior.

Attribution of intent, often observed in human interactions, is central to person perception and interpersonal relations, and indirectly raises theoretical issues concerning the relevance of intentions (Maselli and Altrocchi, 1969). Maselli and Altrocchi (1969) proposed that in the social world a large number of complex variables are grasped easily by adults, largely because persons are perceived as having intentions. The laws underlying all social perceptions appear to regulate behavior in a way that makes the environment relatively stable and predictable (Maselli and Altrocchi, 1969). Thus, the perception of intent is seen to allow stable cognitions about persons so as to create a more predictable and understandable social world.

Piagetian moral judgment techniques

To study the development of moral judgment, Piaget (1932) interviewed children five to twelve years of age in order to establish
their concepts of rules, the impact of adult constraint and the development of the idea of justice. Through his now famous *méthode clinique*, he devised stories in an attempt to distinguish between the heteronomous and autonomous stages of moral development in children.

In the Piagetian moral judgment interview (Piaget, 1932, 1965), the child is verbally presented with stories about two children, one of whom accidentally produces a large negative outcome whereas the other intentionally causes a minor negative outcome. The child is then asked to decide which of the story figures is naughtier and to explain his reasons. The consistent finding of the studies employing this research paradigm is that, until the age of eight or nine, children make moral judgments on the basis of the outcome of the actions and ignore the intentions which lie behind them (Bandura and McDonald, 1963; Cowan, Langer, Heavenrich, and Nathanson, 1969; Gutkin, 1972; Hebble, 1971). Consequently, it has been implied that young children are unresponsive to intention cues. However, because of confounding variables in the research paradigm this finding concerning the young child's unresponsiveness to intentional cues is not altogether clear. For example, the story format confounds the effects of intentions with the intensity of the outcomes, as has been pointed out by Chandler, Greenspan and Barenboin (1973), Costanzo, Coie, Grument, and Farnill (1973), Rybash et al. (1975). In addition, Berg-Cross (1975) observed that story length handicapped younger children's use of intention in their moral judgments because of their limited memory span.
Stimuli used in previous research on moral intentionality have either involved verbal stories, verbal stories with visual aids, or videotaped presentations of stories. All such stories involve characters causing damage. One story in Piaget's (1932) earlier work depicts a story figure who has produced a large, negative outcome (e.g., many broken cups) while acting from positive intentions. The second part of the story depicts another story character who has produced a minor negative event (one broken cup), despite his negative intentions. The subject is asked to decide which of the two story figures is naughtier. This choice is followed by an inquiry into the reasons for the choice. Two kinds of information are thereby obtained; a moral evaluation and moral reasoning as manifested in the child's justification of his choice.

Chandler, Greenspan and Barenboim (1973) presented 80 seven-year-old children with two moral dilemmas, both of which were prepared in the Piagetian verbal format and then also were produced on videotape using children as actors. Moral judgments made in response to the verbal dilemmas were based on consequences, supporting previous studies (Boehm, 1962; Johnson, 1962). Responses to videotaped dilemmas were, however, based on intentions.

Support for video presentations as a mode of story presentation comes from Rybash, et al. (1975) and Soneson (1976). Rybash, et al. (1975), using middle class six-year-old children (32 boys and 32 girls) as subjects, found videotaped stories to facilitate children's use of intentions in making their moral judgments. On the other hand, verbal
presentations of stories alone appeared to make the consequences more salient ($F_{1,48} = 14.23; p < .001$). More children (17 of 32) judged the transgressor as "good" in the videotaped presentation than did children (five of 32) in the verbal condition, ($X^2(1) = 8.04$, $p < .0005$). High-damage transgressors were rated less favorable than those who produced low damage ($F_{1,48} = 26.90; p < .001$).

The basic story-pair paradigm used by Piaget has been challenged by Berg-Cross (1975). She believes that the complexity of the story-pair task may be masking potential differences in variables under investigation. Secondly, in the classic Piagetian stories the child must infer the accidental or intentional nature of the act since many of the stories are ambiguous in terms of intent. In an attempt to control for these methodological problems, Berg-Cross presented 153 first grade children (mean age = six years seven months) a single-story treatment varying intention (accident, obedience, accident in the midst of disobedience, and malevolent intention) and damage (small and large). A controlled set of six thematic stories, each five sentences long, appeared in all eight conditions of the 4 x 2 design. The stories were constructed so that each condition could be produced by changing the meaning of two or three key sentences. Other than these key sentences acting as independent variables, all other sentences in the stories remained constant across conditions. Results from the study showed children given single stories to judge gave more mature explanations than children who were given Piaget's story-pair condition ($F_{3,128} = 22.14, p < .001$). In the Piagetian treatment 66 (65%) of
the responses were classified as immature and 36 (35%) were classified as mature. In the single-story treatment 267 (40%) of the responses were immature while 400 (60%) were mature. A Z-test of the proportion of mature responses showed that single stories evoked significantly more mature responses \(Z = 5.9; p < .001\) than did the Piagetian condition. Other studies (Armsby, 1971; Bearison and Isaacs, 1975) have resulted in similar conclusions.

Peterson et al. (1974) designed stories varying on the content of the stimuli. Fifty second grade children with an equal number of boys and girls with a mean age range of six to eight years to nine to two years acted as subjects. Each subject was presented with Piagetian-type stories varying in intent (good and bad), damage (high and low), and actor (adult and child). Black line drawings depicting the central action and consequences of each story were presented as stories were read. Children were asked to judge adult actors and child actors along the same variations in story content. Thus, each child judged stories with adult actors, child actors and child-adult actors. Significantly more intentional judgments were made on the child-adult pair than on the other two combined \(X^2 = 6.61, df = 1, p < .02\), while the all adult and all child actor stories did not differ significantly among themselves.

Peterson et al. conclude that it is not the age of the characters alone but rather the conflict induced between age and damage in the child-adult pair which influences moral judgment.
Parental influences

Early studies of parent-child relations were derived from research on the childrearing characteristics of parents of delinquents and emotionally disturbed children (Martin, 1975). Parents of delinquents were described as rejecting and lax, or erratic in the application of discipline (Glueck and Glueck, 1934; Healy and Bronner, 1926). Hewitt and Jenkins (1946) found children who attended child guidance clinics to come from families with rejecting parents.

Parent-child researchers have been interested also in so called normal parental behaviors. Baldwin, Kolhorn and Breese (1945), utilizing data from the Fels Research Institute longitudinal studies, intercorrelated ratings of maternal behavior gathered over two and one half years during home observations of preschool children and their mothers. Intercorrelated maternal behaviors yielded three clusters of behaviors: affections, indulgence and democracy. Further efforts to conceptually understand and identify "normal" parental behavior emerged with the work of Becker and Krug (1964) and Schaefer (1959).

Schaefer (1959) attempted to integrate parental behaviors as a means to increase conceptual understanding of their dimensions. Analyzing data from 56 mothers, gathered by the University of California Institute of Child Welfare, Schaefer rated mothers on eighteen behaviors related to child interaction. Ratings were from sets of notes made by a testing examiner over three years. Three judges rated behaviors. Reliability of combined scores of these
three judges ranged from .67 to .89. Schaefer demonstrated that the eighteen maternal behaviors could be arranged in a systematic circular order. A factor analysis of the data substantiated the notion that the behaviors could be conceptualized in a two-dimensional space. Thus Schaefer organized parental behaviors on a circumplex identifying poles of permissiveness to restrictiveness and acceptance to rejection. Therefore, it would seem that parental behaviors do cluster conceptually and may provide a framework within which to study parental behavior.

Recent research (Baumrind, 1973; White and Watts, 1973) has centered around parental behavior's within the context of their children's social competency. White's Harvard Preschool Project (White and Watts, 1973) focused on the development of competency in one to three-year-old children. White found that in addition to the way parents interact with children, the kind of environment the parent provides also is important. White found a mother of a competent child, in addition to being responsible for the type of environment the child has, sets up guides for the child's behavior. The mother generally is permissive and indulgent also. The child is encouraged in the vast majority of his explorations and when the child encounters a difficult situation, he often turns to his mother for help. In general, competent mothers were those who talk a great deal with their children, explain things to their children, set clear limits and are involved in their children's activities.

The Iowa Parent Behavior Inventory (IPBI), a paper and pencil inventory, was designed to help meet the need for an assessment of
parent behavior toward their children (Crase, Clark, and Pease, 1978). Behaviors rather than attitudes are the focus of the inventory. Child-related behaviors of each parent are sought in two separate forms (mother and father). The IPBI attempts to measure parental behavior in relation to one of their own children. Ratings are based on each parent's perception of his or her own behavior in relationship to the identified child.

During recent months the IPBI has been factor analyzed and revised from a 50 item to a 36 item scale. Factor analysis of the instrument has resulted in identification of six factors for the mother form and five factors for the father form. The six mother factors include parent involvement, limit setting, responsiveness, reasoning guidance, free expression of affection, and intimacy. The five father factors are parental involvement, limit setting, responsiveness, reasoning guidance, and intimacy. Factor analyses and reliability of the Inventory are described in the IPBI manual (Crase, Clark, and Pease, 1978).

Research on Children's Development of Moral Judgment

Chronological age of child

A major variable in intentionality research is chronological age. Piaget (1932, 1965) theorized that until eight or nine years of age, children make moral judgments on the basis of the outcome of the actions and ignore the intentions which lie behind them. According to Piaget, intention based judgments are not fully developed until age 11.
Other investigators have provided support to Piaget's theory (Bandura and McDonald, 1963; Gutkin, 1972; and Hebble, 1971). However, confounding variables in Piaget's original research paradigm have been noted in this literature review. Partially because of these confounding variables, some investigators suggest an earlier acquisition of intention based judgments by children (Armsby, 1971; Austin, 1977; Berndt and Berndt, 1975; Berg-Cross, 1975; Chandler, Greenspan, and Barenboim 1973; Imamoglu, 1975).

With 240 children aged six, eight and ten years as subjects, Armsby (1971) presented each child with a battery of six revised Piagetian moral judgment story pairs that contrast a purposive act with an accidental act. The story-pairs were administered together with three standard Piaget story pairs. Armsby found that a majority of the younger children made intentionality judgments in response to the revised story-pairs as compared with the standard story-pairs. Armsby cited two reasons for this finding. Probably most important is that the standard Piaget story pairs did not distinguish clearly between acts that were purposive and acts that were accidental. In addition, the standard Piaget story pairs were unnecessarily long and complex.

Other researchers (Feldman, et al., 1976; Austin, et al., 1977) have found children as young as five years of age able to base their moral judgments on intentions. Feldman, et al. (1976) found order of intentions and consequences in stories to affect five-year-old children's use of intentions in their judgment. Similarly, Bearison and Issaacs
(1975) found that children by six years of age seem to make intention-based judgments if intentions were expressed explicitly in the stories. Berndt and Berndt (1975) stated that five-year-old children (12 males and 12 females) take considerably longer to respond in their moral judgments to stories involving accidental damage than those involving intentional damage. They note also that the children report a preference for actors doing accidental damage over those doing intentional damage, when the outcome was negative. Therefore, it seems that young children (six years of age and younger) may be able to use intention information in their moral judgments if the following conditions are met: 1) clear distinction between a purposive act with an accidental act, 2) shorter stories to lessen memory effects, 3) varying stories as to purposeful and accidental intent and severe and moderate consequences.

Soneson (1976) hypothesized that older children, seven to nine years of age will give significantly greater correct responses to intentionality stories than will four to five-year-old children. With a subject pool of 60 boys and girls between 50 and 117 months of age, Soneson presented each subject with eleven videotaped stories. Each child made moral judgments based on information presented in each story. Soneson's results support her hypothesis ($F = 11.08, p < .01$) and those of other investigators who contend that the change in a child's moral judgment emphasis from damage to intent probably occurs at around the age of six years for the normal child (Armsby, 1971; Austin, et al., 1977; Berg-Cross, 1975; Berndt and Berndt, 1975; Costanzo, et al., 1973; Feldman, et al., 1976; Imamoglu, 1975; Lee, 1971).
Sex of child

Piaget (1932) did not investigate sex differences in his research on moral development. However, moral development research since the late 1950's and early 1960's has included reports of sex differences.

Sears, Maccoby and Levin (1957) found that girls generally received higher scores than boys on tests of moral knowledge including conventional and ideal standards. However, for the most part recent studies have found no significant differences in the moral judgments of boys and girls (Ambron and Irwin, 1975; Armsby, 1971; Bearison and Issacs, 1975; Berndt and Berndt, 1975; Boehm and Nass, 1962; Gutkin, 1972; Imamoglue, 1975; Soneson, 1976).

Intelligence of child

The validity of Piaget's argument that the child's level of moral development is tied to his general level of cognitive functioning is supported in numerous studies in which I.Q. and the child's level of moral functioning are investigated (Ambron and Irwin, 1975; Boehm, 1962; Johnson, 1962; Lickona, 1969). Boehm (1967) found that sixty-seven retarded adolescents, 16 to 21 years of age scored at the same level as younger (nine-year-old) normal children of equivalent mental age on dimensions of intentionality and peer reciprocity. In a similar but opposite vein, Boehm (1962) reports six to nine-year-old gifted children (I.Q. above 110) mature earlier in their moral judgment concerning distinctions between intention and outcome of an action than children of average intelligence (I.Q. of 90 to 110). These findings
are supported by those of Harris, Mussen and Rutherford (1976).

Social class of child

Hoffman (1970) has summarized results of studies assessing the influence of socioeconomic class on the development of moral reasoning in children. A consistent finding from these studies is that a positive relationship exists between social class level and child's level of moral intentionality (Boehm, 1962; Boehm and Nass, 1962). Boehm and Nass (1962) conducted a study of 102 children aged six to 12 years of age and in grades one through six of public elementary schools. Fifty-four of the children were judged to be of the lower class; 48 were judged to be of the upper middle class. Parent occupation was used as the standard of evaluation. Four Piagetian-type stories were used to assess the development of moral judgment in the children. Statistical analysis of the data revealed that the children's responses to moral judgments differentiated lower class from middle class children at a statistically significant and negative direction. However, the authors suggested that I.Q. (intelligence test scores) may be a confounding variable in assessing the true effects of social class on children's moral judgments.

Attempting to control the I.Q. variable, Boehm (1962) tested 237 six to nine-year-old children. Those children who fell within the normal intelligence range of the Pintner-Cunningham Intelligence Test were included in the study. As noted earlier, Piagetian stories were used to measure the moral judgment level of the children and parent
occupation determined the social class level for each family. Boehm found that when I.Q. was controlled, social class differences were found to be positively related to children's moral judgment level. Lower class children scored more immaturely when distinguishing right from wrong than middle-class children at the same age.

Differing childrearing practices have been observed among different social classes (Hoffman and Saltzstein, 1967; Kohn, 1959; Sears, et al., 1957). Using 200 Washington, D. C. families, Kohn (1959) reported that lower-class parents, as compared to middle-class parents, focus more on immediate compliance with rules and demands and less on character development. Each of the 200 families' social class position was determined by the Hollingshead Index of Social Position. Mothers were asked by Kohn to express their values as embodied in their ten to 11 year-old child's behavior. Examples of children's behavior were presented to mothers to obtain ratings of their values. Data were examined by correlational analysis. Significant relationships were indicated for the two social class groups. Lower class parents rated the following values higher than middle class parents: obeys parent well ($r = .20; p < .05$); considerate of others ($r = .39; p < .05$); has self-control ($r = .22; p < .05$). Sears, et al. (1957) also have reported similar social class differences in child rearing.

Parental influences

In his review of moral development research, Hoffman (1970) observes that various indices of moral development in a large number
of studies are associated with parental practices (Fry, 1975; Hoffman and Saltzstein, 1967; Sears, Maccoby and Levin, 1957; Shoffeitt, 1971). For instance, Sears, Maccoby and Levin (1957) operationally defined "conscience" as the mother's report that the child confessed or expressed guilt in some other way after having transgressed but before having been detected. With a sample of 379 mothers and their children, they found that 42% of the children whose mothers generally were judged to be warm to their children and who reported frequently using love withdrawal as a form of discipline, had a high conscience index compared to 24% of the children whose mothers were judged to be warm but reported using love withdrawal infrequently. The relationship between love withdrawal and conscience, however, has not been consistently replicated. A more recent study by Yarrow, Campbell and Burton (1968), for example, using similar measures (mother and teacher reports) found no evidence of an association between "conscience" and love withdrawal under conditions of high or low warmth.

In the face of these inconsistent findings, there is some research suggesting that the differences in children's moral behavior is partly due to different discipline and affective patterns of their parents (Saltzstein, 1976). Hoffman and Saltzstein (1967) conclude that induction, not love withdrawal, is the critical variable in conscience development. Induction primarily involves pointing out to the transgressor the consequences to other persons of his behavior. The technique contrasts with power assertion, which is defined as physical punishment.
or any other exercise of physical power over the child. It contrasts also with love withdrawal, defined as nonphysical expression of anger or withdrawal of love (Hoffman, 1970).

In a survey of seventh-grade children, including 146 middle class boys, 124 middle class girls, 91 lower class boys, and 83 lower class girls, Hoffman and Saltzstein (1967) examined parents' and children's reports of both mother and fathers' present discipline practices. They also asked the parents to indicate their parent-child practices when the child was about five-years-old. In addition, they assessed several facets of the child's conscience: severity of guilt as expressed in story completions, internality of moral judgments (judgments of right and wrong independent of rewards and punishment), teacher's ratings of the child's acceptance of responsibility for wrongdoing, mother's report of the child's tendency to confess after transgressing, and peers' sociometric nominations of classmates they judged most considerate of other children. Controlling for intelligence and social class, Hoffman and Saltzstein (1967) found that children's higher scores on the various indices of morality generally were negatively associated with parental use of power assertion ($p < .05$), positively associated with parental use of induction ($p < .05$), and unassociated with use of love withdrawal. The same results were obtained regardless of whether the child, parent, teacher or peers was the source of information for the moral index, or whether the mother or the child reported the mother's discipline. The type of data analyses was not provided in the report of this study.
Role taking opportunities, as provided by social participation in the family, peer groups, and other social settings, has been considered important in determining the rate at which moral thought progresses (Kohlberg, 1976; Lee, 1971; Piaget, 1932; Selman, 1971). Role taking is defined as a group of cognitive processes by which one person comes to know and understand another person (Shantz, 1975). More specifically role taking refers to the ability to take the position of another person and thereby infer his perspective. Kohlberg (1976) has observed the importance of the social environment on moral development. He states,

In understanding the effects of social environments on moral development, then, we must consider the environments provision of role-taking opportunities to the child. Variations in role-taking opportunities exist in terms of the child's relation to his family, his peer group, his school and his social status (p. 49).

Ambron and Irwin (1975) concentrated on children's ability to take the viewpoint of others by measuring children's role-taking abilities. Intentionality was measured by Piagetian-type moral judgment stories. Subjects for the study included 38 second grade children from two suburban New York City Schools in middle class neighborhoods (equal number of boys and girls). Each child was tested on 32 role taking items and 24 moral judgment items. Ambron and Irwin found role taking to correlate (r = .36, p < .001) with moral judgment of intentionality for five to seven-year-olds.

Stressing the importance of parental interaction with their children and moral development, Holstein (1968) observes,
... with regard to family, the disposition of parents to allow or encourage dialogue on value issues is one of the clearest determinants of moral state advance in children (p. 21).

Along this same line, Rest, Turiel and Kohlberg (1969) have demonstrated that the parent can further facilitate the development of the child's moral thought by presenting him or her with moral reasoning one stage above the child's own stage. According to Rest, et al., children tend to approve, understand and adopt moral reasoning passages one stage above their own but tend to reject those one stage below their own and approve but fail to understand moral reasoning two stages above their own, instead assimilating it to their own stage level. It seems reasonable to conclude that the enhancing effects of parental behaviors with their children rests, in part, on the level of verbal "reasoning" contained in such techniques. For instance, the best match between parental discipline and the child's moral development level may not be an exact correspondance but one step difference between the moral thought expressed through the parent's discipline and the child's current moral reasoning level.

Generally, few empirical studies have dealt with the parents' role in the child's moralization. Those few mentioned have focused on child rearing techniques such as discipline (Gutkin, 1975; Hoffman, 1970; Hoffman and Saltzstein, 1967) rather than on parental moral development per se. Holstein (1968) administered Kohlberg's moral dilemmas to evaluate the moral judgment of mothers, fathers and their eighth grade children (boys and girls) in 53 normal middle class
families. According to the resulting data mothers at higher moral stages had children who employed higher moral stages of reasoning. Furthermore, in families with parental conflict, the moral judgment of the mother and child were correlated more highly even in cases in which the father's moral level was higher.

Findings of a study by Hudgins and Prentice (1973) indicate that moral reasoning of ten adolescent delinquents and their mothers is less mature than that of ten non-delinquents and their mothers of the same age. The adolescent subjects had an age range of 14.5 to 16.1 years. The delinquents were drawn from a local juvenile court and the non-delinquents from junior high schools in the same city. Kohlberg's moral dilemmas were used to assess moral reasoning. Utilizing a four way analysis of variance of the weighted scores for moral judgment for delinquents and non-delinquents and their mothers, the investigators found a significant effect ($F = 31.03; p < .0001$) showing a difference in how mothers and their adolescents answer stories. A significant difference between mothers of delinquents and mothers of non-delinquents also was found ($F = 12.22, p < .01$).

Fodor (1971) has demonstrated that the moral development level of psychopathic boys (14 to 17 years of age) is influenced by parental behaviors, especially their fathers. The psychopaths perceived their fathers as having been less nurturant toward them and as having given them less praise. On the other hand, results by Haan, Langer and Kohlberg (1976) suggest that the fathers role in their son's moral development is not especially illuminated by knowledge of parental behaviors.
First grade children were exposed to both peer and adult models who display either consistent, conflicting or inconsistent moral judgments and explanations (Brody and Henderson 1977). Ninety first grade children (age range five/eleven to six/four) acted as subjects for the study. Children were exposed to adult and peer models who made either consistent, conflicting, or inconsistent judgments and explanations based on Piagetian-type moral judgment stories. The experiment consisted of two phases: an experimental (modeling) test and a generalization test. First, each subject heard how a peer model and an adult model responded to twelve moral judgment stories. The models responded to two questions: which child was the naughtiest in the story? (moral judgment), and why was he or she naughty? (rationale). The subject was asked to respond similarly to twelve moral judgment stories after hearing the responses of the models. On the completion of this phase, the generalization phase (rationale) was introduced by presenting the subject with twelve new moral judgment stories. Subjects were assigned randomly to one of eight treatment combinations or a control group varying in adult and peer modeling of mature (intention-based) and immature (consequence-based) moral judgments. Each dependent measure of each phase was analyzed using a 4 (modeling) x 2 (rationale or no rationale by model) factorial analysis of variance design. Children who were exposed to those adult and peer models consistently displaying mature moral judgments produced the most mature moral judgments and explanations ($F_{3,72} = 2.88, p < .04$). Brody and Henderson concluded that adult models were most influential when the adult's
response pattern was consistent and when a rationale accompanied the modeled judgments. If the adult did not use any rationales he or she was no more influential than the peer. Further support for the influence of adult models in young children's moral judgments comes from research by Walker and Richards (1976).

Several studies have accented the importance of treating separately the influence of mother and father behaviors on their child's moral development (Hoffman, 1970; LaVoie and Looft, 1973; Santrock, 1975). There is evidence that the father's presence is important in the child's moral development (Hoffman, 1971; Santrock, 1975). Hoffman (1971) compared father absent seventh grade children (262 boys and 235 girls) with a similar number of father present seventh grade children. Children in both groups were matched on I.Q. and socioeconomic status. Measures of moral functioning included the following: 1) story completion items; 2) moral judgments based on transgression in story form; 3) moral values based on ratings of personal attributes and acceptance of blame and; 4) teacher reports. Data were analyzed separately for boys and girls and the test of significance used throughout was the median test. No differences were found between father absent and father present girls, but father absent boys did show consistently lower moral development scores than their counterparts who had fathers (p < .01). In a similar vein, Santrock (1975) evaluated moral judgment in pre-adolescent boys. Father absent boys were reported by their teachers as less advanced in moral development than father present boys.
Fifty-one children (six, ten, and 14 years old) and their mothers from Buffalo, New York, were interviewed and their responses to moral delimmias classified in order to determine possible environmental causes, how the parent treats the child, of stages in moral reasoning (Denny and Duffy, 1974). The purpose of the study was, first, to determine whether parents actually do imply different moral principles to children of different ages and, second, to determine whether there is a relationship between the type of moral reasoning that parents imply and the level of moral reasoning used by the child. All responses were categorized into either preconventional, conventional or post-conventional categories of moral reasoning. Inter-rater reliability was established ($r = .89$). Results from the Denny and Duffy (1974) study indicate that as the ages of the children increase, both the level of moral reasoning used by children and the level of moral reasoning implied by the mothers' treatment of the children increased. In other words, there was a significant relationship between the age of the child and his level of moral development ($x^2 = 15.06; p < .01$). The older the child, the higher the level of moral reasoning he used. Even with age partialed out, there was a significant and positive correlation between the mothers' implied level of moral reasoning and the children's level of moral reasoning ($r = .59, p < .01$). Thus, although causality cannot be established, the results indicate that there is at least the possibility that the way the mother treats the child may be influenced on the appearance of stages in the child's development of moral reasoning.
METHODOLOGY

The purpose of the present study was to investigate parental behaviors and their influences on the level of intentionality in moral judgments of children.

Subjects

Six elementary schools were selected in Marshalltown, Iowa. These six particular schools were selected because personnel in the Marshalltown school administration believed that they best served middle-class families in or near Marshalltown and therefore would provide both a more homogeneous sample and a better return rate.

The study was introduced by letter to all families who had first grade children in the six elementary schools. The parent letter requested family involvement in the study and allowed them opportunity to refuse to participate if they wished. A copy of the parent letter, explaining the criteria for participation in the study, may be found in Appendix A.

Of the 294 letters which were distributed to intact families in the six schools, 274 families agreed to participate in the study. These 274 families then were mailed Iowa Parent Behavior Inventories (Mother and Father forms) and a letter (Appendix B) explaining the forms and how to return them to the experimenter. One hundred seventy-one families returned IPBI's to the experimenter. Of these, eleven families were eliminated from the final sample because of incomplete data. Thus the final sample consisted of 160 families.
Participating children were between 74 months and 98 months of age. The mean age was 83 months. There were 86 boys and 74 girls among the 99 seven-year-olds and 61 six-year-old. The final sample was comprised of 160 children and included 157 Caucasian children, two of whom were twins, and three Oriental children.

Instruments

Three instruments were used in the present study. The Moral Judgment Test was administered to children individually to assess their moral intentionality level. A copy of the instrument may be found in Appendix C. The Iowa Parent Behavior Inventory (Crase, Clark, Pease, 1978) was used to measure parental behaviors toward their child (Appendix D). The Teacher Rating form was developed to assess children's: 1) ability to understand story content; 2) level of physical and verbal aggression in the classroom setting; and 3) achievement in school subjects. The Teacher Rating form is located in Appendix E.

Moral Judgment Test

The Moral Judgment Test (MJT) originates from stories which were developed from and were similar to the story format used by Piaget but with modifications based on subsequent research (Bearison and Isaacs, 1975; Berndt and Berndt, 1975; Imamoglu, 1975).

Story modifications include the following: 1) a single story format instead of the story pair format used by Piaget; 2) same characters used across stories; 3) stories controlled for sex of story actors; 4) stories controlled for length by using three sentences per story;
5) stories controlled for intent and consequences; 6) story themes involving human characters rather than objects. Each story is accompanied by three descriptive pictures which clarify actions taken by actors in the story. Eight different themes were generated by the experimenter. Each theme was developed into a pair of stories which resulted in a total of eight pairs of stories. Four of the pairs were manipulated such that consequences were held constant and intent (accidental or deliberate) of actor varied. The remaining four pairs of stories allowed consequence of the story (moderate or severe) to vary while intent of the actor was held constant. In each pair of stories, one was written with boy participants and one with girl participants. Thus, the 16 stories were varied with regard to accidental or intentional action, severity of consequence and sex of actor. Each story had two characters, one character taking either deliberate or accidental action against the other which produced either a moderate or severe consequence.

Five independent Child Development experts rated the sixteen stories to determine their agreement on degree of intention and degree of consequence as well as story construction. Rating was on a seven point scale. There was 87% agreement among judges for severity of consequence and for degree of intentionality.

Three pictures were prepared for each story and depicted story action and consequence.

In an effort to elicit children's evaluations of the naughtiness of the story actor, four faces were developed. A not naughty evaluation
was depicted by a blank face, a little naughty evaluation by a slightly frowny face, a very naughty evaluation by a more frowny face and a very, very naughty evaluation by the most frowny face. Therefore, the child was provided three cues from which to make his or her evaluation of the story actor: line drawings of faces, a number above each face with one matched to the blank face and four to the very, very naughty face, and the verbal description of each face by the examiner. The child also was asked to state why he or she rated the story actor as he or she did.

Prior to test administration, the child was asked to repeat directions to determine whether he or she understood them.

A pilot study was conducted with 24 children from the Child Development Laboratory, Iowa State University, Ames, Iowa. Children ranged in age from five-year-olds to seven-year-olds, with nine five-year-olds, four six-year-olds, and nine seven-year-olds. Parent permission letters (Appendix F) were mailed to all parents before children were tested. Purposes for the pilot included: 1) developing of clear instructions and refining the method for testing; 2) determining the most discriminating moral judgment stories; and 3) determining which stories were of most interest to children. Subject responses were recorded by the experimenter on a score sheet and tape recorded for further accuracy.

It was evident from the pilot study that fewer stories and more simplified directions were needed if the attention span of first grade children was to be maintained throughout the testing period. Eight
stories were selected from the original sixteen using the following
criteria: 1) clear discrimination of intentionality and consequence;
and 2) adaptability to both male and female actors. These criteria
were used because the stories in the primary study needed to be dis­
criminating for six and one-half to seven and one-half-year-old
children. Likewise, utilizing the same stories for males and females
would reduce the number of stories from 16 to eight.

The revised MJT used in the primary study included four themes.
Each theme was composed of a pair of stories which resulted in a total
of four pairs of stories. Two of the pairs were manipulated such that
consequences were held constant and intent (accidental or deliberate)
of actor varied. The remaining two pairs of stories varied by conse­
quence of the story (moderate or severe) with intent of actor held
constant. The four pairs of stories were the same for male and female
subjects. Male subjects heard stories about male characters and female
subjects heard stories about female characters.

Before the child was read the stories by the experimenter, he or
she was read the following directions:

I am going to play a game with you. In this game I am going to
tell you about some children. I will ask you to tell me whether
a child should get a not naughty face, a little naughty face, a
very naughty face, or a very, very naughty face. A not naughty
face means nothing should happen to the child, he or she is not
naughty. A little naughty face means the child should get into
a little trouble. A very naughty face means the child should
get into more trouble and a very, very naughty face means the
child should get into big trouble.

At this point the child was shown the four faces from which he or
she was to make his or her evaluations of the actor's naughtiness. He
or she was asked to repeat what each face in the rating scale means for the story actor, from not naughty (blank face) to very, very naughty (most frowny face). Directions were continued after this as follows:

After each story I want you to point to the face you think the child should get. Then I want you to tell me why you think the child should get the face you choose. Understand? Here is a practice story to see if you understand how to play the game.

The child was shown pictures of two actors in the stories and each actor is introduced by name. At this point, the child was presented one practice story before he was given the MJT. Each story was read to the child individually and he or she was asked:

"How naughty is [Actor's Name] in the story?"

A number from one to four is recorded by the experimenter based on the child's evaluation of the actor's naughtiness (Naughtiness Evaluation). Then the child is requested to give his/her reasons (Rationale) for the evaluation. Rationale given were tape recorded and also were written on the child's individual MJT score sheet (Appendix G).

The eight stories were randomly ordered. These then were divided into two groups of four stories each. The four then were further ordered into every possible combination within the group. A subject received the order for each of two groups of stories that was subsequent to that order administered to the previous child. This procedure was followed for all subjects. It took approximately thirteen to sixteen minutes for the experimenter to test each child.
Iowa Parent Behavior Inventory (IPBI)

The Iowa Parent Behavior Inventory (Crase, Clark, and Pease, 1978) was administered to mothers and fathers of all participating families. The IPBI is a paper and pencil inventory which measures parents' perceptions of their behaviors toward their child. The IPBI was developed in conjunction with the North Central 124 project, Life Span Analysis of Rural Children's Mental and Social Development. There is a mother form and a father form, each with 36 behavioral items. Each item represents a behavioral situation in which the parent rates his or her behavior in that situation. The 36 items are rated on a one to five point scale in which "1" indicates that the parent almost never behaves that way and "5" indicates that the parent always behaves that way. A "3" indicates that the parent behaves that way about half the time or is not sure how often he or she behaves that way. Parents may use any number from one to five in rating their behaviors.

Factor analysis of the IPBI (Crase, Clark and Pease, 1978) has resulted in the delineation of six factors for the mother form and five factors for the father form. Factor intercorrelations for both the mother and father forms have provided reliability estimates for both "total variance" and "unique variance" reliability. The IPBI factors for the mother's responses are: 1) parental involvement, 2) limit setting, 3) responsiveness, 4) reasoning guidance, 5) free expression and 6) intimacy. The IPBI factors for the father's responses are: 1) parental involvement, 2) limit setting, 3) responsiveness, 4) reasoning guidance and 5) intimacy. The IPBI items
for each of the mother factors and father factors can be found in Appendix H.

Teacher rating

A Teacher Rating Scale (Appendix E) was developed by the experimenter to identify children who might have problems understanding the MJT story content. The rating form also required teachers to rate children on aggressive behaviors and achievement in school subjects.

Instructions to teacher's are:

For my research I am asking you to make judgments about children's ability to understand story situations and to answer questions about them. I am interested also in your assessment of some of his/her behaviors in the classroom. To help me with this research, I am asking you to respond to the following statements in a way which best described each child. Consider each statement in a way which best describes each child. Consider each statement separately. There are no "right" or "wrong" responses.

The teacher rating included the following items: 1) can understand the content of this story and answer questions about it; 2) follows directions well in class; 3) physically fights with other children; 4) argues with other children; 5) talks back to adults; 6) gets along well with other children his or her age; 7) tends to be bossy with other children; 8) tends to be a leader of other children; 9) achieves well in school subjects.

The technique for rating each child is based on the following certainty scale (Wolins and Dickinson, 1973):

In the space provided to the left of each statement, place a number (1 - 99) that best describes how you would rate this child. Respond "99" if you are very certain the child is best described by this statement. Use numbers larger than "50" to
show the child is this way more than half the time and numbers less than "50" to show the child is this way less than half the time. Use "50" only when you are not sure or have had no opportunity to observe this child. Make use of the full range (1 - 99) whenever possible and make your ratings as fine as you wish.

Procedures

The experimenter received permission to conduct the study from the Superintendent of Schools; Marshalltown Community School District. Principals and teachers were introduced to the study, and a schedule for testing was arranged. Before interviews with the children began a parent consent letter was sent home with the children. Two hundred and seventy-four families agreed to participate in the study and Iowa Parent Behavior Inventories (mother and father forms) were taken home by the children to these families. One hundred and sixty complete mother and father IPBI's were returned by mail.

On receipt of the IPBI forms, interview schedules were arranged for children of parents who completed the forms. Each child was administered the MJT in a quiet room provided by the school principal. The room was either the nurse's room or the testing room used by the school psychologists or speech therapist. A child-sized table and chairs were provided.

The child was escorted by the experimenter from their classroom to the testing room. Once seated, the experimenter introduced himself and the child was asked his or her name. Prior to administration of the MJT the experimenter asked the child to state the job his or her father presently held. This form of socioeconomic data collection
was used since access to school records of children was not possible. Therefore, these data served as an index of families socioeconomic status. The child was escorted back to his or her classroom following administration of the MJT.

Teachers were asked to complete teacher rating forms for each child involved in the study. These ratings were collected by the experimenter one week after testing had been completed.

Scoring and Analysis

Eight scores of evaluation and reasoning for each child were derived from the MJT. The child's evaluation of the story actor's naughtiness (Naughtiness Evaluation) was scored one (not naughty), two (little naughty), three (very naughty) or four (very, very naughty). The child's rationale was rated by two judges. The judges rated the child's rationale responses for each of the eight stories on a 99 point certainty scale (Wolins and Dickinson, 1973). A child received a "1" if the rater was absolutely sure the response was consequence based. A "50" was used only if the rater was uncertain whether the response was intention based or consequence based or if the child did not respond. A "99" was given to the child's response if the rater was absolutely sure the response was intention based. Numbers between one and 99 reflect the rater's level of certainty in his or her judgment. Inter-rater reliability was established by correlating ratings of Judge I with ratings of Judge II.

Parents rated their behaviors on the IPBI on a scale of one to
five as previously described. These raw data were recorded for mother and father responses.

For each of the nine items of the Teacher Rating Scale, teachers rated children's behavior on the one to 99 certainty scale developed by Wolins and Dickinson (1973).

Socioeconomic level of family was operationalized by the occupation level of the head of the household. The Hollingshead Two Factor Index of Social Position (Hollingshead, Note 1) was used to code the occupations. Occupation scores for this study ranged from one, for being an executive or major professional, to seven, for unskilled workers.

Data were punched according to the code sheet located in Appendix I.

Pearson Product Moment correlation coefficients were calculated to test the hypotheses involving the Moral Judgment Test, Iowa Parent Behavior Inventory (mother and father forms), Teacher Ratings and Socioeconomic status. A correlation coefficient at or beyond the .05 level of probability was considered significant. With a sample of 160, a correlation of .15 or above is necessary to reach the .05 level of probability.
RESULTS

The major concerns of this study were relationships among parental behaviors and moral judgment level of their children. Also of interest were relationships of teacher ratings and children's moral judgments, influence of children's sex on their moral judgment and effect of story variation on children's moral judgment.

Findings internal to the Iowa Parent Behavior Inventory and the Moral Judgment Test are discussed followed by presentation of major findings. Each hypothesis is stated separately with tables and text detailing relevant correlations. Ancillary findings follow major findings.

Major Findings

**IPBI factor intercorrelations for mothers and fathers**

Table 1 contains a correlation matrix of fathers' factors and mothers' factors on the IPBI. Within this matrix are two triangular submatrices in which are intercorrelations for father factors and mother factors. All father factors are significant and positively correlated ($p < .01$) with each other. The factor of mother parental involvement correlates positively with the mother factors of responsiveness ($r = .27; p < .001$); reasoning guidance ($r = .27; p < .001$); and intimacy ($r = .21; p < .01$). The factor of mother limit setting correlates positively with mother factors of responsiveness ($r = .15; p < .05$) and reasoning guidance ($r = .35; p < .001$), and negatively with free expression ($r = -.20; p < .01$). The factor of mother responsiveness correlates positively with their reasoning guidance
Table 1. IPBI factor intercorrelations for mothers and fathers

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<th>FF1</th>
<th>FF2</th>
<th>FF3</th>
<th>FF4</th>
<th>FF5</th>
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<th>MF3</th>
<th>MF4</th>
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<td>.10</td>
<td>.16*</td>
<td>.22**</td>
<td>.19**</td>
<td></td>
</tr>
</tbody>
</table>

Note: FF1 = parental involvement; FF2 = limit setting; FF3 = responsiveness; FF4 = reasoning guidance; FF5 = intimacy; MF1 = parental involvement; MF2 = limit setting; MF3 = responsiveness; MF4 = reasoning guidance; MF5 = free expression; MF6 = intimacy.

*p < .05; **p < .01; ***p < .001.
(r = .38; p < .001) and intimacy (r = .16; p < .05). Reasoning guidance correlates positively with intimacy (r = .22; p < .01) and free expression correlates positively with intimacy (r = .19; p < .05).

Several significant relationships were found to exist between mother and father factors on the IPBI and these also are depicted in Table 1. Maternal involvement is related to father's involvement (r = .28; p < .001) and father's reasoning guidance (r = .18; p < .05). Limit setting by the mother is significantly related to limit setting by the father (r = .27; p < .001) and father's reasoning guidance (r = .15; p < .05). Responsiveness by the mother is significantly related to responsiveness by the father (r = .20; p < .01). Reasoning guidance for the mother is significantly related to father factors dealing with limit setting (r = .15; p < .05), responsiveness (r = .19; p < .01) and reasoning guidance (r = .21; p < .01). There is a significant relationship also between intimacy by the mother and reasoning guidance (r = .15; p < .05) and intimacy (r = .21; p < .01) by the father. These results generally indicate that mothers and fathers describe their child somewhat similarly.

** MJT Naughtiness Evaluations**

Children's Naughtiness Evaluation scores were intercorrelated to determine relationships of intention and consequence in story variations. These correlations are reported in Table 2. Two triangular submatrices contain correlations for stories stressing constancy of accidental
Table 2. MJT Naughtiness Evaluation intercorrelations

<table>
<thead>
<tr>
<th></th>
<th>AM₁</th>
<th>AM₂</th>
<th>AS₁</th>
<th>AS₂</th>
<th>IM₁</th>
<th>IM₂</th>
<th>IS₁</th>
<th>IS₂</th>
</tr>
</thead>
<tbody>
<tr>
<td>C AM₁</td>
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<td></td>
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<tr>
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<tr>
<td>D AS₂</td>
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<td>.47***</td>
<td>.68***</td>
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<td>E IM₂</td>
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<td>-.08</td>
<td>-.10</td>
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<tr>
<td>G IS₁</td>
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<td>.02</td>
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<tr>
<td>H IS₂</td>
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<td>.00</td>
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<td>.17*</td>
<td>.09</td>
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</tbody>
</table>

Note: A = accidental; I = intentional; M = moderate consequence; S = severe consequence.

*p < .05.

**p < .01.

***p < .001.
action and stories stressing constancy of intentional action while severity of consequence varies. For those stories in which accidental action is constant but severity of consequence varies all six intercorrelations are highly significant. Also, the two pairs of stories illustrating these conditions \((AM_1 vs. AM_2\) and \(AS_1 vs. AS_2\)) correlate with each other at a highly significant level. For those stories in which intentionality of action is held constant and severity of consequence varies, three of the six intercorrelations reach significance. For the two pairs of stories illustrating these conditions \((IM_1 vs. IM_2\) and \(IS_1 vs. IS_2\)), one pair correlates significantly \((IM_1 vs. IM_2; r = .25, p < .01)\). From these results it can be seen that children's responses to stories in which intentionality of actor is held constant and consequence varies appear to retain similarity of response more for intentionality rather than for consequence. This is particularly true for accidental action.

The fewer number of significant correlations for stories depicting intentional action leading to mild as opposed to severe consequence indicate that children do not appear to respond similarly to all stories which vary on consequence. Intercorrelations for the four stories in which intentionality varies and moderate consequence is held constant fail to reach significance. This indicates that children's responses differ considerably to stories of this type by intent of action. For those stories in which intentionality varies and severe consequence is held constant, two of the four intercorrelations are significant \((IS_2 vs. AS_1\) and \(IS_2 vs. AS_2)\). Thus for stories
with severe consequence, there is a tendency for children to respond to the consequence regardless of the intent of action.

Mean scores for Naughtiness Evaluation of intention and consequence varied stories are presented in Figure 1. Accidental stories with moderate consequences show the lowest mean scores (less negative evaluations). As stories become more intentional regardless of moderate or severe consequences, mean naughtiness evaluations become more negative. Intentional action stories with severe consequences are the most negative. It would appear from these results that children are responding to story actors intentions more often than story consequences in their naughtiness evaluations but the severity of consequences when combined with intent results in the most negative evaluations.

**MJT Rationale ratings**

A 16 x 16 correlational matrix of MJT Rationale ratings by two judges is reported in Table 3. The matrix consists of eight story ratings by each of two judges. In order to facilitate understanding of the matrix, variables have been arranged schematically into two triangular submatrices. The two triangular submatrices contain intercorrelations for the eight stories for each judge. The validity diagonals are underlined coefficients and they represent the degree to which judge's ratings correlated for each story. All correlations were significant positive correlations ($p < .0001$).

The significant intercorrelations within the triangular submatrices would indicate that there is an element of consistency across the eight
Note: A = accidental; I = intentional; M = moderate consequence, S = severe consequence.

Figure 1. MJT Naughtiness Evaluation mean scores
Table 3. MJT Rationale Ratings intercorrelations

<table>
<thead>
<tr>
<th>Judge I</th>
<th>Judge II</th>
</tr>
</thead>
<tbody>
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<td>AM&lt;sub&gt;1&lt;/sub&gt;</td>
</tr>
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</tr>
<tr>
<td>AM&lt;sub&gt;2&lt;/sub&gt;</td>
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<tr>
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<td>0.38</td>
</tr>
<tr>
<td>IM&lt;sub&gt;2&lt;/sub&gt;</td>
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</tr>
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</tr>
<tr>
<td>IS&lt;sub&gt;2&lt;/sub&gt;</td>
<td>0.60</td>
</tr>
</tbody>
</table>

NOTE: A = accidental; I = intentional; M = moderate consequence; S = severe consequence.
All p < .001.
stories for measuring moral intentionality in children. Since the inter-rater reliability coefficients are generally higher than other correlations within the matrix, rater bias is indicated.

Raw mean scores derived from judges' ratings of Rationale on the MJT are shown in Figure 2. High mean scores reflect a consequence based reasoning and low mean scores indicate intention-based reasoning. There seems to be a trend for more intention-based reasoning by children for all stories except one (IS1). This story deals with one child intentionally tossing a dart into the neck of another child, making the neck bleed. This trend is consistent with results for Naughtiness Evaluation scores. When stories have severe consequences, children tend to exhibit more consequence-based Rationale scores. Conversely, when stories have moderate consequences, there seems to be a trend toward more intention-based Rationale scores by children.

**MJT as an instrument**

In general, the results concerning the MJT would indicate that the eight stories are discriminating among children's use of intention and consequence cues for making their moral judgments. Furthermore, the significant correlations across several stories, particularly those with accidental action held constant, point out that these stories are measuring a similar phenomenon. Of equal importance also are the lack of significant correlations across stories which indicate differences in stories varied on intentionality and consequence. On the bases of these data, the first null hypothesis that there is no
Note: A = accidental; I = intentional; M = moderate consequence; S = severe consequence.

Figure 2. MJT Mean Rationale Ratings;
relationship between children's responses to intention based stories and children's responses to consequence based stories on the MJT is rejected.

**MJT Naughtiness Evaluation, Rationale Ratings, and IPBI factors**

The null hypothesis that there are no relationships in children's performance on the MJT and their parents' responses on the Iowa Parent Behavior Inventory fails to be rejected (p > .05). Correlations between these variables for mothers can be found in Table 4 and for fathers can be found in Table 5.

IPBI mother and father factors are not correlated significantly with total score for Naughtiness Evaluation of children nor with children's Rationale ratings (Judge I and II). Examination of total score of Naughtiness Evaluation ratings and mother and father factors yield no particular trends. Examining separate story scores of Naughtiness Evaluation with IPBI factors yields seven significant correlations (p > .05) out of 32 possible correlations. It is probable that these are spurious results.

Total Rationale responses as rated by judges by story reveal no significant relationships with father factors and mother factors. Only four correlations are significant (p > .05) out of 176 possible correlations of IPBI factors and rationale responses to all stories.

These results indicate that parental behaviors measured by the IPBI do not relate in any consistent manner to moral intentionality levels of their children as measured by the MJT.
Table 4. Correlation coefficients between IPBI mother factors and MJT Naughtiness Evaluation and Rationale total scores

<table>
<thead>
<tr>
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<th>Total MJT Scores</th>
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<td>MF4</td>
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<td>-.058</td>
<td>-.015</td>
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<td>Rationale (Judge II)</td>
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<td>-.005</td>
<td>-.064</td>
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</table>

Note: The table presents correlation coefficients between IPBI mother factors and MJT Naughtiness Evaluation and Rationale total scores.
Table 5. Correlation coefficients between IPBI father factors and MJT Naughtiness Evaluation and Rationale (Judge I and II) total scores

<table>
<thead>
<tr>
<th>IPBI Father Factors</th>
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<th>FF3</th>
<th>FF4</th>
<th>FF5</th>
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<tr>
<td>Rationale (Judge II)</td>
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<td>.005</td>
<td>-.013</td>
<td>-.095</td>
<td>.021</td>
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</table>
MJT Naughtiness Evaluation, Rationale Ratings, and sex of child

The null hypothesis that there is no relationship between children's performance on the MJT and their sex fails to be rejected \((p > .05)\). Correlations between sex and children's scores on Naughtiness Evaluation are located in Table 6. Naughtiness Evaluation and Rationale ratings by Judge I and Judge II were found not to be significantly correlated to the sex of children.

Although the relationship is not significant, a trend may be noted in Table 6 for Naughtiness Evaluation with sex \((r = -.14)\) and Rationale Ratings by Judge I \((r = -.10)\) and Judge II \((r = -.08)\) with sex. In mean Naughtiness Evaluations, boys tended to rate story characters as naughtier more often than girls. Rationale ratings seem to be more consequence based for boys and more intention based for girls, although these differences did not reach a statistically significant level.

MJT Naughtiness Evaluation, Rationale Ratings, and teacher rating

Correlations of MJT scores of Naughtiness Evaluation with teacher rating items are shown in Table 7. A total of 19 significant correlations occur out of the 72 possible. All significant correlations were negative except one. The highest significant correlation was \(-.34 (p < .001)\) for one accident based story \((A_{5,2})\) and Teacher rating five, talks back to adults, and the lowest was \(-.15 (p < .05)\) for accident based stories \((A_{5,1}, A_{5,2})\) and teacher rating three, tends
Table 6. Correlation coefficients between sex and MJT Naughtiness Evaluation and Rationale (Judge I and II) total scores

<table>
<thead>
<tr>
<th></th>
<th>MJT Scores</th>
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<tr>
<td></td>
<td>Naughtiness Evaluation</td>
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<tr>
<td>Sex</td>
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</table>
Table 7. Correlation of Teacher Ratings and MJT Naughtiness Evaluation

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<th>Teacher Ratings</th>
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<th>TR2</th>
<th>TR3</th>
<th>TR4</th>
<th>TR5</th>
<th>TR6</th>
<th>TR7</th>
<th>TR8</th>
<th>TR9</th>
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<td>.06</td>
<td>.00</td>
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<td>-.10</td>
<td>-.30***</td>
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<td>-.01</td>
<td>-.08</td>
<td>-.10</td>
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<td>.02</td>
<td>.07</td>
<td>-.05</td>
<td>.03</td>
<td>.03</td>
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</tbody>
</table>

Note: TR1 = understands content of story; TR2 = follows directions well; TR3 = tends to be a leader; TR4 = achieves well in school subjects; TR5 = gets along well with others; TR6 = physically fights with children; TR7 = argues with children; TR8 = talks back with adults; TR9 = tends to be bossy with children.

* \( p < .05 \)
** \( p < .01 \)
*** \( p < .001 \)
to be a leader. Data reveal Naughtiness Evaluations for accident based stories \((AM_1, AM_2, AS_1, AS_2)\) correlate significantly and negatively with the following teacher ratings: understanding story content \((p < .01)\); follows directions well \((p < .01)\) (except for \(AM_1\)); leadership \((p < .01)\) (except for \(AM_2\)); achieves well in school subjects \((p < .05)\) and gets along well with others \((p < .01)\). TR 2 (follows directions well) was found to correlate in a positive direction with one intention based story \((r = .16; p < .05)\).

Correlations between MJT Rationale scores and Teacher ratings are shown in Table 8. The results show a total of 24 of the 72 correlations to be significant for Judge I with Teacher ratings and 19 of the 72 correlations to be significant for Judge II with Teacher ratings. The majority of these significant relationships between Teacher ratings one, two, three, four, and five and Judge I (13) and Judge II (ten) are negative for accident based stories. In other words, TR 1 (understanding story content), TR 2 (follows directions well), TR 3 (leadership), TR 4 (achieves well in school subjects), and TR 5 (gets along well with others) correlate with children's ability to give a rationale for their judgments of intentionality especially in accident based stories.

Hence, the null hypothesis that there is no relationship between childrens' performance on the MJT and their behavior as rated by their teachers is rejected. Findings appear to indicate that children who judge story actor naughtiness less negatively and base these evaluations on story actors intentions (accidental), tend to be rated
<table>
<thead>
<tr>
<th></th>
<th>Judge I</th>
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<td>AS₂</td>
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<td>B</td>
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<td>TR₂</td>
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Note: TR₁ = understanding content of story; TR₂ = follows directions well; TR₃ = tends to be a leader; TR₄ = achieves well in school subjects; TR₅ = gets along well with others; TR₆ = physically fights with children; TR₇ = argues with children; TR₈ = talks back with adults; TR₉ = tends to be bossy with children.

"p < .05.

""p < .01.
high by teachers in understanding story content, following directions well, giving leadership, achieving in school subjects, and getting along well with others.

**Teacher ratings and IPBI factors**

Correlations of Teacher ratings of children and children's mother and father responses to the IPBI by factors are shown in Tables 9 and 10, respectively. Positive and significant relationships were found to exist between mother and father factors on the IPBI and Teacher ratings of children's behaviors. The factors of limit setting for fathers was negatively correlated \((r = -0.15; p < 0.05)\) with the teachers rating of child's understanding of story content. On the other hand, positive relationships were shown between the factor of limit setting for father and Teacher ratings of physically fighting \((r = 0.15; p < 0.05)\), arguing with children \((r = 0.45; p < 0.05)\) and leadership \((r = 0.16; p < 0.05)\). These findings would seem to indicate that fathers who rate their behavior high in limit setting have children who are rated low by teachers for understanding story content and rated high for fighting, arguing and leadership. Teacher ratings on the item of getting along well with others was found to relate significantly with IPBI father factors of reasoning guidance \((r = 0.17; p < 0.05)\) and intimacy \((r = 0.23; p < 0.01)\). In other words, children who receive high ratings by teachers for getting along well with others had fathers who rated their behaviors low for reasoning guidance and intimacy. Leadership ratings by teachers
Table 9. Correlations of IPBI father factors and Teacher Ratings

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<th>FF4</th>
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</table>

*p < .05.

**p < .01.
### Table 10. Correlations of IPBI mother factors and Teacher Ratings

<table>
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<tr>
<th>Teacher Ratings</th>
<th>MF1</th>
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</tr>
</tbody>
</table>

*P < .05.

**P < .01.
were correlated negatively with responsiveness ($r = -0.15; p < 0.05$) and intimacy ($r = -0.18; p < 0.05$). Therefore, the higher ratings of leadership by teachers were associated with lower ratings by fathers for responsiveness and intimacy behaviors.

Inspection of Table 10 shows three significant correlations between Teacher ratings and factors from the mother form of the IPBI. All three correlations were positive. The parental involvement factor was significantly correlated with TR 2, follows directions well ($r = 0.17; p < 0.05$). MF 4 (reasoning guidance was related to TR 6, physically fights with children ($r = 0.18; p < 0.05$) and TR 8, talks back to adults ($r = 0.15; p < 0.05$). Hence, mothers who rated themselves high in parental involvement and reasoning guidance had children rated high by teachers for following directions well, physically fighting with children and talking back to adults.

Ancillary Findings

A correlation matrix of Teacher Ratings is located in Table 11. The results show that the first five teacher ratings are significantly intercorrelated in a positive direction ($p < 0.001$). These items include: 1) understand content of story; 2) follows directions well; 3) tends to be a leader; 4) achieves well in school subjects; and 5) gets along well with others. Teacher rating items six through nine show significant positive relationships also ($p < 0.001$). These items are: 6) physically fights with children; 7) argues with children; 8) talks back to adults; 9) tends to be bossy. Inspection
Table 11. Teacher Ratings item intercorrelations

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<th>TR1</th>
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</table>

Note: TR1 = understands content of story; TR2 = follows directions well; TR3 = tends to be a leader; TR4 = achieves well in school subjects; TR5 = gets along well with others; TR6 = physically fights with children; TR7 = argues with children; TR8 = talks back with adults; TR9 = tends to be bossy.

*p < .05.

**p < .01.

***p < .001.
of the correlations between teacher ratings one through five with items six through nine reveals 13 of 20 significant correlations to be negative. The highest correlation is -.54 and the lowest is -.15. However, item four, achieves well in school subjects, correlates significantly and in a positive direction with item eight, talks back to adults \( r = .20; p < .01 \) and item nine, tends to be bossy \( r = .38; p < .001 \). The results would seem to indicate that teachers are rating children around two clusters. More positive behaviors, items one through five, make one cluster and aggressive behavior items, six through nine, make up the second cluster.

Correlation coefficients were computed for Teacher ratings, sex of child and father's occupation. These results are in Table 12. Examination of the table shows sex to correlate positively and significantly with Teacher ratings of follows directions well \( r = .21; p < .001 \), tends to be a leader \( r = .15; p < .05 \), achieves well in school subjects \( r = .20; p < .001 \), and gets along well with others \( r = .17; p < .05 \). Girls were rated higher by teachers than boys on these items. Sex was negatively correlated with teachers ratings of physically fights with children \( r = -.40; p < .001 \), argues with children \( r = -.28; p < .001 \), and talks back to adults \( r = -.17; p < .05 \). For these items, boys were rated by teachers more highly than girls.

Teacher ratings of understanding story content \( r = -.25; p < .001 \) and gets along well with others \( r = -.15; p < .05 \) were significantly related to higher levels of father occupations. However, these results
Table 12. Correlations of Teacher Ratings, child's sex and father's occupation

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*p < .05.

**p < .01.

***p < .001.
should be interpreted with caution because children were the only source of information about the father's present occupational level.
DISCUSSION

The purpose of the present investigation was to examine the relationships between parental behaviors toward their child, moral judgments of the child and teacher ratings of the child. Relationships of sex of the child and socioeconomic level of parents also were investigated. The above relationships will be discussed in light of the findings. In addition, limitations of this study and its implications for future research will be noted.

Major Findings

Iowa Parent Behavior Inventory

Significant relationships were found for the mother and father factors on the IPBI: maternal involvement/participation with the child, and paternal involvement/participation with child; maternal limit setting and paternal limit setting; maternal responsiveness with paternal responsiveness; maternal reasoning guidance with paternal reasoning guidance and maternal intimacy with paternal intimacy.

The reasons for maintaining two separate forms (mother and father) of the IPBI, in part, is to attempt to uncover different parent behaviors in relationship to their child. Items are not totally the same for both forms nor are the items in the same order. Consequently there is an indication from these results that mother and father self-rated behaviors toward their child seem to be somewhat consistent. Several reasons may account for this. Mothers may have taken more of an active role in helping fathers complete
their form since it was generally mothers who initially agreed to participate in the study. Moreover, fathers may have let their perception of the mother's behavior toward the child influence their own ratings. Finally, father and mother behaviors toward the child may be similar for this age group thereby raising the question of need for two separate forms. In any case, the use of two forms (mother and father) of the IPBI presents difficulties in analyzing the relationships of mother and father behaviors since technically these two forms are not comparable.

**Moral Judgment Test**

Results indicate that first grade children do respond differently to stories varied on intention and consequence. Interestingly, Naughtiness Evaluation and Rationale scores reveal more intention-based responses. In other words, children generally assigned Naughtiness Evaluations to story actors on the basis of the actor's intentions either when deliberate or accidental. However, consequences appear to influence the child's moral reasoning especially when they were severe, suggesting that children were attending to both intentions and consequences in making their moral judgments. This would seem partially to substantiate Piaget's (1932, 1965) theory concerning children's moral development. Children are reflecting a transition from the heteronomous stage to the autonomous stage of moral development. On the whole, the six and one-half to seven and one-half year old children in this study appear to use intentions more often than
consequences in making their moral judgments. In this case, Piaget's claim that children do not make intention based judgments prior to eight to ten years of age is not supported. This suggests that the subject's responses to the confounding variables of intention and consequence variation of the stories are influenced by the age at which children express intentionality. This finding is supported by other researchers (Berg-Cross, 1975; Costanzo, et al., 1973; Rybash, et al., 1975).

Visual and auditory presentation of the moral judgment stories may have influenced the more intention based responses of children. Rybash, et al. (1975) found six-year-old children to use intentions in making their moral judgments when facilitated by videotaped stories rather than with verbal stories alone. Similarly, Peterson (1974) found six to eight-year-old children to respond to black line drawings by making more intention based moral judgments than consequence based judgments. The findings of the present study would substantiate the above-mentioned findings.

Stories with accidental action produced Naughtiness Evaluation responses from children which were less negative. Moreover, Rationale ratings of stories with accidental action were found to be more intention based than consequence based. It would appear that first grade children who are in moral transition in intentionality may recognize accidental behavior (which is interpreted as more positive behavior) more readily than deliberate behavior (which is interpreted as more negative behavior), yet still respond to consequences when
they become particularly severe. Children in the sample appear to recognize the salience of consequences in one kind of situation but not in the other. One plausible speculation which could be made from these findings is that the transition for utilization of intent which appears, for the most part, during first grade simply occurs earlier under more positive conditions (accidental stories) than under negative conditions (intentional or deliberate stories).

Another explanation for the differential transition points of moral intentionality may be located within the context of the parent-child relationship. The child may be evaluated by quite different parental criteria when he or she deliberately hurts another child and/or produces severe consequences. That is, most children may receive negative feedback from socializing agents when they deliberately inflict injury on another child as opposed to causing accidental injury. However, the consequences of children's behavior, especially when moderate, may be less influential on parental sanctions than the intentions of the children.

Parental behaviors and moral judgment of their child

The absence of relationships between the MJT and mother and father factors of the IPBI refutes previous theoretical research claims (Ambron and Irwin, 1975; Fry, 1975; Guthkin, 1975; Hoffman and Saltzstein, 1967; and Shoffeitt, 1971). Several factors may account for this finding. Parent report of his or her behaviors may reflect an "ideal" behavioral relationship with his or her child. It may
simply be the case that parents are test-wise and do not rate objectively their behaviors with their child. Likewise, parental behaviors most influential to the child's moral reasoning may not be contained within the range of the IPBI behavioral items.

Absent within the measure of parental behaviors, are items which relate to the general area concerning the development of social cognition in children. For instance, Ambron and Irwin (1975) found role taking to correlate significantly with moral judgment of intentionality for five to seven-year-old children. If indeed role taking opportunities are important for moral functioning and are enhanced by the parent-child interaction, then it follows that such items related to role taking opportunities should be a part of the measure of parent's behaviors with their child. Therefore, the relationship between intent vs. consequence utilization in moral evaluation and role taking opportunities offered by parents deserves further research attention before any definitive conclusions can be made.

Rest, Turiel, and Kohlberg (1969) stated that parents can facilitate the development of their child's moral reasoning by presenting him or her with moral reasoning one stage above the child's own state. Since the parent's moral functioning was not known in this study, it is difficult to determine their influence. It is possible that parental moral reasoning with their child may have a greater impact than isolated behaviors, especially if their reasoning is one stage above that of their child's as Rest, et al. would suggest. Parental behaviors rated on the IPBI may not be
uncovering this relationship because the IPBI does not tap parents' moral level.

This line of thought is supported further by Holstein (1968) who found mother's moral functioning to be related to their children's moral functioning. Higher moral reasoning by children was related to higher moral reasoning by mothers. Similarly, Denny and Duffy (1974) found a positive correlation between the child's (six, ten, and fourteen-year-olds) and mother's moral reasoning. Their conclusions accent the importance of determining the parent's moral level concommittantly with that of the child.

**Sex of child and their moral judgments**

Results of this study give positive support to research which contends that boys and girls do not differ in their moral judgments (Ambron and Irwin, 1975; Bearison and Issacs, 1975; Boehm and Nass, 1962; and Gutkin, 1972). However, Naughtiness Evaluation and Rationale responses, indicate a trend toward consequence-based or less mature moral judgments for boys than girls which may be more indicative of developmental differences in maturation than real moral development differences. Further investigation of this trend in the data is needed in order to explain this phenomenon.

**Teacher ratings and moral judgment of the child**

The most significant and consistent correlations for Naughtiness Evaluation and Rationale scores were found with the teacher's rating of school achievement. If school performance can be considered an
estimate of intellectual functioning, then this finding substantiates Piaget's (1932, 1965) views of moral development as necessarily a concomitant of intellectual development. Also this finding adds support to Boehm's (1962) reports that six-year-old gifted children mature earlier than children of average intelligence in their moral judgments concerning distinctions between intentions and consequences.

Children's responses to stories with accidental intentions produced significantly higher correlations in relationship to teachers ratings of story comprehension, leadership and school achievement than did stories with deliberate intentions. These findings are in contrast to children's intentionality level and teachers ratings of aggressive behaviors where no significant relationships were found. These relationships (children's responses to stories with accidental intent and teachers ratings) may, again, reflect the transitional period in moral functioning for more capable children. Children are not responding equally to stories varied in deliberate and accidental intentions. Accidental stories may be more salient to children at this age (six and one-half to seven and one-half) and at their moral and intellectual levels.

From the findings, it may be concluded that teacher ratings of children's classroom behavior relate more to the child's level of moral intentionality than did mother and father behaviors toward their child. Since the IPBI and Teacher Rating Form are two separate instruments, any conclusions drawn from their comparison must be considered tenuous. However, it would appear that teacher ratings
of children may have an advantage of being more objective than parental ratings of their own behaviors. The element of objectivity would seem to differentiate the child's moral functioning within two social milieus, the home and school. Teacher ratings may indicate a more accurate picture of the child within the school environment and be a good source of information in regard to the child's level of moral functioning.

Furthermore, teacher ratings correlated with four father factors and two mother factors on the IPBI. Fathers who rated themselves high in limit setting and mothers who rated themselves high in parental involvement and reasoning guidance had children who were rated by teachers as exhibiting aggressive behaviors. It would seem that different mother and father behaviors are associated with teacher ratings of aggressive behaviors. It is not clear from this association, however, why different behaviors from each parent seem to be contributing to the association.

These results do not prove that the intentionality levels observed in children are a result of certain classroom behaviors identified by teachers rather than a result of internal changes in cognitive structures. Because the present study was correlational, causality cannot be established. It could be argued that children simply tailor their behaviors and interactions with teachers to what they have found, through experience, to elicit more positive reactions from teachers.
Ancillary Findings

Significant peripheral results such as the relationships between teacher rating items indicate the consistency of teachers in rating children across positive and negative behaviors. These findings are highlighted by a strong differentiation between teacher ratings of male and female behaviors. Although parent ratings of behaviors with their children indicated no sex differentiation, it is interesting to speculate on why teachers, on the other hand, did so. It is reasonable to believe that teachers who work with groups of children of the same age are reacting to sex stereotypes. Another possibility may be that because teachers work with both male and female children, they have more of a basis for making comparisons across sex than do parents who have a child of one sex. Teachers and parents are rating on two separate dimensions also. Teachers are rating the child's behavior, whereas parents are rating their own behavior. Still another possibility is that boys do actually exhibit different behaviors than girls.

Limitations of the investigation

One of the limiting factors in the present investigation was the use of a self-rating parent behavior scale which attempts to assess parent behaviors in relation to their child only once. In addition the self-rating parent behavior scale, direct parent-child observation by independent raters have been utilized in research (White and Watts, 1973). Along this line, perhaps a combination assessment might prove to be a more accurate assessment of parent
behaviors in the future. Also, by using two separate IPBI forms (one for mothers and one for fathers), no definitive conclusions can be drawn concerning relationships between mother and father behaviors. In this case, a supplemental parent behavior form for use with mothers and fathers might have been the basis on which to compare parental behaviors. To conduct such an extensive investigation, however, was not within the scope of the present study. The imposition of having parents fill out additional parent behavior forms or having interviews or observers in their homes was considered impractical for the purposes of the present investigation.

Socioeconomic status of parents has been linked to the child's level of moral intentionality (Boehm, 1962; Boehm and Nass, 1962). However, social class levels were not adequately assessed in this investigation. The child's report of his or her father's occupations served as an index of social class. Most certainly the accuracy of this information must remain in question.

Because the IPBI has been developed only recently, limited reliability and no validity information exist. The lack of reliability and validity information hold true for the MJT and TR instruments also.

**Implications for further research**

The present study was correlational, and therefore, causality cannot be established. Some correlations may be significant because of the large number of correlations calculated among the variables.
It cannot be argued, then, that parent-child or teacher-child interactions are unidirectional. It appears that children are eliciting an "ideal" response from parents and teacher ratings of child behavior. In addition to a correlational reason for these relationships, it may also be that parents and teachers are responding to questionnaires in a socially desirable manner. In order to establish the direction of causality, non-correlational research will have to be done. Until that time, one can at least conclude, that environmental factors should not be discounted as possible causes of the stages in the development of children's moral intentionality.

The present investigation, detailed in this report, has hopefully added to and extended the information concerning relationships between parental behaviors and moral intentionality in children. Questionnaires were used to rate parent behaviors. Stories depicting moral situations were used to measure children's use of intentions or consequences in making their moral judgments. Examination of children's responses to the moral judgment test yielded no significant relationships nor trends. Therefore, future research in this area is questionable based on the design of this study. A multi-method approach in measuring parental behaviors more accurately is needed. Likewise, the issue of how to study moral judgments in young children also requires further research and thinking. The use of stories requiring moral reasoning might be supplemented by more naturalistic observations and parent and teacher reports of the child's moral functioning level.
Accidental based stories seemed to discriminate more often than did intentional-based stories. For this reason, it may be appropriate in future research to explore intentionality levels among six and seven year-olds using only accidental based stories varied by severity of consequences. On the other hand, for older children (beyond seven years of age) it may be useful to maintain stories varied on deliberate action and accidental action since it would be expected that older children would base their moral judgments on both levels of intentionality.

Additionally, a number of possibilities, some directly and some tangentially related to this study, appear to call for future research. Teacher ratings of their behaviors with children may add invaluable information to the field of child development concerning children's moral functioning. These data would provide an important adjunct to parental behaviors and moral intentionality levels of children over an extended developmental span.

Clearly, more research is important to the further understanding of specific parental behaviors which influence development. The investigator feels that the development and standardization of a test of moral intentionality coupled with improved measures of parental behaviors may provide a vehicle for the addition of requisite information about the parental behaviors most central to the moral development of their children.
SUMMARY

The present investigation was conducted to determine relationships of parental behaviors and moral intentionality in first grade children. Relationships between mother and father behaviors, teacher ratings of the child's behavior in school and sex of child also were explored.

Subjects were 160 first grade children, with a total of 86 boys and 74 girls and who ranged in age from 74 months to 98 months.

Parental behaviors were measured by the Iowa Parent Behavior Inventory (Crase, Clark, and Pease, 1978). The presence or absence of intentionality was determined by Piagetian-type stories (Piaget, 1932, 1965) as presented in the Moral Judgment Test (MJT). The teacher rating scale was designed specifically for this study in order to assess children's general school achievement and behavior.

Pearson Product-moment correlations were calculated to test the relationships between parent behaviors, moral intentionality levels of children, teacher ratings of children's classroom behaviors, sex of child and socioeconomic status of families.

The results of this study indicate that, in general, the eight stories of the MJT discriminate children's use of intention and consequence cues. Significant correlations across stories suggest that stories are measuring a similar phenomenon. Significant relationships exist between children's performance on the MJT and their classroom behavior as rated by their teachers. The findings appear
to indicate that children who judge story actor naughtiness less negatively and base these evaluations on story actor intentions (accidental) tend to be rated highly by teachers for the following behaviors: 1) understanding story content, 2) follows directions well, 3) leadership, 4) achieves well in school subjects and 5) gets along well with others.

No significant relationships were found to exist between parental behaviors (mother and father) and moral intentionality levels of their children. Further, no significant relationships were noted between sex of child and their moral intentionality scores.

Results were discussed and limitations of the study and implications for future research considered.
REFERENCE NOTES

REFERENCES


Kohn, M. L. Social class and parental values. *American Journal of Sociology*, 1959, 64, 335-351.


Wolins, L. and Dickinson, T. L. Transformations to improve reliability and/or validity for affective scale. Educational and Psychological Measurement, 1973, 33, 711-713.

ACKNOWLEDGMENTS

The writer would like to take this opportunity to express sincere appreciation to the people who helped him in the completion of this research project. In particular, I would like to thank Dr. Sam Clark for his guidance and expertise throughout my graduate program and the writing of the dissertation. Special thanks are extended to Dr. Pease, Dr. Wolins, Dr. Galejs and Dr. Schwieder for their suggestions and support as committee members.

I am especially indebted to the Marshalltown Public School faculty and children for their willingness to participate in the study.

To my wife, Ann, a warm appreciation for her support, understanding and encouragement throughout my graduate program.

Finally, I would like to express a very special acknowledgment to my deceased father, Henry E. Mangus, without whose support and encouragement I could not have undertaken graduate study.
APPENDIX A

PARENT CONSENT LETTER FOR PRIMARY STUDY
February 3, 1978

Dear Parents:

I am a graduate student in Child Development at Iowa State University and am presently working on my doctoral dissertation under the direction of Dr. Sam Clark. I am interested in children's judgments of other children's behavior (e.g. block play, roller skating) presented in story situations. I am interested also in the relationship of these judgments to parent behaviors. In order to obtain more information about this relationship, I will be interviewing children and asking their parents and teachers to respond to a questionnaire.

I have spoken to (teacher's name) and he/she has agreed to allow me to do a 10 minute interview with one child at a time. The interview will consist of telling the children eight stories. At the end of each story the children will be asked to decide whether or not one of the children in the story was naughty and how naughty that child was. Children will be accompanied at all times by an adult. The teacher questionnaire consists of several items which deal with the child's ability to understand and respond to short stories. In addition, you will be mailed questionnaires requesting a response from mother and father. The questionnaire will contain statements representing a variety of ways that parents may interact with their children. You will be asked to respond to these statements in the way which best represents your behavior toward your child. The questionnaire will require about fifteen minutes of time from each parent. Once completed the questionnaires should be placed in the return envelope and mailed to me by ____________.

The interview and questionnaires will be completely confidential. No information will be considered on an individual basis nor will individual copies of the questionnaires be made available to anyone. Once the information is tabulated, your child's answer sheet and the parent and teacher questionnaires will be destroyed.
I will be happy to answer any questions you might have concerning this project and can be reached mornings at 294-3040. Should you not want your child to participate, please fill out the form below and return it to (teacher's name) by ________________.

I greatly appreciate your cooperation.

Sincerely,

Ron Mullis

Approved by:

Dr. Sam Clark
Head, Child Development Department

I do not want my child to participate.

Date: ___________  Signed: ________________
APPENDIX B

PARENT COVER LETTER FOR IPBI'S
March 23, 1978

Dear Parents:

I am a graduate student in Child Development at Iowa State University and am presently working on my doctoral dissertation under the direction of Dr. Sam Clark. I am interested in the ways parents view their behavior with their children. To obtain this information I would very much appreciate parents filling out and returning the enclosed questionnaires. Please note there is a mother form (dark green) and a father form (light green).

The questionnaire contains statements representing a variety of ways that parents may interact with their children. You are being asked to respond to these statements in the way which best represents your behavior toward your child. The questionnaire requires about fifteen minutes of time. Once completed the questionnaires should be placed in the return envelope and mailed to me. I would appreciate it if you could have these in the mail by April 7, 1978.

Your responses will be kept completely confidential. No information will be considered on an individual basis nor will your responses be made available to anyone but me. Once the information is tabulated the questionnaires will be destroyed.

I will be happy to answer any questions you might have concerning this project and I can be reached mornings at 294-3040. Please call me collect if you have a concern.

I greatly appreciate your cooperation.

Sincerely,

Ron Mullis

Approved by:

Dr. Sam Clark, Head
Department of Child Development
APPENDIX C

MORAL JUDGMENT TEST

Form for Boys

Moral Judgment Test for girls not included. The form for girls differs in name and attire of characters.
JOHN IS PLAYING WITH HIS DOG. (AM)
While chasing the dog, John doesn't see Bob and runs right into him. (Am.)
BOB FALLS AND SKINS HIS KNEE ON THE SIDEWALK. (AM)
BOB AND JOHN ARE AT THE PARK SLEDDING DOWN A HILL. (AM^2)
BOB LOSES HIS BALANCE AND FALLS AGAINST JOHN. (AM₁)
JOHN IS KNOCKED OFF THE SLED AND SKINS HIS KNEE. (AM_2)
BOB AND JOHN ARE AT THE PARK SLEDDING DOWN A HILL. (AS₁)
BOB LOSES HIS BALANCE AND FALLS AGAINST JOHN. (AS)
JOHN IS KNOCKED OFF THE SLED AND BREAKS HIS ARM. (AS₁)
JOHN IS RIDING HIS SKATEBOARD ON THE SIDEWALK IN FRONT OF THE HOUSE. (AS$_2$)
He loses his balance and slams into Bob, who is riding his bicycle beside him. (AS₂)
BOB FALLS OFF HIS BICYCLE AND BREAKS HIS ARM. \( \text{(AS}_2 \) \)
BOB IS PLAYING WITH HIS DART GAME. HE SEES JOHN READING A BOOK IN THE LIVING ROOM. (IM)
BOB THROWS A DART AT JOHN. (IM)
THE DART STICKS IN JOHN'S JACKET. (IM1)
JOHN IS PLAYING WITH HIS DOG AND SEES BOB. (IM$_2$)
John shouts to his dog, "Let's get Bob." They both run into Bob. :)
BOB FALLS AND SKINS HIS KNEE ON THE SIDEWALK. (IM₂)
BOB IS PLAYING WITH HIS DART GAME AND SEES JOHN SITTING IN THE LIVING ROOM READING A BOOK.

(IS₁)
BOB THROWS A DART AT JOHN. (IS₁)
IT HITS AND STICKS IN JOHN'S NECK, MAKING IT BLEED. (IS₁)
JOHN IS RIDING HIS SKATEBOARD ON THE SIDEWALK IN FRONT OF HIS HOUSE. HE SEES BOB RIDING TOWARD HIM ON A BICYCLE. (IS₂)
John aims his skateboard right at Bob's front wheel. \((IS)\)
BO3 falls off his bicycle and breaks his arm. (IS$_2$)
APPENDIX D

IPBI'S - MOTHER AND FATHER FORMS
IOWA PARENT BEHAVIOR INVENTORY¹ (Mother Form)

Sedahlia Jasper Crase, Sam Clark, Damaris Pease
Department of Child Development
Iowa State University

CHILD'S NAME __________________________ DATE OF RATING ______________

CHILD'S SEX ___________ CHILD'S BIRTHDATE _____________________________
(month, day, year)

MOTHER'S NAME __________________________

We are interested in learning more about how parents and children interact. The following statements represent a variety of ways that parents may interact with their children. Before you begin, have firmly in mind the child you are rating. Please respond to the statements in the way which you feel best represents your behavior toward the child. Base your ratings on your own experiences with this child over the last month.

Consider each statement separately. There are no "right" or "wrong" responses. In the space provided to the left of each statement, place the number (1 to 5) that best describes how you see your behavior toward your child.

Respond "5" if you think you always behave as described and "1" if you think you never behave that way. Use numbers larger than "3" to show you behave that way more than half the time, and numbers smaller than "3" to show you behave that way less than half the time. This means the more you behave as described, the larger the numbers should be, and the less you behave as described, the smaller the numbers should be. To the extent you are uncertain you behave that way, your response should be "3". If an item does not apply to your particular home situation, place a "3" in the rating column. Please make use of the full range of the scale.

RATING SCALE

<table>
<thead>
<tr>
<th>I almost never behave this way</th>
<th>I seldom behave this way</th>
<th>I behave this way about half the time OR I'm not sure how often I behave this way</th>
<th>I often behave this way</th>
<th>I almost always behave this way</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

¹© copyright, 1977, 1978. Iowa State University Research Foundation, Inc. All rights reserved.
<table>
<thead>
<tr>
<th>RATING</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Excuse yourself from invited guests when your child asks for help with such things as pasting, sewing, or model building?</td>
</tr>
<tr>
<td>2.</td>
<td>Require your child to remain seated in the car while you are driving?</td>
</tr>
<tr>
<td>3.</td>
<td>Give your child things he or she especially likes when he or she is ill?</td>
</tr>
<tr>
<td>4.</td>
<td>Go to your child quickly when you see his or her feelings are hurt?</td>
</tr>
<tr>
<td>5.</td>
<td>Find children's books, reference books or records that you and your child can share together?</td>
</tr>
<tr>
<td>6.</td>
<td>Explain to your child the consequences related to his or her behavior?</td>
</tr>
<tr>
<td>7.</td>
<td>Restrict the times your child can have friends over to play?</td>
</tr>
<tr>
<td>8.</td>
<td>Find crafts such as painting, coloring, woodworking or needlework you and your child can do together on cold, rainy days?</td>
</tr>
<tr>
<td>9.</td>
<td>Listen when your child tells you of a disagreement he or she has had with another child?</td>
</tr>
<tr>
<td>10.</td>
<td>Interrupt a telephone conversation to assist your child if he or she can't find such things as scissors, thread or paste?</td>
</tr>
<tr>
<td>11.</td>
<td>Require your child to put away his or her clothes?</td>
</tr>
<tr>
<td>12.</td>
<td>Enforce your child’s established bedtimes when he or she ignores them?</td>
</tr>
<tr>
<td>13.</td>
<td>Restrict the kinds of food your child eats?</td>
</tr>
<tr>
<td>14.</td>
<td>Listen to your child when he or she is upset even though you feel he or she has nothing to be upset about?</td>
</tr>
</tbody>
</table>
### RATING SCALE

<table>
<thead>
<tr>
<th>Rating</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I almost never behave this way</td>
</tr>
<tr>
<td>2</td>
<td>I seldom behave this way</td>
</tr>
<tr>
<td>3</td>
<td>I behave this way about half the time OR I'm not sure how often I behave this way</td>
</tr>
<tr>
<td>4</td>
<td>I often behave this way</td>
</tr>
<tr>
<td>5</td>
<td>I almost always behave this way</td>
</tr>
</tbody>
</table>

### TO WHAT EXTENT DO YOU.........

<table>
<thead>
<tr>
<th>Rating</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Tell your spouse of your annoyance with a neighbor or employer while your child is listening?</td>
</tr>
<tr>
<td>16</td>
<td>Insist your child speak politely to you as opposed to being sassy?</td>
</tr>
<tr>
<td>17</td>
<td>Remind your child when he or she forgets to do daily household chores?</td>
</tr>
<tr>
<td>18</td>
<td>Explain to your child, when he or she behaves in an unacceptable way, your reasons for not approving that kind of behavior?</td>
</tr>
<tr>
<td>19</td>
<td>Hold, pat or hug your child?</td>
</tr>
<tr>
<td>20</td>
<td>Point out to your child the acceptable choices of behavior when he or she misbehaves?</td>
</tr>
<tr>
<td>21</td>
<td>Maintain the limits you have set for your child's television watching?</td>
</tr>
<tr>
<td>22</td>
<td>Change plans to attend a night meeting so you can be with your child if he or she becomes ill?</td>
</tr>
<tr>
<td>23</td>
<td>Go immediately to your child when you see him or her hurt from a fall off a bicycle?</td>
</tr>
<tr>
<td>24</td>
<td>Disagree with your spouse when your child is present?</td>
</tr>
<tr>
<td>25</td>
<td>Ask your child for his or her reasons when he or she misbehaves?</td>
</tr>
<tr>
<td>26</td>
<td>Go to your child quickly when you hear him or her sobbing?</td>
</tr>
<tr>
<td>27</td>
<td>Get out of bed at night to go to your child as soon as you hear him or her crying?</td>
</tr>
<tr>
<td>28</td>
<td>Let your child know that you are afraid during fear provoking situations such as storms?</td>
</tr>
<tr>
<td>29</td>
<td>Make special efforts to stay with your child when he or she is ill?</td>
</tr>
<tr>
<td>30</td>
<td>Hug or kiss your spouse in the presence of your child?</td>
</tr>
</tbody>
</table>
### RATING SCALE

<table>
<thead>
<tr>
<th>I almost never behave this way</th>
<th>I seldom behave this way</th>
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<tr>
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<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

### TO WHAT EXTENT DO YOU........

<table>
<thead>
<tr>
<th>RATING</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____</td>
<td>31. Help your child to recognize another person's point of view?</td>
</tr>
<tr>
<td>_____</td>
<td>32. Take your child with you when you visit friends?</td>
</tr>
<tr>
<td>_____</td>
<td>33. Tell your child when you are in agreement with him or her?</td>
</tr>
<tr>
<td>_____</td>
<td>34. Cry if you feel like crying when your child is present?</td>
</tr>
<tr>
<td>_____</td>
<td>35. Work together with your child on household and yard cleaning tasks?</td>
</tr>
<tr>
<td>_____</td>
<td>36. Hold, pat and/or hug your child when other children are watching?</td>
</tr>
</tbody>
</table>

Thank you.
IOWA PARENT BEHAVIOR INVENTORY\(^1\) (Father Form)

Sedahlia Jasper Crase, Sam Clark, Damaris Pease
Department of Child Development
Iowa State University

CHILD'S NAME ___________________________ DATE OF RATING __________________

CHILD'S SEX _______ CHILD'S BIRTHDATE (month, day, year)

FATHER'S NAME ___________________________ ___________________________

---

We are interested in learning more about how parents and children interact. The following statements represent a variety of ways that parents may interact with their children. Before you begin, have firmly in mind the child you are rating. Please respond to the statements in the way which you feel best represents your behavior toward the child. Base your ratings on your own experiences with this child over the last month.

Consider each statement separately. There are no “right” or “wrong” responses. In the space provided to the left of each statement, place the number (1 to 5) that best describes how you see your behavior toward your child.

Respond “5” if you think you always behave as described and “1” if you think you never behave that way. Use numbers larger than “3” to show you behave that way more than half the time, and numbers smaller than “3” to show you behave that way less than half the time. This means the more you behave as described, the larger the numbers should be, and the less you behave as described, the smaller the numbers should be.

If you are uncertain you behave that way, your response should be “3.” If an item does not apply to your home situation, place a “3” in the rating column. Please make use of the full range of the scale.

---

**RATING SCALE**

<table>
<thead>
<tr>
<th>I almost never behave this way</th>
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<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

\(^{1}\) \textcopyright 1977, 1976 Iowa State University Research Foundation, Inc. All rights reserved.
### RATING SCALE

<table>
<thead>
<tr>
<th>Rating</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Require your child to remain seated in the car while you are driving?</td>
</tr>
<tr>
<td>2.</td>
<td>Give your child things he or she especially likes when he or she is ill?</td>
</tr>
<tr>
<td>3.</td>
<td>Go to your child quickly when you see his or her feelings are hurt?</td>
</tr>
<tr>
<td>4.</td>
<td>Find children's books, reference books or records that you and your child can share together?</td>
</tr>
<tr>
<td>5.</td>
<td>Suggest to your child outdoor games that you and he or she might play together?</td>
</tr>
<tr>
<td>6.</td>
<td>Explain to your child the consequences related to his or her behavior?</td>
</tr>
<tr>
<td>7.</td>
<td>Help your child select items that interest him or her at the store?</td>
</tr>
<tr>
<td>8.</td>
<td>Express your appreciation when your child carries his or her dishes to the sink?</td>
</tr>
<tr>
<td>9.</td>
<td>Enforce rules for your child concerning pushing or shoving of other children?</td>
</tr>
<tr>
<td>10.</td>
<td>Find crafts such as painting, coloring, woodworking or needlework you and your child can do together on cold, rainy days?</td>
</tr>
<tr>
<td>11.</td>
<td>Maintain the limits you set for your child's behavior in public places like basketball games, church or grocery stores?</td>
</tr>
<tr>
<td>12.</td>
<td>Listen without interrupting when your child tells you reasons for his or her misbehavior?</td>
</tr>
<tr>
<td>13.</td>
<td>Require your child to put away his or her clothes?</td>
</tr>
<tr>
<td>14.</td>
<td>Enforce your child's established bedtimes when he or she ignores them?</td>
</tr>
</tbody>
</table>
RATING SCALE

I almost never behave this way
I seldom behave this way
I behave this way about half the time OR I'm not sure how often I behave this way
I often behave this way
I almost always behave this way

1 2 3 4 5

TO WHAT EXTENT DO YOU..........

<table>
<thead>
<tr>
<th>RATING</th>
<th>ITEM</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____ 15. Listen to your child when he or she is upset even though you feel he or she has nothing to be upset about?</td>
<td></td>
</tr>
<tr>
<td>_____ 16. Tell your child that you are unhappy when he or she tracks mud into the house?</td>
<td></td>
</tr>
<tr>
<td>_____ 17. Participate with your child in storytelling and reading?</td>
<td></td>
</tr>
<tr>
<td>_____ 18. Insist your child speak politely to you as opposed to being sassy?</td>
<td></td>
</tr>
<tr>
<td>_____ 19. Have rules about the places your child can go alone?</td>
<td></td>
</tr>
<tr>
<td>_____ 20. Remind your child when he or she forgets to do daily household chores?</td>
<td></td>
</tr>
<tr>
<td>_____ 21. Hold, pat or hug your child?</td>
<td></td>
</tr>
<tr>
<td>_____ 22. Point out to your child the acceptable choices of behavior when he or she misbehaves?</td>
<td></td>
</tr>
<tr>
<td>_____ 23. Talk with your child about his or her fears of the dark, of animals or of school failures?</td>
<td></td>
</tr>
<tr>
<td>_____ 24. Change plans to attend a night meeting so you can be with your child if he or she becomes ill?</td>
<td></td>
</tr>
<tr>
<td>_____ 25. Go immediately to your child when you see him or her hurt from a fall off a bicycle?</td>
<td></td>
</tr>
<tr>
<td>_____ 26. Ask your child for his or her reasons when he or she misbehaves?</td>
<td></td>
</tr>
<tr>
<td>_____ 27. Go to your child quickly when you hear him or her sobbing?</td>
<td></td>
</tr>
<tr>
<td>_____ 28. Ask your child for his or her opinion in family decisions?</td>
<td></td>
</tr>
<tr>
<td>_____ 29. Get out of bed at night to go to your child as soon as you hear him or her crying?</td>
<td></td>
</tr>
<tr>
<td>_____ 30. Make special efforts to stay with your child when he or she is ill?</td>
<td></td>
</tr>
<tr>
<td>_____ 31. Hug or kiss your spouse in the presence of your child?</td>
<td></td>
</tr>
<tr>
<td>_____ 32. Consider suggestions made by your child?</td>
<td></td>
</tr>
</tbody>
</table>

PLEASE TURN PAGE
RATING SCALE

<table>
<thead>
<tr>
<th></th>
<th>I almost never behave this way</th>
<th>I seldom behave this way</th>
<th>I behave this way about half the time OR I'm not sure how often I behave this way</th>
<th>I often behave this way</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

TO WHAT EXTENT DO YOU........

RATING ITEM

_____ 33. Suggest to your child indoor games that you and he or she might play together?
_____ 34. Tell your child why you are angry, irritable or impatient when he or she is not to blame?
_____ 35. Help your child to recognize another person's point of view?
_____ 36. Hold, pat and/or hug your child when other children are watching?

Thank you.
APPENDIX E

TEACHER RATING
TEACHER RATING

For my research I am asking you to make judgments about children’s ability to understand story situations and to answer questions about them. I am interested also in your assessment of some of his/her behaviors in the classroom. To help me with this research, I am asking you to respond to the following statements in a way which best describes each child. Consider each statement separately. There are no "right" or "wrong" responses.

In the space provided to the left of each statement, place a number (1 - 99) that best describes how you would rate this child. Respond "99" if you are very certain the child is best described by this statement and "1" if you think the child is not described by this statement. Use numbers larger than "50" to show the child is this way more than half the time and numbers less than "50" to show the child is this way less than half the time. Use "50" only when you are not sure or have had no opportunity to observe this child. Make use of the full range (1 - 99) whenever possible and make your ratings as fine as you wish.
Child's name: __________________________

TEACHER RATING

Rating Scale

<table>
<thead>
<tr>
<th>Absolutely sure the child is not as described.</th>
<th>Absolutely sure the child is as described.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not sure or have had no opportunity to observe.</td>
<td></td>
</tr>
</tbody>
</table>

Please rate each child on the following criteria.

Example of a story to be used with this child:

Chris and Don are eating candy while watching TV. Chris says, "Don let me show you how cowboys fight on TV." Chris tackles Don and Don gets a scratch on his hand.

HOW CERTAIN ARE YOU THAT THIS CHILD . . .

1. Can understand the content of this story and answer questions about it?
2. Follows directions well in class?
3. Physically fights with other children?
4. Argues with other children?
5. Talks back to adults?
6. Gets along well with other children his/her age?
7. Tends to be bossy with other children?
8. Tends to be a leader of other children?
9. Achieves well in school subjects?
APPENDIX F

PARENT CONSENT LETTER FOR PILOT STUDY
January 23, 1978

Dear Parents:

I am a graduate student in Child Development at Iowa State University and am presently working on my doctoral dissertation under the direction of Dr. Sam Clark. I am interested in children's judgments of other children's behavior (e.g. block play, roller skating) presented in story situations. In order to obtain more information about these judgments, I will be interviewing children in the Child Development Department Laboratory and Older Children's Laboratory.

I have spoken to (teacher's name) and he/she has agreed to allow me to do a 20 minute interview with four to six children at a time. The interview will consist of telling the children six to eight stories. At the end of each story the children will be asked to mark, on an answer sheet, whether or not one of the children in the story was naughty and how naughty that child was. Children will be interviewed in the research rooms of the Child Development Department. Children will be accompanied at all times by an adult.

All of the children's responses to the interview will be confidential. No information will be considered on an individual basis nor will information be made available to anyone. Once the information is tabulated the answer sheets will be destroyed.

I will be happy to answer any questions you might have concerning this project and can be reached mornings at 294-3040. Should you not want to have your child participate, please fill out the form below and return it to (teacher's name) by __________.

I greatly appreciate your cooperation.

Sincerely,

Ron Mullis

Approved by:

Dr. Sam Clark
Head, Child Development Department

I do not want my child to participate.

Date: ___________  Signed: ____________________________________________________________________
APPENDIX G

ANSWER SHEET FOR MJT
ANSWER SHEET FOR MJT

Bob
A. How naughty is Sally? 1 2 3 4
   Why is Sally naughty? 1 2 3 4 5

Bob
B. How naughty is Sally? 1 2 3 4
   Why is Sally naughty? 1 2 3 4 5

John
C. How naughty is Linda? 1 2 3 4
   Why is Linda naughty? 1 2 3 4 5

John
D. How naughty is Linda? 1 2 3 4
   Why is Linda naughty? 1 2 3 4 5

John
E. How naughty is Linda? 1 2 3 4
   Why is Linda naughty? 1 2 3 4 5

Bob
F. How naughty is Sally? 1 2 3 4
   Why is Sally naughty? 1 2 3 4 5

Bob
C. How naughty is Sally? 1 2 3 4
   Why is Sally naughty? 1 2 3 4 5

John
H. How naughty is Linda? 1 2 3 4
   Why is Linda naughty? 1 2 3 4 5
APPENDIX H

IPBI MOTHER AND FATHER FACTORS
IPBI MOTHER AND FATHER FACTORS

IPBI Mother Factors

Factor 1: Parental Involvement

Item Number

1 Excuse yourself from invited guests when your child asks for help with such things as pasting, sewing or model building.
3 Find children's books, reference books or records that you and your child can share together.
8 Find crafts such as painting, coloring, woodworking or needlework you and your child can do together on cold rainy days.
10 Interrupt a telephone conversation to assist your child if he or she can't find such things as scissors, thread or paste.

Factor 2: Limit Setting

Item Number

2 Require your child to remain seated in the car while you are driving.
7 Restrict the times your child can have friends over to play.
11 Require your child to put away his or her clothes.
12 Enforce your child's established bedtimes when he or she ignores them.
13 Restrict the kinds of food your child eats.
16 Insist your child speak politely to you as opposed to being sassy.
17 Remind your child when he or she forgets to do daily household chores.
21 Maintain the limits you have set for your child's television watching.

Factor 3: Responsiveness

Item Number

3 Give your child things he or she especially likes when he or she is ill.
4 Go to your child quickly when you see his or her feelings are hurt.
22 Change plans to attend a night meeting so you can be with your child if he or she becomes ill.
Factor 3: (continued)

**Item Number**

23 Go immediately to your child when you see him or her hurt from a fall off a bicycle.
26 Go to your child quickly when you hear him or her sobbing.
27 Get out of bed at night to go to your child as soon as you hear him or her crying.
29 Make special efforts to stay with your child when he or she is ill.

Factor 4: **Reasoning Guidance**

**Item Number**

6 Explain to your child the consequences related to his or her behavior.
9 Listen when your child tells you of a disagreement he or she has had with another child.
14 Listen to your child when he or she is upset even though you feel he or she has nothing to be upset about.
18 Explain to your child, when he or she behaves in an unacceptable way, your reasons for not approving that kind of behavior.
20 Point out to your child the acceptable choices of behavior when he or she misbehaves.
25 Ask your child for his or her reasons when he or she misbehaves.
31 Help your child to recognize another person's point of view.

Factor 5: **Free Expression**

**Item Number**

15 Tell your spouse of your annoyance with a neighbor or employer while your child is listening.
24 Disagree with your spouse when your child is present.
28 Let your child know that you are afraid during fear provoking situations such as storms.

Factor 6: **Intimacy**

**Item Number**

19 Hold, pat or hug your child.
19 Hold, pat and/or hug your child when other children are watching.
Factor 6: (continued)

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<thead>
<tr>
<th>Item Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>30</td>
<td>Hug or kiss your spouse in the presence of your child.</td>
</tr>
<tr>
<td>32</td>
<td>Take your child with you when you visit friends.</td>
</tr>
<tr>
<td>33</td>
<td>Tell your child when you are in agreement with him or her.</td>
</tr>
<tr>
<td>34</td>
<td>Cry if you feel like crying when your child is present.</td>
</tr>
</tbody>
</table>
Factor 1: Parental Involvement

Item Number

4. Find children's books, reference books or records that you and your child can share together.
5. Suggest to your child outdoor games that you and he or she might play together.
7. Help your child select items that interest him or her at the store.
8. Express your appreciation when your child carries his or her dishes to the sink.
10. Find crafts such as painting, coloring, woodworking or needlework you and your child can do together on cold rainy days.
17. Participate with your child in storytelling and reading.
33. Suggest to your child indoor games that you and he or she might play together.

Factor 2: Limit Setting

Item Number

1. Require your child to remain seated in the car while you are driving.
9. Enforce rules for your child concerning pushing or shoving of other children.
11. Maintain the limits you set for your child's behavior in public places like basketball games, church or grocery stores.
13. Require your child to put away his or her clothes.
14. Enforce your child's established bedtimes when he or she ignores them.
16. Tell your child that you are unhappy when he or she tracks mud into the house.
18. Insist your child speak politely to you as opposed to being sassy.
19. Have rules about the places your child can go alone.
20. Remind your child when he or she forgets to do daily household chores.
Factor 3: Responsiveness

Item Number

2  Give your child things he or she especially likes when he or she is ill.
3  Go to your child quickly when you see his or her feelings are hurt.
24  Change plans to attend a night meeting so you can be with your child if he or she becomes ill.
25  Go immediately to your child when you see him or her hurt from a fall off a bicycle.
27  Go to your child quickly when you hear him or her sobbing.
29  Get out of bed at night to go to your child as soon as you hear him or her crying.
30  Make special efforts to stay with your child when he or she is ill.

Factor 4: Reasoning Guidance

Item Number

6  Explain to your child the consequences related to his or her behavior.
12  Listen without interrupting when your child tells you reasons for his or her misbehavior.
15  Listen to your child when he or she is upset even though you feel he or she has nothing to be upset about.
22  Point out to your child the acceptable choices of behavior when he or she misbehaves.
23  Talk with your child about his or her fears of the dark, of animals or of school failures.
26  Ask your child for his or her reasons when he or she misbehaves.
28  Ask your child for his or her opinion in family decisions.
32  Consider suggestions made by your child.
34  Tell your child why you are angry, irritable, or impatient when he or she is not to blame.
35  Help your child to recognize another person's point of view.

Factor 5: Intimacy

Item Number

21  Hold, pat or hug your child.
31  Hug or kiss your spouse in the presence of your child.
36  Hold, pat and/or hug your child when other children are watching.
### Column (Card I) Description Coding

1, 2 Card

3, 4, 5 Family number

6 Sex of child
   1 = male
   2 = female

7, 8, 9 Age of child
   In months

10 School
   1 = Hogian
   2 = Anson
   3 = Fisher
   4 = Franklin
   5 = Hansen
   6 = Rogers

11, 12 Father's occupation
   See attached for coding instructions

13 Blank

14 - 21 Evaluation:
   Stories 1 - 8
   1 = not naughty
   2 = little naughty
   3 = very naughty
   4 = very, very naughty

22 - 37 Judge I
   Eight Stories
   1 - 99 raw data

38 - 53 Judge II
   Eight Stories
   1 - 99 raw data

54 Blank

55 - 72 Teacher rating:
   Items 1 - 9
   Raw data 1 - 99

73 Blank

74 - 79 Father form of IPBI
   Items 1 - 6
   Raw data 1 - 5
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<tr>
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<td></td>
</tr>
<tr>
<td>14 - 43</td>
<td>Father form IPBI</td>
<td>Raw data 1 - 5</td>
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<tr>
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<td>Items 7 - 36</td>
<td></td>
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<td>44 - 79</td>
<td>Mother form of IPBI</td>
<td>Raw data 1 - 5</td>
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<td>Items 1 - 36</td>
<td></td>
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