RAPP, Linda Ruth, 1948-
AN INVESTIGATION OF THE DEVELOPMENT OF MORAL
CONDUCT AND MORAL JUDGMENT AMONG TRAINABLE
MENTALLY RETARDED CHILDREN.
The Ohio State University, Ph.D., 1975
Psychology, social

Xerox University Microfilms, Ann Arbor, Michigan 48106
AN INVESTIGATION OF THE DEVELOPMENT OF MORAL CONDUCT AND MORAL JUDGMENT AMONG TRAINABLE MENTALLY RETARDED CHILDREN

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of the Ohio State University.

By

Linda Ruth Rapp, B.S., M.A.

* * * * *

The Ohio State University

1975

Reading Committee

Henry Leland, Ph.D.
George G. Thompson, Ph.D.
Dorothy W. Jackson, Ph.D.

Approved by

Advisor
Department of Psychology
ACKNOWLEDGMENT

The author wishes to express her sincere thanks to the members of her committee, Dr. Henry Leland, major advisor; Dr. George Thompson and Dr. Dorothy Jackson for their assistance throughout this thesis.

Gratitude is also extended to the staff and students of The Franklin County Program for the Mentally Retarded for their participation and cooperation. The author also wishes to thank Miss Mary Kellar for her assistance in the collection of the data and Mrs. Mary Kellar for the typing of the final manuscript.

Special recognition and appreciation are extended to Dr. Francis Bennett for his critical advice and assistance in statistical analysis. Without his understanding, patience, and encouragement during difficult times, this thesis would not have been possible.

Finally, appreciation is also expressed to Ms. Linda Bott for her assistance in completing the various administrative requirements.
VITA


1970 . . . . . . . B.S. St Lawrence University, Canton, New York.

1971 . . . . . . . Research Assistant, College of Administrative Science, The Ohio State University, Columbus, Ohio.

1971-1973 . . . . Psychology Trainee, Nisonger Center, The Ohio State University, Columbus, Ohio.

1973 . . . . . . . M.A. The Ohio State University, Columbus, Ohio.

1973 . . . . . . . Psychology Internship, Parsons State Hospital & Training Center, Parsons, Kansas.

1973-1975 . . . . Psychology Intern, Franklin County Program for the Mentally Retarded Columbus, Ohio.

1975 . . . . . . . Developmental Psychologist, St. Lawrence County Mental Health Services, Potsdam, New York.

FIELDS OF STUDY

Major Field:

Undergraduate: Psychology, Sociology

Masters: Developmental Psychology

Doctors: Developmental Psychology
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>VITA</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>viii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xi</td>
</tr>
<tr>
<td>Chapter I STATEMENT OF THE PROBLEM</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td></td>
</tr>
<tr>
<td>Statement of Purpose.</td>
<td></td>
</tr>
<tr>
<td>Need for The Study</td>
<td></td>
</tr>
<tr>
<td>Statement of Hypothesis</td>
<td></td>
</tr>
<tr>
<td>Chapter II REVIEW OF LITERATURE</td>
<td>15</td>
</tr>
<tr>
<td>MORAL JUDGMENT</td>
<td>18</td>
</tr>
<tr>
<td>Theoretical Orientation</td>
<td></td>
</tr>
<tr>
<td>Piaget</td>
<td></td>
</tr>
<tr>
<td>Kohlberg</td>
<td></td>
</tr>
<tr>
<td>Measurement of Moral Judgment Research</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Intelligence</td>
<td></td>
</tr>
<tr>
<td>SES</td>
<td></td>
</tr>
<tr>
<td>Peer Interaction</td>
<td></td>
</tr>
<tr>
<td>Transitional Processes</td>
<td></td>
</tr>
<tr>
<td>Consistency across Moral Attributes</td>
<td></td>
</tr>
<tr>
<td>Kohlberg's Model</td>
<td></td>
</tr>
<tr>
<td>Studies Using Retarded Samples</td>
<td></td>
</tr>
</tbody>
</table>
Procedures for Data Collection
   Administration of Moral Conduct
   Test
   Moral Conduct Scoring
   Administration of Moral Judgment Stories
   Moral Judgment Scoring

Treatment of Data

IV RESULTS ............................................. 129
   MANOVA
   ANOVA
   Pair Comparison for Age
   Linear Trend
   Correlational Analysis
   Factor Analysis

V DISCUSSION & APPLICATIONS. ............... 159

   Moral Conduct
      Sex
      Age
      Race and SES

   Moral Judgment
      Sex
      Age
      Race and SES

   Relationship between judgment and conduct
   Factor Structure
   Implications
   Limitations and Further Research

SUMMARY ............................................... 175
<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>178</td>
</tr>
<tr>
<td>B</td>
<td>188</td>
</tr>
<tr>
<td>C</td>
<td>190</td>
</tr>
<tr>
<td>D</td>
<td>192</td>
</tr>
<tr>
<td>E</td>
<td>194</td>
</tr>
<tr>
<td>F</td>
<td>198</td>
</tr>
<tr>
<td>G</td>
<td>201</td>
</tr>
</tbody>
</table>

<p>| BIBLIOGRAPHY | 203 |</p>
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Means and Standard Deviations of Age and IQ</td>
<td>115</td>
</tr>
<tr>
<td>2</td>
<td>Inter-rater Reliability Coefficients on Moral Conduct Measures</td>
<td>119</td>
</tr>
<tr>
<td>3</td>
<td>Inter-rater Reliability Coefficients for Moral Judgment Stories</td>
<td>122</td>
</tr>
<tr>
<td>4</td>
<td>Test-Retest Reliability Coefficients for Moral Judgment Stories</td>
<td>123</td>
</tr>
<tr>
<td>5</td>
<td>Analysis of Variance for Age Based on Behavioral Responses in Moral Conduct Situations</td>
<td>132</td>
</tr>
<tr>
<td>6</td>
<td>Analysis of Variance for Age Based on Verbal Responses to Moral Conduct Stories</td>
<td>133</td>
</tr>
<tr>
<td>7</td>
<td>Analysis of Variance for the interaction of Sex and Age Based on Behavioral Responses in Moral Conduct Situations</td>
<td>136</td>
</tr>
<tr>
<td>8</td>
<td>Analysis of Variance for the Interaction of Sex and Age Based on Verbal Responses to Moral Conduct Stories</td>
<td>137</td>
</tr>
<tr>
<td>9</td>
<td>Analysis of Variance for Sex Based on Behavioral Responses in Moral Conduct Situations</td>
<td>138</td>
</tr>
<tr>
<td>10</td>
<td>Analysis of Variance for Sex Based on Verbal Responses to Moral Conduct Stories</td>
<td>139</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>11</td>
<td>An analysis of Variance for Age in Moral Conduct Situations with Black Subjects Deleted</td>
<td>140</td>
</tr>
<tr>
<td>12</td>
<td>An analysis of Variance for Age on Moral Conduct Stories with Black Subjects Deleted</td>
<td>141</td>
</tr>
<tr>
<td>13</td>
<td>An analysis of Variance for Age in Moral Conduct Situations with SES Levels 1 and 3 Deleted</td>
<td>142</td>
</tr>
<tr>
<td>14</td>
<td>An analysis of Variance for Age on Moral Conduct Stories with SES Levels 1 and 3 Deleted</td>
<td>143</td>
</tr>
<tr>
<td>15</td>
<td>Means and Standard Deviations for Three Age Groups Based on Behavioral Responses in Moral Conduct Situations</td>
<td>146</td>
</tr>
<tr>
<td>16</td>
<td>Means and Standard Deviations for Three Age Groups Based on Verbal Responses to Moral Conduct Stories</td>
<td>147</td>
</tr>
<tr>
<td>17</td>
<td>Polynomial Analysis for Trends for Three Age Levels Based on Behavioral Responses in Moral Conduct Situations</td>
<td>148</td>
</tr>
<tr>
<td>18</td>
<td>Polynomial Analysis for Trends for Three Age Levels Based on Verbal Responses to Moral Conduct Stories</td>
<td>149</td>
</tr>
<tr>
<td>19</td>
<td>Correlation Coefficients Between Behavioral Responses in Moral Conduct Situations and Verbal Responses to Analogous Moral Conduct Stories</td>
<td>154</td>
</tr>
<tr>
<td>20</td>
<td>Rotated Factor Matrix for Moral Conduct and Moral Judgment Variables for the Total Group</td>
<td>155</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Linear Trends for Moral Conduct Situations Across Three Age Levels of TMR Children</td>
<td>152</td>
</tr>
<tr>
<td>2</td>
<td>Linear Trends for Moral Conduct Stories Across Three Age Levels of TMR Children</td>
<td>153</td>
</tr>
</tbody>
</table>
CHAPTER I

STATEMENT OF THE PROBLEM

INTRODUCTION

For hundreds of years, morality was the central category for defining social relationships and development. Many theorists of the early twentieth century considered morality to be the key to understanding social development. This approach is indicated in a statement by McDougall (1908):

The fundamental problem for social psychology is the moralization of the individual into the society into which he is born as an amoral and egoistic infant. There are successive stages, each of which must be traversed by every individual before he can attain the next higher: (1) the stage in which the operation of the instinctive impulses is modified by the influence of rewards and punishments, (2) the stage in which conduct is controlled in the main by anticipation of social praise and blame, (3) the highest stage in which conduct is regulated by an ideal that enables a man to act in the way that seems to him right regardless of the praise and blame of his immediate social environment (p. 10).
Moral development is only one aspect of the child's growth and it may be affected by the course of other aspects of development, intellectual, emotional and social. Moral development is a complex subject which is defined by different people in various ways and is determined by the interaction of a great number of influences. This study uses a multi-dimensional approach to moral development. Some of the components of moral development are moral knowledge, behavioral conformity, social awareness, empathy and role playing. Some of the prerequisites necessary for moral development include cognitive and conceptual skills and attributes of personal development, such as social adjustment and social maturity.

Moral development and other forms of socialization are viewed as the "process by which a child becomes an individual who fits into his society, who shares its beliefs and values, and who has acquired and uses skills that are important for maintenance of the society" (Baldwin, 1968, p. 325). The term moral often refers to behavior which is considered
right or wrong in relationship to society's norms and values.

Simpson (1974) points out that morality is the product of interaction with the social environment, and emphasizes the importance of this interaction for development. Recent models of moral development (Hogan, 1974; Kohlberg, 1963a; Piaget, 1948) have also emphasized that moral development is a continuous process of adjusting internal conditions to external demands and these adjustments are made necessary by changes which occur in both the organism and the environment. However, most research efforts have generally reflected singular concern for only one aspect of moral development at a time, such as moral conduct or moral judgment. Studies dealing with moral judgment (Kohlberg, 1963b; Piaget, 1948) have presented evidence that moral judgment proceeds through a hierarchical sequence of stages. Most research on moral conduct (Hartshorne and May, 1928; Aronfreed, 1968) has not reported a developmental trend. Recently, however, a longitudinal study (Stephens, 1974) on the development of Piagetian reasoning, moral judgment and moral conduct among
children, aged six to twenty, reports a developmental trend for both moral judgment and moral conduct.

Historically, mentally retarded persons were thought to have immoral tendencies, to lack self-control, and to be a social menace to society (Bul-lard, 1910). By about 1920, workers in the field of retardation recognized that these characteristics of the retarded were false and that retarded persons could be integrated into community life. Today, mental retardation is viewed as a social concept that is derived from the critical demands and specific needs of the community (Leland, 1973). It is this social orientation that is employed in this study. Mental retardation refers to "significantly subaverage intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period" (Gross-man, 1973, p. 5).

The impact of the AAMD definition of mental retardation has been to focus greater attention on social adaptation and competency and to the development of educational programs to enhance the social
competency of the retarded. In a society in which social competency is emphasized, persons who display a deficit in social competence is manifested by: (1) the extent to which an individual is able and willing to conform to the customs, habits, and standards of behavior which prevail in his particular society, and (2) by the degree to which he is able to do so independently of direction, and (3) by the extent to which he participates constructively in the affairs of his community (Gunzberg, 1973). If social competence is to be achieved, it will be essential that the retarded person learn to conform to the customs, habits, and standards of the community in which he lives. One aspect of moral development can be defined in terms of conformity, i.e., behavioral, affective, or cognitive conformity to the moral standards of the child's culture. Thus, moral development plays an important role in the social competence of the retarded and needs to be investigated.

The particular constructs of moral judgment and moral conduct have received minimal attention by researchers in the field of retardation. There are only
a few studies reported that have used a retarded sample. Abel (1941) and Boehm (1967) investigated moral judgment among educable mentally retarded children. Abel, extending Piaget's research to the area of retardation, supports the postulate that moral judgment follows a developmental course. A conclusion derived from Boehm's research is that if intellectual capacity alone serves as a predictor of performance, retarded adolescents (IQ 50 to 75) exceed expectations on moral judgment tasks. Therefore, Boehm suggested that appropriate life experiences might partially compensate for intellectual deficits as they relate to the development of moral judgment. In a study noted earlier, Stephens and her associates (1974) also investigated developmental gains in the reasoning, moral judgment, and moral conduct of retarded children. Stephens is running a longitudinal study to provide a comparative analysis of changing growth patterns characteristic of retarded and non-retarded persons. Mahaney and Stephens (1974) report differences between normal and retarded children on measures of moral judgment but indicate that both the normal and retarded sample show developmental trends.
This parallels Inhelder's (1968) research on cognitive development comparing normal and retarded children. In the investigation of moral conduct of retarded and normal children, Moore and Stephens (1974) report that there is equivalence in the conduct of normal and retarded children of comparable mental ages and that moral conduct is developmental, i.e., conduct improves with increased mental and chronological age.

Although efforts to measure moral development in an educable mentally retarded (EMR) population appear inadequate, the investigation of moral development in trainable mentally retarded (TMR) is nonexistent. Therefore, there is a need to determine whether present measures of moral development can be used with a TMR population in order to determine the level of moral development attained and to develop programs individually designed to promote growth in this area.

STATEMENT OF PURPOSE

The purpose of this present study is to investigate the development of moral conduct and moral judgment among TMR children.
Sub-problems to be Investigated

1. Are there differences in moral conduct among TMR children at different levels as measured by a subject's behavioral response in structured situation?

2. Are there differences in moral judgment among TMR children at different age levels as measured by verbal responses to moral conduct stories?

3. Are there differences in moral conduct and moral judgment between TMR boys and girls at a given age?

4. If there are age differences, do these differences follow a developmental sequence?

5. Is there a relationship between moral conduct and moral judgment among TMR children, i.e., the relationship between stated opinions of expected behavior and the subject's conduct in similar contrived situations?

NEED FOR THE STUDY

A total training program for the mentally
retarded must be responsive to the requirements established by society for assimilation of the retarded. A program must take into account the cognitive, social, and affective deficiencies of retarded children which interfere with them being assimilated into society. Goldstein (1969 b) has stated that the two pervasive characteristics necessary for social maturity in a society such as ours are the abilities to think critically and to act independently. It is expected that the individual read the environment, recognize the criteria for social adjustment and then perform in such a way that one does not attract the disapproval which awaits someone who threatens social equilibrium. If the individual's perceptions of the environment are accurate and if his actions and coping strategies are in harmony with the world around him, the retarded individual is likely to be assimilated into society. Leland and Smith (1974) refer to this as the visibility - invisibility of the retarded. If one views social maturity as one of the prerequisites of moral development, moral conduct and moral judgment depends on the individual's ability to think critically and act independently in
in adjusting to the demands of the environment.

A systematic evaluation of factors in the environment that significantly affect an individual's social adaptation is an integral aspect of psychology. In order to investigate the impairment in adaptive behavior of the retarded, it is necessary to determine the critical demands that are made on the person. Leland (1973) has pointed out that one type of critical demand concerns the survival of the community itself. Certain types of social behaviors, certain types of moral behaviors, and certain types of functional activities must be carried on if the community is going to survive. If an individual seems incapable of these behaviors, he is thought to endanger the existence of the community. Leland (1973) points out that the specific demands on which the community places the greatest importance can be defined and can serve as the basis of training programs to help the individual meet these demands. This reflects the reversible aspect of mental retardation.

The concept of adaptive behavior refers to the effectiveness with which the individual copes with the natural and social demands of his environment and
includes the degree to which the individual is able to function and maintain himself independently and the degree to which he meets satisfactorily the culturally imposed demands of personal and social responsibility (Heber, 1961). Adaptive behavior can be broken down into three major elements: independent functioning, personal responsibility and social responsibility (Leland, 1968). Social responsibility is defined as:

The ability of the individual to accept the responsibility as a member of a community group and to carry out appropriate behavior in terms of these group expectations. Social responsibility can be reflected in levels of conformity, socially positive creativity, social adjustment and emotional maturity (Leland, 1968, p.14).

A socially responsible person has learned what is expected of him in terms of the accepted mores of the community. This would also pertain to the mores which are included in moral conduct. Therefore, if a person has a deficit in this area of social responsibility or cultural responsivity (Cromwell, 1967), this represents a deficit in moral development.

If the general objective of the rehabilitation of the retarded is viewed as the acquisition and
and development of behaviors, skills, attitudes, and awareness which will enable the individual to cope effectively with the natural and culturally imposed demands of his society, deficits in moral development require specific training programs which will train the individual in situational problem solving and planning. Prior to training the retarded, it is necessary to determine an individual's level of moral functioning. If this level is found unacceptable in terms of community demands or age-critical demands, remedial activities could be instigated which take the persons' present level of moral functioning as a baseline and supply structured experiences which are devised to promote step-by-step development, rather than immediately trying to instill total self-control or responsibility. Therefore, an investigation of the development of moral judgment and moral conduct among TMR children can determine the developmental nature of these levels of functioning and serve as possible remedial programs in order for the individual to cope effectively with the cultural demands of the environment.
STATEMENT OF HYPOTHESES

The hypotheses below stated in null form, are a restatement of the problems presented earlier in this chapter.

Hypothesis I
There is no significant difference between age levels on the construct of moral conduct as measured by observed behavior in structured situations.

Hypothesis II
There is no significant difference between age levels on the construct of moral judgment as measured by verbal responses to moral conduct stories.

Hypothesis III
There is no significant developmental trend for age on the construct of moral conduct as measured in this study.

Hypothesis IV
There is no significant developmental trend for age on the construct of moral judgment as measured in this study.

Hypothesis V
There is no significant difference between sex and moral conduct as measured in this study.
**Hypothesis VI**

There is no significant difference between sex and moral judgment as measured in this study.

**Hypothesis VII**

There is no significant relationship between observed behavior in structured moral conduct situations and verbal responses to moral conduct stories.
In this chapter the various theoretical positions and major research studies concerning the psychological processes in moral development will be reviewed. Three major theoretical approaches and their offshoots have guided most of the research in this area: cognitive developmental theory, psychoanalytic theory and learning theory. Each approach based on different philosophical doctrines has its own way of defining morality which thus guides its research interests.

The cognitive-developmental researchers, such as Piaget, define a moral act as "one based on a conscious prior judgment of its rightness or wrongness." (Hoffman, 1969, p. 261). Their objective is to examine the higher mental processes and thought structures which underlie the moral response.

Psycholanalysts have defined morality as conformity to cultural standards and have conceptualized the problem in internalization terms. According to Freud,
the child is dominated by the id (sexual and aggres­sive impulses which seek immediate gratification) and
the child's anarchic tendencies must be transformed be­fore he can take his place in society. The superego
which represents the standards and primitive functions of
the moral process, is acquired through a strong identi­fication with one's parents which resolves the oedipal
conflicts (Freud, 1923, 1924). The major research
focus generated from this approach is on the guilt
that results from the violation of these standards.

Learning theorists view morality in terms of spe­cific behaviors which are learned on the basis of re­wards and punishment. Various research approaches have
investigated conditioning, punishment and modeling as
factors in internalization. The typical research pro­
cedure is to use direct or vicarious reinforcement,
with little or no accompanying rationale to chart be­
haviors in the lab which are "good" in terms of some
culturally shared standard of conduct (Hoffman, 1969).

As Kohlberg 1964 and Hoffman (1969) point out,
the guiding concept in most moral development research
is the internalization of social standards, Kohlberg
states that morality has generally been defined as
conscience, as a set of cultural rules of social action which have been internalized by the individual. Moral development has been conceived as the increase in such internalization of basic cultural values.

Various researchers have stressed different aspects of internalization, namely, the behavioral, emotional and judgmental aspects of moral action which have given direction to studies in the following areas: moral conduct, moral emotion, and moral judgment. This review plans to analyze the areas of moral conduct and moral judgment. However the author refers the reader to recent papers by Hoffman (1969) and Kohlberg (1964) for an extensive discussion of moral emotion. Furthermore the relationship between moral conduct and moral judgment will be examined. Although research pertaining to the moral development of retarded subjects has been minimal, these empirical studies will also be reviewed.
MORAL JUDGMENT

The development of moral judgment in the child has been of considerable interest to the social scientist. Studies in this area focus on the cognitive aspects of moral development and are concerned with moral reasoning and decision processes. The cognitive-developmental approach to moral development, as exemplified in the writings of Piaget and Kohlberg, forms the basis for most of the moral judgment research. From their perspective, the development of moral judgment cannot be explained by the "developmental" view of moral learning as simply the internalization of cultural rules through verbal learning reinforcement, or identification. Piaget (1948) and Kohlberg (1963) examine developing morality from a structural point of view, focusing on an examination of the modes of thought underlying moral responses. Both of these men maintain that the organization of a child's thought is qualitatively different from that of an adult and that the study of moral development must include a sequential analysis of developmental changes. The study of moral development from this point of view
requires investigation of the organism's efforts to organize and regulate social experiences. It is through active coping with a social environment and attempts to order and organize social experiences, that the child comes to develop moral structures composed of both affective and cognitive components. These moral structures are generated through interaction with the social environment. The developing child imposes his own structure on the environment and this structure changes qualitatively as a result of one's social experiences. Thus, moral development is assumed to be a self-constructive process involving changing emotions and conceptions. Developmental changes are considered to be the result of the growing child's interaction with a social and moral environment. Turiel (1966) defines "moral environment" as an environment that presents rules, standards, values and principles. An individual's moral response should be examined in light of how one perceives the moral situation, what the meaning of the situation is to the person responding, and the relation of one's choice to that meaning - both cognitive and emotional processes in making moral judgments.
Hoffman (1969) states that the cognitive-developmental approach to moral ideology involves "the analysis of thought structures underly­ing the moral concepts of persons at different age levels in order to define a general direction of movement" (p.264). These structures, or stages, are characterized as follows. Just as cognitive structures are not copies of reality (Piaget, 1947), these moral stages do not represent successive acquisitions of patterns presented to the child by his particular culture. Rather they represent qualitatively different modes of organizing the social and moral world through which the child passes. The series of stages form an invariant sequence in which the attainment of a stage is dependent on the attainment of the preceding stage. Each child normally must pass through one stage before moving on to the next one. However, movement from one stage to the next does not involve an addition to an earlier stage, but is a reorganization displacing the less advanced stage. Thus the stage approach assumes that each individual must pass through the stages in the prescribed sequence. However, it is the order of the stages that is constant, while the age at which
the stage appears is not fixed. The particular age at which a stage appears is influenced by the child's environment and level of cognitive development. Within this developmental framework, development is a function of the child's interaction with his environment. Moral thought is neither wired-in to the organism nor a copy of reality. The development of moral thought involves assimilating and integrating the external world to the structure of the organism.

THEORETICAL ORIENTATION

Piaget: Stage Theory

Piaget is the chief exponent of the cognitive developmental approach to moral development. According to Piaget the essence of morality includes "both the individual's respect for the rules of social order and his sense of justice, that is, a concern for reciprocity and equality among individuals" (Hoffman, 1969, p. 265). Piaget's main interest is in the developmental shift in the basis of these two aspects of morality - from respect and submission to authority, to self-government and control.
In 1932, Piaget presented a series of brief stories, centering on a moral issue, to more than 100 Swiss children, and on the basis of their responses to his questions, distinguished two broad stages of moral development (in addition to an earlier motor or "ritual" period) which encompass both the respect for rules and sense of justice. In the first stage which begins about age 2, referred to as moral realism, morality of constraint or heteronomous morality, the child views moral rules and restraints as sacred and unalterable and thus he must comply to them. The child views behavior as totally right or wrong and believes everyone views them in the same way. The rightness or wrongness of an act is based on the magnitude of its consequences, the extent to which it conforms exactly to established rules, and whether or not it elicits punishment (Hoffman, 1969). In accordance with the principle of "immediate justice", the child believes that violations of social norms are followed by physical accidents or misfortunes willed by God or other inanimate object and that the severity of punishment varies directly with the enormity of the consequences of action regardless of the motive. At
this immature level, moral rules are adhered to solely through fear of external punishment by superordinate authority.

In contrast, the child in the more mature stage, (around age 11) called autonomous morality, morality of cooperation, or reciprocity, views rules as compacts arrived at and maintained through reciprocal social agreement. The rules may be changed by mutual consent and modified in light of extenuating circumstances. The child abandons his view of moral absolutism and recognizes that judgments of right or wrong are determined both by the consequences of the act and the intention or lack of intention to deceive. Another difference between the heteronomous and autonomous child is that for the autonomous child duty and obligation tend to revolve around conformity to peer expectations and welfare and putting oneself in the place of others. Also the autonomous child no longer believes that punishment is impersonally ordained. Punishment, instead of being generalized and "expiatory", is specific to the infraction aimed at reciprocity in kind or restitution, and is guided by the principle of "equity" involving consideration of the underlying
motive of the act or of particular circumstances. Moral principles are internalized so that the child acts morally without the necessity of external sanctions; thus, moral behavior is its own reward.

In summary, Piaget made observations of age changes in eleven different aspects of development of moral judgment which are implied by his stage concepts. The first five attributes listed pertain to the observable aspects of the child's definition of right and wrong (respect for rules) and the other six attributes pertain to the child's sense of justice. The eleven attributes are listed with the heteronomous stage characteristics first and the autonomous stage characteristics placed in parentheses.

Rules

1. **Objective responsibility** (as opposed to internalism).
2. **Absolutism of value** (as opposed to relativism).
3. **Unchangeability of rules** (as opposed to flexibility).
4. **Moral wrongness defined by Sanctions** as opposed to moral judgments made independently of sanctions).
5. **Duty defined as obedience to authority** (as opposed to duty defined in terms of conformity expectations of peers).
6. Ignoring reciprocity in defining obligations (as opposed to defining obligations in terms of the rights of contract and exchange).
7. Expiative justice (as opposed to restitutive justice).
8. Immanent justice (as opposed to naturalistic causality).
9. Belief in collective responsibility (as opposed to individual responsibility).

Piaget: Stage Transition

Piaget posits that both maturation and experience play a role in the transition of stages. Maturation is considered important as it affects the developing cognitive capacities of the child. The experiential variable that Piaget specifically singles out as important is the child's shift from interaction primarily with adults (imposition of standards), to increasing interaction with peers (mutual give-and-take). Piaget frequently restates the importance of these two forces in moral development but he does not attempt to systematically explain the process by which these two
factors interact to move the child through moral realism to moral autonomy.

Cognition

Hoffman (1969) points out that there are two major cognitive limitations which underlie the child's moral realism - egocentrism and realism. As a result of these two factors, he assumes that others views are the same as his about whether an act is right or wrong and he confuses subjective and objective aspects of experiences. The child perceives the pain following transgressions to be the same as violations of physical law. Therefore he confuses natural catastrophe with moral punishment and believes in immanent justice. A major prerequisite for moral growth is giving up egocentrism and realism which involves the development of a concept of the self. A child must be able to go beyond his own immediate point of view, his thinking must become less absolute and more relativistic in nature and that he must be able to recognize that other individuals have points of view and perspectives about an event that differs from his own.
Peer Interaction

Piaget believes that the development of "mutual respect" toward others leads to an "autonomous" regard for the rules as products of group agreement and as instruments of cooperation and that this development arises largely through peer group interaction. Piaget distinguishes two processes which take place in peer interaction. The first process, development of "mutual respect:, has already been mentioned. The second process, which is multi-faceted, deals with the importance of taking alternate and reciprocal roles. Other literature, mostly theoretical in nature, also pictures the peer group experience as constructive perhaps essential in the moral development of children. Parsons and Bales (1955) have argued that in the peer group, the child finds himself in a situation, in which the gross differentials of power and authority, which characterize his relations with adult rule-enforcers at home and school, are absent. Leadership and authority in the peer group are more likely to be based upon relevant, universalistic criteria of merit and the willing consent of the participants. It is specifically this
greater mutual control and acceptance in the peer group which helps the child achieve the notion of common subjection to a general rule. Eisenstadt (1956) argues that the peer group experience plays an important role in complex societies in which major adult activities are organized on a non-kinship basis. Eisenstadt states that the peer group, which is like the kin group in that it is small and has affectively loaded interpersonal relationships but without the institutional authority, is functional as a kind of a transitional buffered learning situation between family authority and participation in the broader adult society.

Thus according to Piaget, the interaction of these factors, the changing cognitive capacities away from egocentrism, the amount of adult constraint, and the amount of peer group cooperation and reciprocity, cause developmental differences in the type of moral judgment used by children of different ages.

In summary, Piaget views moral development as:

... the outcome of an active process involving the development of certain cognitive capacities in conjunction with the exposure to new modes of social experience which provide the basis for a broadened perspective.
on authority and an enhanced ability to take the role of others. (Hoffman, 1969, p. 269).

Cognitive development helps the child to make sense out of new experiences and integrate them with his prior views. It should be pointed out that social experience does not lead directly to a new moral orientation but stimulates and challenges the individual to reorganize his pre-existing patterns of moral thought. Though not stressed by Piaget, it would seem to follow from his theory that deficits in cognitive development or social experiences could result in retarded development in moral judgment.

Kohlberg

Perhaps the most influential and systematic extension of Piaget's theory of moral development can be found in the research of Kohlberg (1963a, 1963b, 1964, 1969). Kohlberg (1969), while accepting the basic cognitive-developmental approach, states that Piaget's two-stages of moral judgment have not met the criteria of stage theory and that a number of the dimensions of moral judgment which Piaget studied are really matters of content rather than cognitive
form. Kohlberg (1964) states that Piaget's theory is validated only in its description of the young child's morality as oriented to obedience and to punishment and as ignoring subjective ends and values, and in its assumption that these features in various cultural settings. Kohlberg (1971) lists the following postulates which need to be included in a cognitive-developmental theory of moralization. First, stages of moral development must represent cognitive structural transformations in conception of self and society. Second, these stages must represent successive modes of taking the role of others in social situations and that the social environmental determinants of development are its opportunities for role taking. Third, it must be assumed that the child actively engages in the structuring of his perceived environment.

Moral stages represent the interaction of the child's structuring tendencies and the structural features of the environment which leads to successive forms of equilibrium in interactions. This equilibrium is conceived as a level of justice in
which some optimal level of match or discrepancy is necessary for change between the child and his environment. Kohlberg defined six different stages of moral judgment which would meet these criteria. The six stages are ordered into three levels of moral orientation as follows:

Level I  Premoral
Type 1. Punishment and obedience orientation.
Type II  Naive instrument hedonism.

Level II  Morality of Conventional Role-conformity.
Type 3. Good boy morality of maintaining good relations, approval of others.
Type 4. Authority maintaining morality.

Level III  Morality of Self-Accepted Moral Principles.
Type 5. Morality of contract, of individual rights, and of democratically accepted law.
Type 6. Morality of individual principles of conscience. (Kohlberg, 1964, p. 400).

His final system consists of these six developmental stages, each of which is defined in terms of its position on 30 different moral attributes, including those used by Piaget and those mentioned by children in their interviews.

A more extensive discussion of the basic themes and major attributes of the levels and stages are as follows.
Kohlberg's stage 1 is similar to Piaget's heteronomous stage in view of their obedience orientation, although they differ on their interpretation of obedience. Piaget feels that because of the young child's strong emotional respect for authority, he feels unable to judge for himself and tends to rely on adult sanctions to define right and wrong. Kohlberg believes that Piaget reads too much respect for rules and authority into the young child. Kohlberg sees the young child as lacking respect for authority except in the recognition that parents represent power. According to Kohlberg, the young child's definition of wrong is seen in terms of punishment which reflect a realistic and hedonistic desire to avoid punishment and not a reverence for the adult's views. Hoffman (1969) points out that Piaget sees the young child's morality as externally oriented in the cognitive sense, the standard conformed to is an external command, but not in the motivational sense, the child conforms out of respect. However, Kohlberg sees the young child's morality as external in both a cognitive and motivation sense.
resembles Piaget's autonomous stage with respect to relativism and reciprocity. But Kohlberg criticizes Piaget as crediting these children with too much of these attributes at ten or twelve, (who according to Piaget is well into the autonomous stage) is still quite removed from this type of autonomous and mature morality. This type of high level autonomy is not developed until the last three stages in Kohlberg's system. In summary, elements of Piaget's heteronomy can be found in Kohlberg's stages 2-6. Kohlberg believes that Piaget's moral stages place too much stress or social determinants and that only the most cognitive of his moral attributes satisfy the criteria of stages. In Kohlberg's model, cognitive factors clearly predominate.

Kohlberg: Stage Transition

Kohlberg views movement from one stage to the next as largely an outgrowth of cognitive development. He views the function of the environment and social interaction as sources of raw material upon which cognitive processes operate. The emphasis on social interaction does not mean that stages of moral judgment directly
represent the teaching of values by parents or of their direct "introjection" by the child as psychoanalytic theory proposes. Piaget (1948), Mead (1934) and Baldwin (1906) in their theories of moral stages, view parental training and discipline as part of the social world perceived by the child. The child can internalize the moral values of society and make them his own only as he relates these values to his understanding of the social order and his own goals as a social self. In these stage theories, as in Kohlberg's, the fundamental factor causing such a structuring of the moral order is role-taking. In analyzing the basis of role-taking, Baldwin focuses on the family, Piaget on the peer group, and Mead on the larger social institutions. According to Kohlberg, participation in all groups, whether with peers or authority figures, provides the individual with direct experience in taking alternate roles. It is this social role-taking component which Kohlberg utilizes to help explain the asymmetry between cognitive level and level of moral judgment. Kohlberg views role-taking as an opportunity for the child
to gain first hand knowledge about the socio-moral world and an appreciation for its essential functional rationality. Although participation in all groups is seen as important, Kohlberg does recognize that different levels of participation do exist. Some forms of social participation are quite stimulating to moral development because they provide many stage appropriate opportunities for role-taking. Other forms may lack these opportunities or may arouse anxiety which thus retards progress. Kohlberg has suggested that social role-taking opportunities are in part a function of the quantity or amount of social participation a child experiences and the quality of that social participation would vary according to his centrality in the power structure of his peer group. Kohlberg (1958) reported that the quantity of social participation as reflected by the extent of social participation and social responsibility was associated with accelerated development. Keasey (1971) confirmed this type of finding in his research on social participation and moral development among pre-adolescents.

In summary, Kohlberg states that moral judgment
is a role-taking process which has a new logical structure at each stage (paralleling Piaget's logical stages) and that this logical structure is best formulated as a justice structure which is progressively more comprehensive, differentiated and equilibrated than the prior structure.

Measurement of Moral Judgment

Pittel and Mendelsohn (1966) provide a historical review and critique of measurements of moral values which date back to 1894. With few exceptions, the literature relevant to the measurement of moral values since 1900 can be categorized into three major chronological periods, each of which is characterized by the introduction and predominant use of one type of instrument. Since Pittel and Mendelsohn (1966) have reviewed these periods in great detail, the present review will deal briefly with two of these periods and deal in more detail with that period which is concerned with the Piagetian approach.

The first period extended through the early 1930's and was characterized by the use of paper-pencil assessment devices, most of which were designed to differentiate normal children and adolescents from those with
delinquent or criminal tendencies. To a greater or lesser extent, tests in this period (Fernald, 1912; Pressey and Pressey, 1919; Kohs, 1922; Hartshorne and May, 1929) seemed to be based on the notion that morally relevant behavior was in some way determined by moral knowledge and beliefs, and that moral knowledge and proper moral attitudes were necessary, if not sufficient, to produce moral behavior.

The second period in this development of tests to assess moral values was characterized by a breaking away from the rather naive and primarily atheoretical approaches of the earlier instruments. Two major trends characterized this period: (1) the development of personality batteries which assessed the way subjects felt after violating moral prohibitions and their tendencies to violate moral norms (Murray, 1938; Beller, 1949; Cattell, Saunders and Stice, 1957) and (2) story stimulus followed by an interview (Piaget, 1948; Kohlberg, 1958). Piaget presented children with two stories describing some type of moral behavior, such as lying or stealing, and asked for a comparative evaluation of the two. The stories were so designed that the motivation, intention, and consequences varied while the
nature of the behavior remained relatively constant. The Piaget interview approach emphasized the development of the cognitive component of moral judgment but still followed Fernald's (1912) approach in describing situations which require classification along a dimension of gravity or wrongness. Piaget made no effort to be inclusive in his sampling of morally relevant acts, but each of the acts selected refers to some conventionally defined transgression. The major difference from other instruments lies in the use to which the responses were put. Piaget classified responses in terms of the stage of the child's moral development. Responses were put into classes based on the developmental maturity of their moral judgments which was inferred from their ordering of the two stories and from the intensive unstructured interview which followed. Moral "realistic" responses are those in which moral rules are seen as absolute and immutable. Violations of such rules bring about an immanent justice with the severity of punishment varying directly with the seriousness of consequences, regardless of motivational circumstances. Rules are not internalized during
the stage and are entirely dependent for their enforcement on external sanctions. Moral "relativistic" responses are those in which the child takes extenuating circumstances into account when making moral judgments. Acts are evaluated according to their motives or intentions rather than their physical consequences and punishments are seen as equitable rather than expiatory. Rules are internalized at this stage and are seen as influenced by situational or motivational demands and are arrived at by mutual consent.

The introduction of this interview technique for assessing the cognitive growth of moral judgments within an explicit theoretical framework has been perhaps the single greatest influence in the subsequent investigation of moral values from a psychological perspective.

One investigator who has modified this approach somewhat is Kohlberg (1958) in his development of the Moral Judgment Scale. The purpose of this scale, like Piaget's, is to determine an individual's stage of moral development by examining his moral judgments and reasoning. However in Kohlberg's model, there are six developmental types of value orientations. The Moral
Judgment Scale is a structured projective test consisting of nine hypothetical dilemmas either invented by Kohlberg or adapted from other sources. Kurtines and Greif (1974) criticize this instrument because it lacks standardization of both administration and scoring which thus limits comparison of results across studies. Kurtines and Greif (1974) also criticize the variability and complexity of the scoring system and a lack of reliability estimates.

Magowan and Lee (1970) have discussed some sources of error in the use of the projective method of story completion for the measurement of moral judgment, which has been employed by Piaget, Kohlberg and other researchers. Some of the problems which Magowan and Lee investigated were item content, sex of the identification figure, open ended versus force choice instruments, and degree of projective facility as they effect the dependent variables of moral judgment by age and sex.

The instruments of the third period discussed by Pittel and Mendelsohn (1966) deal with superego development and the internalization of moral standards.
The superego is treated as a more or less unitary dimension consisting of an integrate of moral attitudes, behavioral controls, and effects.

In summary, Pittel and Mendelsohn (1966) point out a number of conceptual and methodological pitfalls in instruments of all three periods. The majority of them have not been sufficiently standardized or validated for extensive use by other investigators. Reliability is lacking for most tests. Orienting instructions, item content or testing situations may tend to elicit socially desirable responses. Many tests sample only a small number of moral areas which limit their generality. In general, the attention devoted by psychologists to the refinement of instruments for the measurement of moral maturity has been sparse when compared with other areas of psychometry and the lack of valid and reliable instruments is a major problem in the study of moral development.

RESEARCH

Empirical Research on Piaget's Theory

The research on Piaget's theory has typically
focused on one or more of the major attributes of his stages (intentionality, relativism, forms of punishment). The objectives of the various studies have been to see if there is a natural tendency for these attributes to appear in the postulated developmental sequence if stage transition is either negatively or positively affected by differences in cognitive development or social experiences, and finally to assess consistency across the attributes within a stage.

Age Trends

An impressive number of studies over a quarter of a century have reported age differences consistent with Piaget's postulated sequence in Western countries (Europe and the U.S.). Studies have usually investigated age changes on a specific dimension of moral judgment.

MacRae (1954) and Lerner (1937) report an age trend for the absolute vs. relative attribute of judgment. They found that a young child viewed an act as either totally right or totally wrong. In contrast, the older child is aware of possible
diversity in views of right and wrong.

Research on the intentionality of judgment (Boehm, 1962; Boehm and Nass, 1962; Grinder, 1964; Johnson, 1962; Lerner, 1937; MacRae, 1954; and Whiteman and Kosier, 1964) showed that this attribute increased monotonically with age, that is, with increasing age, acts are judged in terms of intentions rather than consequences. As an example, young children were asked who was worse - a child who broke five cups while helping his mother set the table or a boy who broke one cup while stealing some jam. Almost all four year olds say the child who committed the larger accidental damage was worse, whereas the majority of nine year olds say the thief was worse.

Research studies have also indicated a change with increasing age in the child's belief in expiatory justice (Harrower, 1934; Johnson, 1962; MacRae, 1954; and Piaget, 1948). Young children advocate severe painful punishment after stories of misdeeds have been presented; older children increasingly favor milder punishment or restitutive justice.

Lerner (1937), MacRae (1954), and Medinnus (1959) found a decrease in the naturalistic view of misfortune
as age increased. Young children believed that deviant acts will cause nature or physical things to injure the offender. Older children do not confuse natural misfortunes with punishment.

A review of the literature concerning Piaget's notion of immanent justice revealed that various studies (Johnson, 1962; Liu, 1950; MacRae, 1954; and Medinnus, 1959) supported Piaget's findings which showed a decrease with age among children in belief of immanent justice. Piaget listed the following percentages of children at the various age levels who affirmed the existence of immanent justice: age six, 86 percent; ages seven to eight, 73 percent; ages nine to ten, 54 percent; and ages eleven to twelve, 34 percent.

Bronfenbrenner (1962) and Hoffman (1969) question the universality of Piaget's stage as a result of a study by Havighurst and Neugarten (1955) which reported some inconsistencies with Piaget's two-stage theory. Other investigators Kohlberg, 1958, 1963; Durkin, 1959a, 1959b, 1959c) have found other attributes (reciprocity) which do not reflect Piaget's postulated sequence. In summary, age trends for several of the Piaget dimensions
are consistent enough to warrant the conclusion that they are "developmental" within the social structure which exists in Western society.

**Sex**

It is somewhat surprising that although Piaget conducted many experiments on moral judgment with children of both sexes, in only one instance does he systematically attend to sex differences in moral responses. In answer to the question of what a smaller boy should do when struck by a bigger boy, the "tendency to consider it legitimate to give back the blows received" increased more rapidly with age for boys than for girls (Piaget, 1948, pp. 301-302). Since that time, research regarding sex differences in moral response has not been conclusive. Medinnus (1959) found girls to be "less advanced than boys in respect to the concept of immanent justice and punishment". Morris (1958) found "no significant differences between boys and girls in age of decreasing moral realism but found a tendency for the values of girls to change earlier than those of boys." Durkin (1960) and Boehm and Nass (1962) reported no significant sex differences in children's responses to moral judgment.
stories. Whiteman and Kosier (1964) found that the percentage of mature responses was greater at each age level for the female group than for the male group but that it was not statistically significant. However, Bull (1969), after an extensive analysis of moral judgment, states that girls were found to be earlier developers in moral judgment than boys but that by age 17, the sexes seem to approximate each other. Therefore, it would seem that further investigation of the influence of sex differences upon moral judgment is warranted.

Measured Intelligence

Hoffman (1969) points out that Piaget cites cognitive development as one of the factors responsible for moral development and thus it should follow that progress through these stages should be accelerated by advanced cognitive development represented by IQ. The relation between IQ and certain moral attributes formulated by Piaget are consistently positive. The following Piaget dimensions were found to be influenced by IQ: relativism of perspective (MacRae, 1954); immanent justice (Abel, 1941 and Johnson, 1962); intentionality (Boehm, 1962; Johnson, 1962; MacRae, 1950;
and Whiteman and Kosier, 1964); and expiative justice (Abel, 1941 and Johnson, 1962).

However, Lee (1968) criticizes these investigators for defining cognitive capacity in terms of performance on standardized intelligence tests. In her research, Lee investigated the relationship between cognitive development, as measured by Piagetian tasks, and moral judgment, as measured by moral conflict studies and found that cognitive and moral development progress concomitantly. More recent research (Keasey and Keasey, 1974) reports that there are high correlations and systematic relationships between the stages of cognitive development and moral judgment.

SES

Several studies have been made on the influence of socioeconomic status (SES) on Piaget's moral attributes. Researchers investigating the following dimensions of moral judgment have found positive correlations: relativism (MacRae, 1950); immanent justice (Johnson, 1962; Lerner, 1937; MacRae, 1950); intentionality (Boehm, 1962; Boehm and Nass, 1962; Johnson, 1962; Lerner, 1937; MacRae, 1954); and retributive justice (Harrower, 1934; Johnson, 1962).
Hoffman (1969) has offered various explanations concerning this correlation. One is that class differences may reflect different parental practices. This explanation is weak due to inconclusive evidence of a correlation between moral judgment and child rearing practices. MacRae (1954) and Johnson (1962) report no correlation between child rearing practices on most of the moral judgment dimensions.

Peer Interaction

Piaget sees peer interaction as one of the forces in producing developmental change in moral judgment. Piaget argued that children's spontaneous rule making and rule enforcing in informal and unsupervised play situations provide a crucially important experience in the development of mature moral judgment. These experiences help the child move away from the earlier stages of moral realism, in which rules were seen as external constraining forces imposed by powerful adult authority figures and toward the notion of a morality based on the principles of cooperation and consent. However, this area has not been extensively researched, but on the whole, research findings have not supported
Piaget's theory with regard to this factor. While peer group participation (measured by friendship choice) is an important factor associated with general development of moral judgment, it has not been found to be specifically associated with advance on measures of intentionality (Kohlberg, 1946) or reciprocity (Kohlberg, 1971). Kohlberg proposes that peer group participation be conceptualized in terms of providing general role-taking opportunities rather than as having very specific and unique forms of influence. Devereaux (1970), in an extensive review of the role of peer-group experience in moral development, reports that there is nothing in the data to lend support to Piaget's theory. But all this still remains largely in the realm of theory and speculation since the empirical evidence concerning the actual consequences of peer group experience on moral development of children is still relatively scarce.

In summary, it would seem from a review of the literature that Piaget's discovery of an age change in moral judgment has been generally confirmed. However, the question of how adult constraint and peer group
cooperation, interact (if they do at all) to produce this change seem largely unresolved.

**Transitional Processes between Stages**

Hoffman (1969) points out that the empirical evidence regarding the process of transition from one stage to the next is unfortunately meager. Johnson (1962) criticized Piaget's view that each stage involves a cognitive reorganization and that moral development is saltatory rather than gradual. Johnson presents evidence, based on cross-section studies that age trends tend to be gradual not saltatory. Hoffman (1969) points out that cross-sectional studies have a built in bias against a saltatory growth hypothesis and that an adequate test of this hypothesis requires a longitudinal approach.

An experimental study bearing on the transitional process between Piaget's stages has been carried out by Bandura and McDonald (1963). These researchers tested second grade children on a series of Piagetian type conflict stories (judged in terms of intention) and found some of the children at the "heteronomous stage" and some at the "autonomous stage." Children
at each stage were then exposed to reinforced models emitting the opposite type of judgment. Bandura and McDonald found substantial learning of the opposite type response. Not only was a "higher stage" readily learned, but it generalized to some new items. Bandura and Walters, interpreting their findings from a social learning framework, concluded that they had demonstrated the reversibility of moral judgment stages and that the developmental sequence proposed by Piaget was not predetermined or invariant. These findings have been replicated by Cowan, Langer, Heavenrich, and Nathanson (1969) who found that these shifts persisted for two weeks and by LeFurgy and Woloshin (1969) who found these shifts persisted for as long as three months.

However, Cowan et al. (1969) contended that Bandura and McDonald's interpretation of Piaget was open to question and that their data had limited relevance to Piaget's position since they viewed such modifications of intentionality largely as surface compliance in response to social coercion. In addition, Bandura and McDonald (1963) appear to equate intentionality with moral judgment generally although intentionality is only one aspect of moral judgment. Whether
changes induced in level of intentionality are paralleled by similar changes in other aspects of moral judgment has received little attention. Prentice (1972) evaluated this question by analyzing the effect of modeling procedures on both intentionality and moral relativism, another attribute of moral judgment, in adolescent delinquents. This researcher reported the usual effect of modeling on intentionality but did not find the effect on moral relativism.

Kohlberg (1971) points out that Bandura and McDonald's research does not show that moral judgment is not an area of structural development, but that Piaget's dimensions and methods are not good measures of structure in this area. Hoffman (1969) notes that certain limitations in the design of these modeling studies limit their conclusions that Piaget's stages do not occur in an invariant and irreversible sequence and that movement through the stages involve a process of successive synthesis.

Consistency across Moral Attributes

If Piaget's stages are truly structured wholes, a certain amount of consistency across these attributes should be found. Two different types of
consistency research have been reported: consistency across content areas within a given attribute and consistency across attribute areas. Johnson (1962) and MacRae (1954) report high consistency within the following attributes: immanent justice and objective responsibility. Boehm and Nass (1962) did not find this consistency for objective responsibility. However, the studies on consistency across attributes reveal varying results. Johnson (1962) report positive relations among the following attributes: immanent justice, objective responsibility, retributive justice and expiatory punishment. MacRae (1954) found that immanent justice, objective responsibility and absolutism were independent of one another.

**Empirical Research on Kohlberg's Model**

Since its appearance in 1958, Kohlberg's stage approach to moral judgment has generally generated research to test its two major assumptions, namely, the invariant sequence and the qualitative nature of the six stages of development. In general, research concerning the influence of IQ, sex, and SES on moral judgment as measured by Kohlberg have been limited.
In 1964, Kohlberg stated that research usually by him or one of his students, indicate that IQ and SES are correlated with the development of moral judgment with regard to IQ, this correlation ranged from .30 to .50 for children at age 12. Kohlberg (1968) reports a curvilinear relation between IQ and level of moral judgment and suggests that IQ is a better indicator of early rate of development than of terminal level. With regard to SES, Kohlberg (1971) found that the direction of age change was the same for lower and middle class children but that middle class children advance at a faster rate.

There are four major forms of evidence to support the assumptions of invariance and reorganization of stages in Kohlberg's model of moral judgment: age trends in various cultures and social classes supporting the order of the stages (Kohlberg, 1968); a Guttman "quasi-simplex" pattern in the correlations between the stages (Kohlberg, 1963); longitudinal studies of individual differences Kohlberg (1970); and experimental evidence from studies by Turiel (1966), Rest, Turiel and Kohlberg (1969) and Rest (1973).

The most important source of evidence comes from
a series of well designed experimental studies (Rest, 1973; Rest, Turiel and Kohlberg, 1969; Turiel, 1966) which attempted a direct test of Kohlberg's stage theoretical assumptions. Turiel's study used 47 middle class boys, (seventh graders) to test two main hypotheses: the six stages form an invariant sequence and each stage represents a reorganization and displacement of the preceding stages. The design involved a pretest to determine the subject's dominant moral stage; an experimental session; and a past-test interview.

The first of Turiel's two major hypotheses (invariant stage sequence) was confirmed and it can be concluded that Kohlberg's stages (only Stage 2, 3, and 4 were used in the study) are successively advanced cognitive levels and children are more likely to progress from one to the next.

The final two studies (Rest, 1973; Rest et. al., 1969) tried to show that the sequence of stages of moral judgment form a hierarchical organization (conceived of as one of complexity). Both studies were similar in design and attempted to assess preference and comprehension. The subjects were administered a
subset of dilemmas from the Moral Judgment Scale in order to determine their dominant stage. They were grouped according to stage and administered a booklet containing two other dilemmas. The subjects read the situations and then read the advice of six friends. The advice was like that in the Turiel Study (+1, -1 or +2). After reading these arguments, subjects stated which advice they thought best (preference) and to recapitulate all the advice given (comprehension). The data suggest that there is some shift in preference and comprehension.

Moral Judgment Studies Using Retarded Samples

Research by Piaget has established that cognitive development proceeds through a hierarchical sequence of stages. Inhelder (1968) applied Piaget's theory of cognitive development to the area of retardation and demonstrated that reasoning in retarded children also follows this hierarchical sequence but that the retarded child fails to progress beyond lower stages of integration. The greater the degree of retardation, the lower the level or stages of integration. In her classificatory system, the moderately
retarded child is seen as incapable of surpassing the preoperational intuitive subperiod and the mildly retarded child is unable to progress beyond the level of concrete operations.

In 1932, Piaget presented his two-stage cognitive theory of moral development. Research presented earlier in this chapter supports the influence of cognitive development on moral judgment. However, the research investigating moral judgment using retarded subjects has been minimal. One of the earliest studies in this area was carried out by Abel (1941). He employed Piaget's technique to study moral judgments made by two groups of educable mentally retarded girls, one institutionalized and the other living at home. Abel investigated the role of institutionalization on moral judgment, the influence of mental age as well as the concommitant effect of social milieu on moral judgment and the relation between the predominant mode of institutional behavior and type of moral evaluations. The subjects were 94 adolescent girls with chronological ages ranging from 15 to 21 years and mental ages from 6 through 11 (IQ range 53-70). Seventy-four of
the subjects were institutionalized at a state institution; the other twenty subjects lived in the community and attended trade adjustment classes. Seven modified Piagetian type stories were individually presented. The subject was asked to repeat the story before the experimenter's informal inquiry. The stories concerned the child's conception of justice and punishment. In the comparison between the institutionalized and community girls, it was found that the institutionalized girls showed consistently greater belief in immanent justice, retributive punishment, and other indices of moral realism. Abel hypothesized that the coercive and restraining atmosphere of the institution fostered moral realism. To see the extent to which longer exposure to such an atmosphere would influence response, Abel compared subjects who had been institutionalized for a shorter or longer period. The frequency of moral realism responses was less for the subjects institutionalized under one year compared to those institutionalized for six or more years. However, the results were not statistically significant. In comparing the subjects living in the community, there were significant results showing a greater frequency of moral
realism responses in the institutionalized group. In their study of the influence of mental age on type of moral response, the chronological age was held constant for two groups of subjects, one group had an M.A. of 6-8 and another group had an M.A. of 9-11. The results indicate that to some extent, a shift in the type of judgment response does take place with increase in M.A. but not with reference to all of the attributes proposed by Piaget, such as immanent justice. The final comparison was made between two types of institutionalized girls matched on M.A. and C.A., namely the "obedient" patient and the "recalcitrant" patient. It was found that the recalcitrant girls made a greater number of moral judgments based on a subjective intent than did the obedient girls.

Boehm (1967) investigated moral responses to four stories (two of which test for intentionality and the two for peer reciprocity) given by educable mentally retarded adolescents. The subjects were 67 retarded adolescents who attended three educational institutions in New York City. Two of these were public high schools, the third was an Occupational Training Center. The age and IQ of the public school subjects was significantly
different from the training center subjects who were between the ages of 17-21 years and had IQ's between 50-69. This investigator reports no significant differences between the two groups on the qualitative aspect of the stories. However, there were qualitative differences between the responses of the occupational and high school group. The occupational group replied in monosyllabic responses whereas the high school group showed adequate verbal fluency. In view of these results, the influence of measured intelligence and greater chronological age on moral judgment is contradictory to studies using normal subjects.

However, the most definitive research on the moral judgment of educable mentally retarded subjects is provided by the longitudinal research study of Beth Stephens at Temple University. Mahaney and Stephens (1974) carried out a longitudinal study to assess the development of moral judgment in normal and retarded subjects at two year intervals. There were 75 normal and 75 retarded subjects equally divided into three age ranges (6-10, 10-14, and 14-18 years in initial study). The three areas of moral judgment which were measured were consciousness of rules of the game,
ability to consider intent of teller rather than extent of deviation from truth in determining culpability of falsehoods, and maturity in evaluation of objective versus subjective responsibility. The variables, except rules of the game, were presented in the form of stories. A three point system devised by Kohlberg was used to score the measures of judgment conceiving lying, justice stealing and rules of the game. A four point scale was devised to measure moral judgment in terms of collective responsibility. Mahaney and Stephens report significant differences between the normal and retarded subjects on level of moral judgment responses but that both groups show a developmental trend on most indices of moral judgment. In their two year follow-up study, retarded subjects of all three age groups demonstrated improved performance on judgments concerning expiatory versus reciprocal forms of punishment, and on tasks concerning accountability of an entire group for the misdeeds of one of its members. However, the judgment of intent versus consequences showed a decrease in the three groups of retarded subjects which implies a deficit in this area of moral judgment.
MORAL CONDUCT

Broadly speaking, the term "moral behavior" has been applied to conduct about which the question of "right" or "wrong" can be raised. The term conscience has been used to refer to the person's internalized system of values and rules concerning behaviors considered by himself or others to be "right" or "wrong" (Singer and Singer, 1969). From the standpoint of society, one of the most important indices of conscience is the degree to which the individual can be counted on to resist pressures to deviate from these basic cultural rules. It is this behavioral criterion of internalization, that of intrinsically motivated conformity or resistance to temptation, which has formed the basis of research in the area of moral conduct.

MORAL CHARACTER

The criterion of intrinsically motivated conformity is implicit in the common-sense notion of "moral character" which formed the basis of the earlier American research on morality. Character refers to "the
sum total of the attitudes and overt ways of behaving of the individual which are the correlatives of his regulative habits, developing values, and volitional drives" (Jones, 1954, p. 783). Moral character is defined as a set of culturally defined virtues which are subject to the moral sanctions of society (Kohlberg, 1964). In an objective approach to character development, one of the first problems which arises is that of measurement. Among the most interesting measures of character have been the tests of actual performance. In such tests, the subject does not know that his "character" is being measured. The most extensive work in the devising and utilization of concealed tests of performance has been done by Hartshorne and May. Although conducted in the 1920's, their investigation of character remains the classic study of moral conduct and will be discussed in some length.

Hartshorne and May (1929) devised two types of test: moral knowledge tests and conduct tests. In devising the test of moral knowledge, it was assumed that the ability to foresee the social consequences of acts is an important intellectual ability in character.
Therefore, they devised a test to measure the ability to foresee the types of consequences that might follow from simple types of activity such as, getting into fights. Four types of conduct tests were devised to measure: deception, cooperation, inhibition, and persistence. Hartshorne and May assumed that conduct could be best measured by taking samples of it and that future conduct could be predicted if enough representative samples were gathered. In the study of honesty, Hartshorne and May took twenty-three samples of children's tendency to cheat, steal and lie in various settings (school, home, and athletic competition). The next type of behavior tests were in the area referred to as "service", such as, helpfulness, cooperation and charity. The last type of conduct measured was persistence.

In order to validate these measures of character, Hartshorne and May collected two types of information against which their tests were checked: the child's reputation among his teachers, classmates, and leaders, and pen portraits of character. In general, these researches found high correlations between the various judgments of peers and teachers and character measures (being around .8).
Specificity of Moral Conduct

Hartshorne and May (1928, 1929) report low intercorrelations among the tests designed to disclose cheating and other forms of dishonesty. Correlations between cheating in one type of situation and in others ranged from .00 to .45. On the basis of these low intercorrelations between sample tests of the same type of behavior, there is a normal distribution of honesty scores in a population of children and differences in situations in the amount of honesty they elicit. Hartshorne and May rejected the concept of unified character traits and advanced their doctrine of specificity. This states that the most influential factors determining resistance to temptation to cheat or disobey are situational factors rather than a fixed individual moral character trait of honesty. Therefore they recommended that morality should be studied in terms of specific situational responses related to specific situational reinforcements.

However, to some extent, Hartshorne and May's conclusion that moral conduct is specific to the situation must be qualified by the results of a recent re-analysis by Burton (1963) of The Hartshorne and May
data. Burton's findings provide some support for a "generality" dimension underlying honesty in different test-taking situations. Sears, Rau, and Alpert (1965) and Nelson, Grinder and Mutterer (1969) have collected new resistance to temptation data from preschool children and report results similar to Burton. Sears, Rau and Alpert (1965) investigated the relation between six different measures of resistance to temptation and reports evidence for both generality and specificity with correlations ranging from 0 to 0.45. Nelson, Grinder and Mutterer (1968); using analysis of variance and factor analysis, report that anywhere from 15 to 50% of the variance in the test scores appeared to be due to "persons."

It seems clear from these studies that both generality and specificity can be found in moral behavior as in any other trait. Hoffman (1969) states that individual's do vary in their general predispositions toward honesty and dishonesty but that their actual behavior in moral conflict situations is not an all-or-none matter" (p. 344). Burton (1963) suggests that any generality which occurs can be based on two gradients:
common stimulus elements in different tests and conceptual similarities requiring cognitive mediation.

Another area of investigation which supports this view of situational variation proposed by Hartshorne and May is an interpretation of the character factor in moral conduct in terms of "ego" abilities or "will" (Kohlberg, 1964). This interpretation is based on the psychoanalytic concept of "ego" strength which is composed of the following factors: will, foresight and empathy in aspects of decision making and emotional control. Kohlberg (1964) cites five types of "ego strength" variables which seem to contribute to moral conduct: general intelligence, ability to delay gratification, attentional control, control of unsocialized fantasies and self-esteem or satisfaction with self. Research findings (Grim, Kohlberg, and White, 1964; Havighurst and Taba, 1949; Peck and Havighurst, 1960) when taken together seem to imply that any major consistencies in moral conduct would represent decision-making capabilities rather than fixed behavioral traits.

Factors Related to Character

The following factors have been investigated to
evaluate their contribution in explaining individual differences in character development.

Age

Hartshorne and May (1930) report practically no correlation between age and conduct except in the scores on persistence tests. Results of persistence tests indicate that older children are inclined to be more persistent than younger children. Experimental measures of resistance to cheating or stealing do not increase significantly or regularly with age from nursery school to high school (Grinder, 1962; Rau, 1964; Walsh, 1967). Ratings by adults of honesty, altruism, and responsibility also fail to show age increases during childhood (Hartshorne and May, 1930).

Stephens (1972) points out that the issue generated by the early studies regarding specificity versus generality has excluded the study of repeated measurement of moral conduct which would provide data on moral development. May (1970) also supports this view and states that the "true picture of moral development can only be obtained by longitudinal studies in which the same group of children are tested year after year" (p. 668). Stephens, Miller, and
McLaughlin (1968) have launched a study which provides for biennial observation and comparison of the development of moral conduct (as measured in contrived situations) in normal and retarded children. Findings from the first testing of children (cross-sectional data), indicate that moral conduct is developmental in nature (Stephens, Miller and McLaughlin, 1969). These researchers found a significant decrease in acts of misconduct as a child increased in age in each group. Stephens (1972) reports that the second phase of testing provides the longitudinal data to support the concept that moral conduct is developmental, i.e., conduct improves with increased mental age and chronological age.

Sex

Hartshorne and May (1930) report that based on children's test performance there were no consistent sex differences in the matter of deception or dishonesty. Jones (1936) employing several tests of honesty in school found no appreciable sex difference.

On cooperative and "helpful" behavior, Hartshorne and May (1929) reported that boys and girls differ very little on the average, but wherever small differences do occur, the advantage is on the side of
the girls. In the tests of inhibition, girls are markedly better than boys. In persistence, the differences are very slight in favor of girls and tend to vary with the test situation.

In more recent studies, neither Grinder (1961) nor Burton, Maccoby and Allinsmith (1961) found sex differences in their respective studies when children were given opportunities to alter scores upward to win prizes. Walsh (1967) found there were no differences in boys and girls in the number who resisted temptation. However, he found that girls resisted temptation longer and when they did yield, spent significantly less time at the forbidden behavior.

Measured Intelligence

Jones (1954) states the relation of intelligence to character development is probably most readily seen in the role which intellect plays in selecting the environment and in orienting the individual to it. Thus levels of intelligence would affect the ability to foresee the consequences of their acts and the ability to make discriminations in social situations. Hartshorne and May (1928, 1929) found correlations which average about .50 between intelligence and
honesty in school situations. Jones, working with honesty, tests similar to those of Hartshorne and May, found correlations ranging from .32 to .43 with seventh and eighth grade students. Hartshorne and May reflect the view of many researchers when they state that deceit is associated with intellectual dullness, retardation in school and emotional instability. Moore and Stephens (1974) present research findings which destroy the myth that retarded persons are more prone to engage in misconduct than non-retarded persons. The Stephens' longitudinal research on moral conduct represents the sole attempt to use the contrived situation method with the retarded. Moore and Stephens report that when retarded subjects were compared with normal subjects of comparable mental age, there was no significant difference in their moral conduct scores.

In summary, if one judges from the wide range of correlations for honesty and other character variables, it seems that intelligence is related in different ways to different aspects of character.
Socioeconomic Status

In their classic studies of deceit, Hartshorne and May (1928) report that there is a general relationship between cheating and socioeconomic status of the children's parents. There is an inverse relationship between cheating and socioeconomic status, that is, cheating increases in frequency of occurrence as socioeconomic status decreases. Therefore, it seems that the general social and economic background of the child is an important factor in his honesty behavior.

LEARNING THEORY AND MECHANISMS IN MORAL DEVELOPMENT

Imitative Modeling: Theory

In terms of social learning theory, moral development is one aspect of the socialization process by which the individual internalizes the cultural norms and rules of society. One of the mechanisms hypothesized by learning theory by which the individual internalizes the value system of society (usually represented by his parents) is the process of imitative modeling (Bandura, 1968). In social learning theory the phenomena ordinarily subsumed under the labels
imitation and identification are designated as modeling. This term was adopted by Bandura because modeling influences have much broader psychological effects than the simple response mimicry implied by the term imitation, and the distinguishing properties of identification are too diffuse and arbitrary to aid scientific inquiry. Research conducted within this framework has shown that modeling influences can produce different types of effects depending on the different processes involved. First, an observer can acquire new behavior patterns by observing the performances of others (observational learning). A second function of modeling influences is to strengthen or weaken inhibition of previously learned responses (inhibitory effects).

Bandura assumes that modeling influences operate principally through their informative function, and that observers acquire mainly symbolic representation of modeled events rather than specific stimulus response associations. In this formulation, modeling phenomena are governed by four interrelated subprocesses: attentional, retention, motoric reproduction, and reinforcement and motivational processes. One of the
main component functions in observational learning involves attentional processes. Merely exposing an individual to modeled responses does not in itself guarantee that the individual will attend closely to them, select the relevant events from the total stimulus complex, and accurately perceive the cues to which their attention has been directed. An observer will not acquire matching behavior at the sensory registration level if he does not attend to, recognize, and differentiate the distinctive features of the model's response. Discriminative observation is one of the requisite conditions for observational learning. A number of attention-controlling variables can be influential in determining which models are closely observed and which are ignored. Some of the factors which exert selective control over attention are: incentives provided for learning modeled behavior, the motivational and psychological characteristics of the observer, and the physical and acquired distinctiveness of the model as well as his power. Zeaman and House (1958) point out that the retarded often have difficulty paying attention to
the relevant cues in a learning situation. Edmonson, deJung and Leland (1965) have reported the retarded persons inability to detect and interpret social cues which may account for instances of social failure in the retarded.

The second basic component function in observational learning is the retention of modeled events. When a person observes a model's behavior without performing the responses, he can acquire the modeled responses while they are occurring only in representational form. In order to reproduce this behavior without the continued presence of external modeling cues, a person must retain the original observational inputs in some symbolic form. Research using retarded subjects has suggested a deficit in short-term retention (Ellis, 1963).

The third major component of modeling phenomena is concerned with motoric reproduction processes. This involves the utilization of symbolic representations of modeled patterns to guide overt performances.

The final component function concerns motivational or reinforcement processes. A person may
acquire and retain the capability of skillful execution of modeled behavior, but the learning will rarely be activated into overt performance if negative sanctions or unfavorable incentive conditions occur. Reinforcement variables not only regulate the overt expression of matching behavior but they can also affect observational learning by exerting selective control over the types of modeled events to which people are most likely to attend.

According to Bandura, any behavior, including the control of aggression and other impulses, can be acquired through imitation and observational learning. The majority of the imitative modeling and moral development studies are relevant to the inhibition of moral prohibitions. The concepts of imitation and identification are considered synonymous by Bandura (1971) since both encompass the same behavioral phenomena, i.e., the tendency for a person to match the behavior, attitudes or emotional reactions as exhibited by actual or symbolized models. Bandura hypothesizes that matching behavior is acquired by observational learning which has previously been discussed.
In contrast to the psychoanalytic view of identification, as a pervasive modeling outcome which is established early in life as a result of the nurturant or threatening interactions with the present, Bandura views identification as:

a continuous process in which new responses are acquired and existing repertoires of behavior are modified to some extent as a function of both direct and vicarious experiences with not only the parents but a wide variety of actual or symbolic models whose attitudes, values, and social responses are exemplified behaviorally or in verbally coded form (Hoffman, 1969, p. 308).

LABORATORY EXPERIMENTS

The first group of studies will discuss the influence of response consequences to a social model on resistance to temptation. The second series of research studies to be presented deal with the effect of observing models on the inhibition of aggression.

Resistance to Temptation

Stein (1967) investigated whether fourth grade boys in a temptation situation would imitate a model who exhibited either yielding or resisting behavior. The results indicate that the child who observed the yielding model displayed more yielding than either
the child who observed a resisting model or the child in control condition who observed no model. However, the subjects who observed the resisting model did show more resisting behavior than the control group. Stein suggests that these results may indicate that observing a model may disinhibit a prohibited response tendency but is ineffective as an agent of inhibition.

Social control is to a large extent maintained through vicariously experienced reward and punishment. Adverse consequences to deviant members of society and the social rewards that accrue to those who perform socially approved acts are widely publicized through the mass media. In two other studies concerning resistance to temptation, the child observes a peer model who deviates from a prohibition and is subsequently either rewarded or punished (Walter, Leat, and Mezei, 1963; Walters and Parke, 1964). It is assumed that the consequences to the model serve as a cue to the observer the permissibility or nonpermissibility of the punished response and that the model's affective expression while undergoing rewarding or punishing experiences elicit corresponding emotion responses in the observer. Walters et al. (1963) found
that children in the model-punished condition showed more resistance to temptation than those in the control group and more than those who saw the model rewarded. Walter and Parke (1964) report the following results; (1) subjects in the modeled punished group deviated less quickly, less often, and for a shorter period of time than subjects in the model rewarded or no-consequence groups; (2) the model punished group deviated slightly more than the control group; and (3) the no-consequence group deviated as much as the model-rewarded group. These results are in contrast with the earlier study by Walters et al. (1963). Walters and Parke (1964) suggested that the discrepancy may be accounted for by the fact that the two samples differed on SES ratings.

The implications of Walters and Parke's (1964) findings are that the consequences of the model have a pronounced effect on the observing child. When the model is punished the child is less likely to perform the prohibited act than when the model is rewarded. An important question is whether these findings should be interpreted as meaning that punishing the model leads to inhibition or rewarding the model leads to
disinhibition of the act. Both of these conclusions are possible and further research is needed to resolve this question. In summary, research thus far does not provide definitive evidence that observing a model punished for violating a prohibition has the effect of increasing resistance to temptation.

**Inhibition of Aggression**

These studies are concerned with the effects of modeling on a socially unacceptable behavior, aggression. Bandura, Ross and Ross (1963) exposed young children to films in which an adult model used physical and verbal aggression against another adult in order to increase his possessions. There were two modeled conditions (model-rewarded and model-punished) and two control conditions (non-aggressive model and no model). The children were placed in a free play situation and aggressive behavior was noted. The results are that the children in the model punished condition exhibited significantly less aggression than children in the model rewarded condition. The model-punished children did not show less aggression than the children in either of the control groups.

Bandura (1965) investigated the influence of
consequences to the model on children's aggressive behavior. Three film sequences were used and the main portion of each sequence depicted an adult exhibiting aggressive behavior. In one sequence the adult was punished for his aggression; in the second sequence the model is rewarded, and in the third sequence there were no consequences. His results are similar to those of his earlier study in which the model punished group showed the least aggressive behavior of any group and that the same amount of aggression was displayed by children in the model rewarded and no-consequence groups.

Bandura's studies seem to show the same type of pattern as was obtained in the Walters and Parke research previously discussed. It seems clear that the consequences to an aggressive model have a significant influence on the subjects aggression but whether this signifies an inhibitory effect for the model-punished condition or a disinhibitory effect for the model rewarded condition depends on whether the no-consequence or no-model condition is chosen for purposes of comparison.

In summary, research has not definitely supported the view that the child's inhibitions against the expression of aggression are increased by exposure to
aggressive models who are punished.

In general, the experimental findings on imitative modeling show that direct observation of a model who yields to temptation and deviates from a social norm has a disinhibiting effect on the observer, whether the model is rewarded or not. Punishment to the model does not appear to inhibit the response tendency previously aroused by the model's deviating behavior but it can raise the child's level of control beyond the baseline that existed before exposure to the model. Hoffman (1969) states that this evidence suggests that the observation of models is capable of undermining the effects of the child's past socialization in impulse control more than it serves to further these aspects of moral development. More research is needed before a definitive statement can be made about the role of modeling in moral development.

**CHILD REARING**

The way parents rear their children has an important effect on the conduct of the child in everyday life situations. Parental efforts at
child rearing are certainly one of the most potent influences in shaping the child's social, cognitive and emotional behaviors. The child rearing dimensions of warmth-hostility and permissiveness-restrictiveness are related to the specific disciplinary methods which parents use, that is, to the ways in which they reward and punish their children's conduct. Discipline refers to parental behavior calculated to control the child's conduct. The relationship between various discipline techniques to a behavioral index of internalization, namely, resistance to temptation, will be discussed in this section. A brief review of the discipline techniques and of the measurement of resistance to temptation will precede the review of research in this area.

Discipline Techniques

Methods of discipline have traditionally fallen into two broad dimensions: power assertive and love oriented. Recently the non-power-assertive discipline (love oriented) has been separated into "love withdrawal" and "induction" (Hoffman, 1969). This review will discuss these three types of discipline: power assertion, love withdrawal and induction. These can be briefly described as follows.
The term "power assertion" refers to those techniques by which the parent uses physical power or control over material resources to control the child. The specific techniques utilized include: physical punishment, deprivation of material objects, withholding privileges, and physical threats.

Love withdrawal refers to the direct but non-physical expression of parental anger or disapproval of the child for engaging in some undesirable behavior. Examples of this technique include: ignoring the child, isolating the child, refusing to speak or listen to the child and explicitly stating a dislike for the child. Hoffman (1959) points out that this technique is also highly punitive since it poses the threat of abandonment or separation.

Induction refers to those techniques in which the parent gives explanation for requiring the child to change his behavior. Specific techniques used are: pointing out harmful consequences of the child's behavior for himself and others and appealing to conformity - inducing agents existing within
the child such as appeals to the child's pride or strivings for mastery and to be "grown-up". This approach uses a cognitive rather than a punitive bases for controlling behavior.

Resistance to Temptation

The ability to resist pressures to deviate even when the possibilities of detection and punishment are remote has been viewed as an important aspect of moral development. The term temptation has been used to refer to a type of conflict when a choice must be made between: (a) conformity to some socially expected role behavior and nonattainment of a goal and (b) nonconformity and attainment of the goal. For empirical research, Grinder (1961) emphasizes the need to define this term in a more functional or behavioral way and has suggested the following conceptualization:

a state of temptation exists for an individual when the addition or presence of some stimulus (incentive) increases the probability of a class of responses which is forbidden because of its incompatibility (conflict) with some socially expected behavior (p.680).

This definition is based upon the functional relationships between the elements of a temptation
The incentive for temptation may be either tangible (money, candy, toys) or intangible (anticipation of praise). The behaviors upon which transgression is contingent are often evaluated from the point of view of virtues, such as honesty, truthfulness, etc. Therefore, temptation can be viewed as a predecision-type conflict situation where an individual, free from coercion or danger of detection, must choose between a positive incentive and conformity to learned role behavior.

If subjects are to be compared with one another in the degree to which they either resist (conform) or yield (transgress) to temptation, it is necessary that the variables of the temptation conflict be measurable indices. Allinsmith (1960) used story completion items. A more direct behavioral index of resistance to temptation has been used by some researchers (Grinder, 1962; Burton, Maccoby, and Allinsmith, 1961; Sears, Rau, and Alpert, 1965). They used an experimental situation in which the subject is tempted to violate the rules of a game (ray-gun game) in order to win a prize. Hartshorne and May, (1928) used techniques such as copying on a test or
the "peeping" test to measure resistance to temptation. Although it is made clear to the subject that no one knows whether he cheats or keeps score according to the rules, the experimenter is usually observing this behavior through a one-way screen or mirror.

Researchers have traditionally used two different types of scales for analyzing performance in temptation situations, dichotomous and interval. Dichotomous scales treat performance in terms of resist-yield categories indicating in either-or terms whether the subject has transgressed. Interval scales are based upon the number of raw score units beyond a transgression criterion, thereby indicating the extent of transgression. Reliability of temptation measures vary from study to study. For example, Hartshorne and May (1928) reported alternate form reliabilities, based on interval scales of .70, .44, and .46 for their versions of the copying, speed, and peeping tasks, respectively. A pilot study involving administration of the Ray-gun game under two different conditions report correlation between the interval scores for the two administrations was .85, when scaled dichotomously the correlation was
Resistance to temptation measures are limited because they are open to the damaging influence of unequal motivation and ability to do well on a task, that is, the temptation to cheat may not be the same for all subjects. Moreover, in recent study by Nelsen, Grinder and Mutterer (1969), it was found that according to ANOVA calculations on the variance in six behavioral measures of honesty, that between 60% to 70% of the total variance is confounded between error and Person X Task interaction. These analyses suggest that the error and unspecified interaction variance result in part from peculiar distributional properties of the measures, from lack of equivalence among the units of measurement, and from low reliabilities for some of the measures.

Despite these problems, the studies using resistance to temptation cannot be ignored since they represent the only studies relating discipline to an overt index of resistance to deviation pressures.

**RESEARCH**

The consequences of discipline techniques and
their relationship to resistance to temptation have been explored in several studies. The question focused upon in the following studies is what does the subject do under pressure to violate his standards rather than his reactions following transgressions.

**Power Assertion**

MacKinnon (1938) initiated research in this area concerning discipline and resistance to temptation with an experimental study of cheating by college males. MacKinnon found that those men who cheated reported that their fathers most often used physically aggressive forms of punishment than love oriented techniques.

More recent studies have adapted the experimental design used by MacKinnon for research with younger children (Burton, Maccoby, and Allinsmith, 1961; Grinder, 1962; and Sears, Rau, and Alpert, 1965). Burton et. al. (1961) investigated antecedents of resistance to temptation in 77 four-year-old children who were enrolled in private nursery schools in the Boston area and report that measures of physical punishment, such as frequency and intensity, did not show any strong trends of association with resistance. Sears, Rau, and Alpert (1965) and Grinder (1962) report no relationships between modes
of discipline and resistance to temptation.

The results of these various studies show great inconsistencies. Hoffman (1964) has offered some possible reasons for these varying results which include lack of control over the child's general needs for achievement or his desire for the particular prize.

A continuing theme in laboratory studies bearing on power assertion has been the investigation of the parameters of punishment, such as timing, intensity, and consistency. Parke and Walters (1967) investigated the effects of differing levels of intensity of punishment in six to eight year-old boys. Parke and Walters report that subjects who received high intensity punishment were found to deviate less quickly, less often and for shorter periods of time than those who had been punished mildly.

Freedman (1965) also investigated the effect of punishment intensity. Groups of children, seven to nine-year-old boys, were threatened with either mild or severe punishment for touching an attractive but forbidden toy. Transgressive behavior was lowest
among children who received the mild threat and refrained from deviation in the absence of social surveillance. Children who were threatened with severe punishment and complied in the absence of the experimenter were more inclined to handle the previously forbidden toy and did not differ in this respect from subjects in the condition combining low threat and social surveillance.

Freedman's findings give perspective to Parke and Walters research. Although higher intensities of punishment tend to contribute positively to temptation immediately following punishment, those who experience mild threat tend to continue to resist temptation at a later date when the prohibition is removed.

Empirical tests of the affective feedback theory of internalization have primarily investigated behavioral suppression as a function of timing of punishment. The basic theoretical framework guiding the research on timing has been provided by Mowrer (1960a, 1960b). This theory states that the execution of an act is accompanied by a sequence of response-produced cues which provide sensory feedback.
Punishment administered at any time during this sequence will result in the relatively direct association of fear-motivated avoidance response with the response-produced cues occurring at that time. Therefore, if punishment is applied at or near the beginning of the act, it will result in an association between the deviator's preparatory responses and the emotion of fear, and thus future initiations of the deviant act will arouse anxiety. This anxiety then activates avoidance responses which are reinforced by anxiety reduction if they are strong enough to forestall the deviant behavior. In contrast, if punishment occurs following the deviant act, the anxiety will be associated with the goal response and less strongly with the initiation of the act. Also, the attainment of the goal may be satisfying enough to offset the effects of punishment. Based on this theory, the earlier the punishment occurs in a prohibited response sequence, the more effectively will it prevent later commission of the punished behavior. The one naturalistic study which reports findings on timing of punishment obtained results that contradict this hypothesis.
(Burton, Maccoby, and Allinsmith, 1961). However, this data was obtained from interviewing the parents and there was a need for more precise data.

Recently several experimental studies have appeared (Aronfree, 1968; Aronfreed and Reber, 1965; Parke and Walters, 1967; and Walters, Parke, and Cane, 1965) which support the expectation that early punishment contributes to resistance to temptation; yet several methodological problems arise which challenge these results.

More recent research (Cheyne and Walters, 1969; Parke, 1969; Parke, 1974) has researched the role of cognitive and verbal rationale which accompany the punishment, the effect of timing of punishment is eliminated and early and late punishments are equally effective inhibitors of the child's behavior. When no rationale was provided, the expected effect of timing of punishment occurred again. Taken together these experiments suggest the important role of cognitive variables in modifying the operation of punishment and more research is needed in this area.

In conclusion, it appears that although the naturalistic studies on parent-child research indicate
that power assertion plays a negative role in moral development, the results of the laboratory studies suggest that under certain conditions; high intensity and early timing, power assertion may foster the immediate suppression of pleasure oriented response tendencies. Hoffman (1970) suggests that one possible explanation for this contradiction is that laboratory studies reflect a more primitive type of internalization which are based on response inhibitions which are quickly conditioned but often shortlived.

**Love Withdrawal**

Naturalistic research studies show little or no correlation between love withdrawal and resistance to temptation, Burton et al. (1961), Grinder (1962), Sears, Rau, and Alpert (1965). Some support for a possible relation between love withdrawal and moral development was obtained in a laboratory study by Parke (1967) who studied resistance to temptation under varying conditions of experimenter nurturance. Parke reports that girls in the nurturance interrupted conditions (laboratory analogue of love withdrawal) were less likely to touch the forbidden toy than those
who received continued-nurturance.

In conclusion, the research on love withdrawal does not support the psychoanalytic theory of analytic identification, that anxiety about possible loss of parental love is the major contributing factor to the child's internalization of parental values and standards.

Induction

Allinsmith (1960) investigated the relationship between discipline modes and resistance to temptation in a group of 112 thirteen year old boys and reported that subjects whose parents have explained their requests are most inclined to write stories in which heroes resist temptation.

Sears, Rau, and Alpert (1965) report that this child rearing correlate and its relationship to resistance to temptation differs from boys and girls. Sears et al. found induction to be positively related for resistance to temptation in girls but found no correlation for boys.

Aronfreed (1966) has recently done a series of studies with young children on the effects of cognitively structuring a prohibited act. His findings
indicate that providing a cognitive structure increases the child's likelihood of suppressing the act.

In the results of a recent study (Parke and Murry, 1971), an interaction between age of the child and the effect of different prohibitory rationales was found. In another study (Parke, 1972) with boys and girls of nursery school age, a similar interaction of age X type of rationale was found. These findings are consistent with the data reported by Cheyne (1972) and LaVoie (1973) concerning developmental changes in the effects of different types of prohibitory rationales. Together the findings emphasize the importance of considering developmental factors in studies of different types of control tactics. The task of charting in more detail age changes in relation to specific types of prohibitory rationales would appear to be worthwhile.

Summary

After reviewing the research on child rearing practices, it seems that induction is associated positively with moral development, whereas power-
assertion and love withdrawal are not. However these findings come mostly from the naturalistic studies and therefore no definitive conclusions can be drawn about causal directions of the relations obtained. Although the naturalistic studies lack the precision and controls needed for establishing causal direction and for studying the psychological processes involved, the experimental research also has its limitations since the intensity of the parent-child relationship is not adequately captured in these experiments.

However it does seem that discipline affects moral development. Any theory of discipline and its effects must recognize that all discipline encounters have a great deal in common regardless of the particular technique used since most techniques are not unidimensional or mutually exclusive as they are divided for research purposes. Therefore, it seems that all techniques have some qualities of power-assertion, love withdrawal, and induction.

RELATION BETWEEN JUDGMENT & CONDUCT

By method and theory, contemporary investigations
of children's moral development are polarized in either behavioral or cognitive systems. The cognitive approach, espoused by Piaget and Kohlberg, have been concerned more with reasoning and decision process while both the psychoanalytic and learning approaches have been concerned with the emotional states and behaviors associated with self-control in the face of temptation. Even though both approaches are supported by data from a great many studies, the two approaches have remained essentially unintegrated in an overall theory of moral development, i.e., the translation of moral judgment into moral conduct. This review will first discuss some of the theoretical orientations regarding the relationship between judgment and conduct and then will present some empirical research which has centered on this issue.

THEORETICAL ORIENTATION

Piagetian Approach

Unfortunately, Piaget is not precise in suggesting a relation between moral behavior and an understanding of moral rules. However, he has speculated
about the developmental relation between children's behavioral resolutions of actual moral conflicts and cognitive processes. Piaget (1948) has assumed that children progressively develop cognitive schemata for moral reflection out of their concrete moral experiences. This led him to hypothesize that "the verbal and theoretical judgment of the child corresponds, broadly speaking, with the concrete and practical judgments which the child may have made on the occasion of his own actions during the years preceding the interrogatory: (Piaget, 1948, p. 115). This hypothesis was generated from some findings obtained by Piaget while interrogating children about playing marbles. Piaget (1948) found a "certain correspondence (not simple but yet quite definable) between children's judgments about rules and their practice of these same rules" (p. 111).

Piaget (1948) points out that in the intellectual field, there is a time lag between the concrete phases and the verbal phases of one and the same process and suggests that this may also happen in the moral sphere, i.e., at a time lag between the child's concrete evaluation and his
theoretical judgment of value. Piaget states that further research is needed in this area before a definitive statement can be made.

Kohlberg’s Approach

Kohlberg (1971) states that the judgment-action relationship is best conceived of as the correspondence between the general maturity of an individual's moral judgment and the maturity of his moral action, i.e., specific forms of moral action require specific forms of moral thought as prerequisites. Kohlberg (1958) reports that when boys, aged 10-16, were rated by their teachers on a variety of character traits, including internalized conformity, the product moment correlation between maturity of moral judgment scores and ratings of conscience was .46. Experimental studies by Krebs (1967) and by Brown, Feldman, Schwartz, and Heingartner (1969) report similar correlational trends.

Kohlberg (1969) states that moral judgment maturity can be a powerful and meaningful predictor of action "where it gives rise to distinctive ways of defining concrete situational rights and duties in socially ambiguous situations" (p.397). Kohlberg
feels that the causal role of moral judgment seems to be due to its contribution to a "cognitive" definition of the situation and not because strong or attitudinal expressions of moral values activate behavior. In Kohlberg's approach, the study of the relation of social cognitive structures to social action seems in principle much like the study of the relation of physical cognitive structure to actions upon physical objects. Moral principles are essentially believed to define "social" laws or realities just as physical principles are felt to define physical laws or realities.

Social Learning Theory

The concept of internalization is often used to refer to "the child's adoption of social norms or roles as its own, and to the resulting control of its behaviors by the most complex mediational functions of cognitive and verbal process" (Aronfreed, 1969, p.264). Kohlberg and Piaget have emphasized that evaluative cognition is a powerful determinant of social behavior. However, Aronfreed notes that advances in moral judgment require certain transitions of cognitive capacity which
are in no way required for the internalized control of conduct. In addition, he points out that human beings are highly conditionable and that large areas of social behavior can be subjected to internalized control with little or no engagement of evaluative decision-making processes. The control of conduct in the absence of social surveillance, or in the absence of any objective expectation of discovery of transgression, can be established on the basis of learning mechanisms. Aronfreed (1974) states that these mechanisms range from conditioning of internalized changes of affective state to the acquisition of evaluative cognitive structure which do not have the qualitative meanings or syntactic forms characteristic of more advanced social stages. A number of experiments with children have demonstrated a variety of conditions of learning which can be used to induce some degree of internalized control over behavior (Aronfreed, 1964; Aronfreed and Reber, 1965; Parke and Walter, 1967; Walters and Parke, 1964).

Aronfreed feels that the term moral conduct should not be used for internalized conformity to behavioral social norms. A moral act is one that
is informed by moral judgment. Therefore, acts of conduct may reach a state of highly internalized conformity before they use conceptual moral structures.

RESEARCH

It has been assumed that values are the most significant source of control over social conduct but research evidence points to great discrepancies between the verbal expression of evaluative standards and actual behavior in a social context. Hartshorne and May (1928) report only a small degree of correlation between the child's knowledge of social standards and its internalized control over behavior in situations designed to test honesty. Brogden (1940) also found that the child's verbalized knowledge of social standards was often discrepant with its actual resistance in a cheating situation which ostensibly was not under surveillance. Various investigators (Boehm, 1962; Kohlberg, 1963; MacRae, 1954; Piaget, 1948) report that children show an increasingly internalized
orientation of conscience, as they advance in age, when they are asked to evaluate the consequences of conduct. However, Sears, Rau, and Alpert (1965) do not report a corresponding age-related increment in the effectiveness with which children control their own behavior in resistance-to-temptation situations.

Grinder (1964) investigated the relations between behavioral and cognitive dimensions of conscience in 106 children from the second, fourth, and sixth grades. Children's self-control in the ray gun game represented the real life temptation conflict (behavioral dimension) and children's responses to stories patterned after those developed by Piaget measured moral judgment (cognitive dimension). Findings indicated that girls' but not boys' conformity to the rules of the temptation game increased with age. Maturity of moral judgment increased significantly with age for both sexes. Tests of association between measures of temptation behavior and moral judgment were non-significant. Medinnus (1966) tested sixth graders
on both behavioral and cognitive measures of conscience development. His results support those of previous investigations showing little association between a child's actual behavior and his verbally expressed attitudes.

However, other researchers (Kohlberg, 1964; Hoffman, 1963) suggest that social behavior is affected by cognitive control. Kohlberg (1963) reported an inverse relationship between cheating and the degree of internalized orientation which characterize the child's moral decision in hypothetical conflict situations. Aronfreed (1969) suggests that the inconsistencies in Kohlberg's research and that of Grinder and Medinnus may be attributable, in part, "to motivational linkages between values and behavior which are differentially activated by variations in the cognitive and affective impact of specific social stimulus situations" (p. 270).

McLaughlin and Stephens (1974) investigated the relationship between reasoning, moral judgment, and moral conduct in both retarded and normal
children. To measure moral conduct these investigators devised contrived structured situations to observe the subject's behavioral responses, such as, self-control, honesty, cheating and persistence. Moral conduct stories were devised which were analogous to moral conduct situations in order to determine if a subject's observed conduct in structured situations corresponds to his stated opinions concerning the type of behavior that should be exhibited in similar situations. In addition, using Piagetian and Kohlberg stories, McLaughlin and Stephens measured three areas of moral judgment: consciousness of the rules of a game, ability to consider intentions, and maturity in evaluation of objective versus subjective responsibility. These investigators reported that for the retarded subjects, there was a low correlation between conduct and judgment which remained relatively constant after a two year period. For the normal subjects, moral conduct combined with verbalized moral reasoning on two factors, opinions concerning observance
of rules combined with actual work maintenance. Overall, however, Piagetian measures of logical reasoning (conservation and classification) and moral conduct tended to strengthen in the retarded subjects, it was reasoning and moral judgment, as well as standard intelligence measures and moral judgment that exhibited an increasing interrelationship in normals, i.e., abilities involving intelligence and logical and moral reasoning were evolving, but were not influencing observed behaviors.

SUMMARY

This chapter reviewed the major theoretical positions and research studies which deal with the psychological processes involved in moral development. It seems apparent that no one theory can explain and integrate all of the processes involved in moral development.

Hoffman (1969), Hogan (1973) and Kay (1968) have presented the view that moral development is
a complex, multidimensional, multifaceted phenomenon to which several processes appear to contribute.

Hogan (1973) proposes five dimensions of moral development based on the conception that man is a rule-formulating and rule-following animal. The five concepts are: moral knowledge, internal standards, empathy, moral judgment and autonomy.

Hoffman (1969) suggests that moral development proceeds along "four tracks whose end products are behavioral conformity, perception of authority as rational, impulse inhibition, and consideration for others" (p. 345). Hoffman points out that social learning theory may best account for the inhibition of acts defined by socializing agents as good or bad and rewarded or punished accordingly. Cognitive development and role taking seem to contribute to the child's shift in his perception of rules and authority from external and arbitrary to objective and
rational. Impulse inhibition as influenced by the parents giving or withholding love contingent upon the child's behavior. This can result in anxiety becoming associated with both the deviant behaviors and the impulses underlying them. Hoffman's fourth process of moral development concerns the child's capacity for empathy which is influenced by induction of adults and reciprocal role playing with peers. Hoffman concludes that these processes are not developmental stages but are socialization modes which progress independently of one another.
CHAPTER III

PROCEDURES

The procedures used in this study were selected to permit the investigation of a developmental trend of moral conduct, as measured in contrived social situations, and moral judgment, as measured by verbal responses to stories, among moderately retarded male and female students at three age levels. Also an analysis was conducted to note any relationship between moral conduct and moral judgment, and the relationship between sex and these two constructs.

THE SAMPLE

Sample Selection

The sample used in the investigation consisted of 90 students selected from a population of children in a training center for trainable mentally retarded children in Columbus, Ohio (The Franklin County Program for the Mentally Retarded). The sample was composed of 15 girls and 15 boys at three age groups, 6-0 to 9-11 years of age, 10-0
to 13-11 years of age, and 14-0 to 17-11 years of age. There were 35 children in the 6-0 to 9-11 age range, 34 children in the 10-0 to 13-11 age range, and 44 children in the 14-0 to 17-11 age range who met the age criteria and from which the sample was randomly selected.

A letter was sent to all parents whose child met the age criteria, briefly explaining the project and allowing them to withdraw their child if they wished. Eight children were withdrawn from the sample and replaced with alternates.

The second criterion from sample selection was that the pupils have some verbal behavior in order to pass a story pretest similar in design to the judgment stories to be used in the experiment. Seven children failed the pretest and were replaced by alternates.

Variables

Sex: There were equal numbers of boys and girls selected at each age range.

Age: The subjects were equally divided into
three age groups:  6-0 to 9-11 years of age.  
(Age Level I)

10-0 to 13-11 years of age.  
(Age Level II)

14-0 to 17-11 years of age.  
(Age Level III)

Table 1 gives the means and standard deviations for the subgroups of the sample.

Race: The sample was composed of 64 white children and 26 black children which approximately reflects the white:black ratio of the student population. Age Level I consisted of 23 white children and 7 black children. Age Level II consisted of 21 white children and 9 black children, and age Level III consisted of 20 white children and 10 black children. In age Level I, there were 4 black males and 3 black females; in Age Level II, there were 7 black males and 2 black females; and in age Level III, there were 5 black males and 5 black females (See Appendix B, C, and D for age, IQ and sex descriptive variables for race).

Intelligence: The State Department of Education of Ohio has prescribed specific limits
concerning the IQ score which a child must have to be educated in the public school system. All the students used in this study are classified as trainable mentally retarded and are in the moderate range of intellectual functioning, that is, Level II, IQ range 36-51 (AAMD Classification, 1973). Table 1 provides ranges and means of IQ scores for males and females in each age group. These are scores obtained from the Stanford-Binet which had been administered by school psychologists.

Socioeconomic Status

The socioeconomic status was measured by the Index of Socioeconomic Status, developed by the Institute for Developmental Studies, Department of Psychiatry, New York Medical College. This index utilizes two factors to estimate the relative social positioning of individuals in a community: occupation of main support of the family and education of main support of the family. See Appendix A for complete instructions. Three socioeconomic levels are determined: level 1 is
low socioeconomic status, level 2 is middle socioeconomic status, and level 3 is high socioeconomic status.

Seventy-five subjects were rated at level 2, middle socioeconomic status. Five children at each age level were either SES level 1 or SES level 3. See Appendix B, C, and D for a descriptive analysis of the SES groups.

No other sample characteristics were examined.
### TABLE 1

Means and Standard Deviations
Age and IQ*

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Age Mean</th>
<th>S.D.</th>
<th>IQ Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Level I</td>
<td>30</td>
<td>8.1</td>
<td>1.2</td>
<td>41.97</td>
<td>6.0</td>
</tr>
<tr>
<td>Males</td>
<td>15</td>
<td>8.5</td>
<td>1.1</td>
<td>41.33</td>
<td>6.2</td>
</tr>
<tr>
<td>Females</td>
<td>15</td>
<td>7.7</td>
<td>1.0</td>
<td>42.60</td>
<td>6.1</td>
</tr>
<tr>
<td>Age Level II</td>
<td>30</td>
<td>12.2</td>
<td>1.2</td>
<td>43.73</td>
<td>6.2</td>
</tr>
<tr>
<td>Males</td>
<td>15</td>
<td>12.0</td>
<td>1.1</td>
<td>44.06</td>
<td>5.8</td>
</tr>
<tr>
<td>Females</td>
<td>15</td>
<td>12.4</td>
<td>1.3</td>
<td>43.40</td>
<td>6.7</td>
</tr>
<tr>
<td>Age Level III</td>
<td>30</td>
<td>16.0</td>
<td>1.2</td>
<td>44.33</td>
<td>5.4</td>
</tr>
<tr>
<td>Males</td>
<td>15</td>
<td>15.7</td>
<td>0.9</td>
<td>43.80</td>
<td>5.2</td>
</tr>
<tr>
<td>Females</td>
<td>15</td>
<td>16.4</td>
<td>1.4</td>
<td>44.86</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>12.1</td>
<td>3.5</td>
<td>43.34</td>
<td>5.9</td>
</tr>
</tbody>
</table>

* Stanford-Binet
Moral Conduct

Hartshorne and May (1928, 1929) developed a technique, placement of subjects in temptation situations, to provide scientific information on honesty, cooperation and persistence. Today, this technique still serves as the basis of moral conduct measures. Recently, techniques similar to those developed by Hartshorne and May, were employed in a longitudinal study of development of moral conduct among mildly retarded subjects (Moore and Stephens, 1974). Moore and Stephens devised structured situations to observe the subject's behavioral responses. The moral conduct variables included: self-control, honesty, stealing, persistence, etc.

Moral conduct situations, patterned after those used by Moore and Stephens (1974) served as the moral conduct measures in this study. Certain aspects of Moore and Stephens' situations were modified for use with a moderately retarded population.
There were five contrived situations used in this study. These include:

1. **Self-control:** Did the subject take candy from a dish during a five-minute period while the examiner was out of the room?

2. **Mishap 1:** During the time the child was alone and engaged in an experimental task, a young woman entered the room (against orders) for a book; in getting the book she overturned several boxes on the shelf which fell to the floor. As she left she entreated the child not to tell anyone she had been there. When the examiner returned, did the child provide information on the mishap?

3. **Cheating:** Bolts and washers were provided each child as the examiner explained that there was interest in seeing who could remove the most washers in a 3-minute period. The child was to remove the washers one at a time from three bolts mounted on a board as quickly as possible. The child was not be begin until the bell on the timer rang. The examiner set the timer to go off one minute after leaving the room. Scores were obtained on:
   - (a) observance of starting time;
   - (b) removal of one washer at a time;
   - (c) observed persistence.

4. **Observance of Limits:** The examiner and the child have been playing with a toy which the child had selected.
After a couple of minutes, the examiner tells the child to put the toy away and assigns the child a task. Prior to the examiner leaving the room, the child is told not to play with the toy until the examiner returns. Does the child touch the toy during the examiner's absence?

5. Honesty: Money Return: A dollar bill was placed in the subject's path upon entering the testing room. The child was alone in the room for two minutes before the examiner came. During that time did the child take the money?

At the end of the testing session, the examiner states that she lost a dollar. Does the child give the examiner the money found in the room?

Inter-rater reliability on measures of moral conduct was established by generating biserial correlations between scores obtained from two judges, each of whom observed the child's responses through a one-way mirror. Inter-rater reliability coefficients for the dichotomous scores reached 1.0 in each situation.
**TABLE 2**

Inter-rater Reliability Coefficients on Moral Conduct Measures

<table>
<thead>
<tr>
<th>Moral Conduct Situations</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>2</td>
<td>1.0</td>
</tr>
<tr>
<td>3</td>
<td>1.0</td>
</tr>
<tr>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>5</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Moral Judgment**

To assess development in moral judgment, Piaget (1948) related a story and then evoked an opinion from the subject on the moral issue presented in the narration. The child's reply indicated his level of moral functioning. Kohlberg (1958) also devised a moral dilemmas test to measure moral judgment level. Both Piaget's and Kohlberg's stories are written on
a level which a moderately retarded child could not comprehend. However, applying this type of approach, requiring a child to formulate an opinion concerning a narrated situation, on stories which reflected dilemmas which were probably encountered at some time in the child's daily activities, a measure of moral judgment could be obtained for moderately retarded children.

Stephens (1972) employed a similar test in her battery assessing moral judgment in mildly retarded children. Stephens measured moral judgment based on the child's verbal response to moral conduct stories which were analogous to the moral conduct situations in which the child had been previously placed. In addition to assessing a moral judgment level, it is possible to determine if a subject's observed conduct in structured situations corresponds to his stated opinions concerning the type of behavior that should be exhibited in similar situations. In order to minimize the retarded child's forgetting the situation, pictures,
depicting the action described in the story, were presented simultaneously as the examiner read the story.

The moral conduct stories involved the following:

1. taking something without asking;
2. report of accident which involves minor liability;
3. cheating on a task by disregarding rules;
4. ignoring test limits;
5. return of lost article when owner is unknown;
6. return of lost article when owner is known.

See Appendix F for the exact wording of each story.

In an effort to establish inter-rater reliability on the moral judgment assessment, Pearson product moment correlation coefficients were generated from the ratings of two judges trained in the technique. As Table 3 shows, that the correlation coefficients range from .92 to .98.
TABLE 3

Inter-rater Reliability Coefficients for Moral Judgment Stories

<table>
<thead>
<tr>
<th>Story</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.96</td>
</tr>
<tr>
<td>2</td>
<td>.95</td>
</tr>
<tr>
<td>3</td>
<td>.95</td>
</tr>
<tr>
<td>4</td>
<td>.95</td>
</tr>
<tr>
<td>5</td>
<td>.92</td>
</tr>
<tr>
<td>6</td>
<td>.98</td>
</tr>
</tbody>
</table>

After a two week interval, thirty subjects were randomly selected from the total sample to be retested on the moral judgment stories. Test-retest reliability was determined for each story, by a Pearson Product Moment Correlation Coefficient, based on the ratings of two independent judges. Table 4 shows the range of the correlational coefficients from .29 to .69.
TABLE 4

Test-Retest Reliability Coefficients for Moral Judgment Stories

<table>
<thead>
<tr>
<th>Story</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.56</td>
</tr>
<tr>
<td>2</td>
<td>.69</td>
</tr>
<tr>
<td>3</td>
<td>.25</td>
</tr>
<tr>
<td>4</td>
<td>.38</td>
</tr>
<tr>
<td>5</td>
<td>.52</td>
</tr>
<tr>
<td>6</td>
<td>.29</td>
</tr>
</tbody>
</table>

PROCEDURES FOR DATA COLLECTION

Each subject was individually tested on the two constructs - moral conduct and moral judgment. Testing was done at the subject's school and was divided into two sessions. During the first session, the child was observed in a playroom which contained a one-way mirror for observation purposes.
During the second session, the child was tested in a small conference room and asked to respond to the moral conduct stories. During both sessions, a female experimenter administered the tasks.

**Administration of Moral Conduct Situations**

Each subject was told that the experimenter wanted to try out different games with children of different ages. The child was sent into the playroom alone while the experimenter went to get some paper. After a couple of minutes, the experimenter returned and read a pre-test story. Only subjects who answered two of the three questions correctly were included in the sample (See Appendix E for the pre-test story and questions).

During the time the child was in the playroom, his responses in five contrived situations were observed (See Appendix E for a copy of the complete Administration Instructions for conduct situations). After the subject had been observed in all five situations, the experimenter explained that time was up for the day and that the experimenter would
see the child again in a week.

Moral Conduct Scoring

In this study, observed behavior in situations devised to measure moral conduct was considered either honest or dishonest and dichotomous (pass-fail) scores were assigned to performance on these tasks. Scoring was carried out immediately after the subject had been observed in the structured situation. A pass received a score of 1, and a fail received a score of 0.

Administration of Moral Judgment Stories

After an interval of seven days, moral conduct stories were read to these same subjects. Each subject was brought to a conference room by the experimenter. The subject was told that the experimenter wanted the child to listen carefully to the following stories because she would ask questions about the stories later. Each story was accompanied by black and white photographs depicting the story (See Table F for the administration Instructions for Moral Conduct Stories).
The pictures were left in front of the subject and referred to if the subject did not remember all of the details. The child was asked both what should the child do in that situation and why. The verbatim verbal responses were recorded by the experimenter (See Appendix G for Moral Stories Recording Sheet). These responses were given to another judge to be independently rated.

Two weeks later, 30 children were randomly selected and re-tested on the same stories administered in the same way.

**Moral Judgment Scoring**

Responses to the moral conduct stories were scored on a three-point interval scale devised by Kohlberg for the Mahaney and Stephens' (1974) moral judgment research. The scale was comprised of the following intervals:

1. Fail: no response or a bizarre or irrelevant one.

2. Response is acceptable but a reason is omitted or illogical.

3. Response reflects mature moral reasoning.
This same procedure was repeated in the re-test situation.

TREATMENT OF THE DATA

The major intent of the present research was a) to see if there is a development trend in, and a significant difference between age groups on the constructs of moral judgment and moral conduct; b) to see if there is any significant difference between sex and observed behavior in moral conduct situations and verbal responses to analogous moral conduct stories; and c) to assess the relationship between moral judgment and moral conduct among moderately retarded students.

To accomplish this, the following statistical analyses were employed.

1. A polynomial analysis for trends was computed to test if there is a significant developmental trend for age on the constructs of moral judgment and moral conduct.

2. A $3 \times 2 \times 2 \times 3$ factorial ANOVA, with three levels of age as the first factor, sex as the second factor, race as the third factor, and SES as the fourth factor, was computed to test
significant differences for moral conduct and moral judgment across these four factors.

3. A Duncan Multiple Range was computed to determine which of the four factors were significantly different.

4. A point bi-serial correlation was computed to test for a significant relationship between observed behavior in a structured moral conduct situation and verbal responses reflecting moral judgment in moral conduct stories.

5. A factor analysis was computed to determine the factor structure of moral conduct and moral judgment.
CHAPTER IV

RESULTS

The hypotheses of this study concerned the effects of age and sex on the development of moral conduct and moral judgment among TMR children and the relationship between the two constructs. In this study, moral conduct was measured by observed behavior in contrived temptation situations. A subject received either a score of zero (fail) or one (pass). Moral judgment was measured by verbal responses to analogous moral conduct stories. A subject's response to the moral conduct stories was scored on a three-point interval scale.

MANOVA

To test the hypothesis that there were no significant differences for moral conduct and moral judgment across age and sex, a multivariate analysis of variance (MANOVA) was computed (Clyde Computer Service, 1970). This consisted of testing
for significant multivariate group effects using the Wilks Lambda criterion. A MANOVA including race and SES was not possible because there were too small cell frequencies for these two variables.

The MANOVA showed that there was a significant group effect for age with an F-ratio of 2.770 (df 28/140) at the .001 level. No multivariate significance was recorded for either sex or the interaction of sex and age. Sex recorded an F-ratio of .518 (df 14/70) and the interaction of sex and age recorded an F ratio of 1.053 (df 28/140). Therefore, children of different ages, regardless of sex, differed in terms of their behavioral responses in contrived situations and in terms of their verbal responses to analogous moral conduct stories. Accordingly the null hypothesis was rejected that there is no significant difference in moral conduct and moral judgment among TMR children at three different age levels. The null hypothesis was supported that there is no significant difference between sex and moral conduct and moral judgment as measured in this study.
However, since the age factor of the multivariate analysis of variance was significant, showing differences among the three age levels, further exploration was conducted to determine which moral conduct and moral judgment variables significantly differed among the age groups. The analysis consisted of a $3 \times 2$ analysis of variance (Weiner, 1971).

Tables 5 and 6 present the results of the moral conduct and moral judgment variables. Significant F-ratios were recorded for three moral conduct variables: self-control, cheating, and persistence. Cheating by disregarding rules was the most significant conduct variable, $p < .001$.

The results of the moral judgment variables are displayed in Table 6. It shows that four of the six judgment variables significantly differentiated ($p < .001$) among the three levels. The judgment regarding self-control was the most significant variable. This was followed by ignoring test limits, returning an article when the owner is unknown
# Table 5

**Analysis of Variance for Age Based on Behavioral Responses in Moral Conduct Situations**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>.527</td>
<td>4.75</td>
<td>.011</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.075</td>
<td>.34</td>
<td>.715</td>
</tr>
<tr>
<td>Cheating</td>
<td>1.484</td>
<td>8.19</td>
<td>.001</td>
</tr>
<tr>
<td>Testing limits</td>
<td>.071</td>
<td>.40</td>
<td>.670</td>
</tr>
<tr>
<td>Honesty I</td>
<td>.085</td>
<td>1.18</td>
<td>.313</td>
</tr>
<tr>
<td>Rule observance</td>
<td>.420</td>
<td>2.62</td>
<td>.079</td>
</tr>
<tr>
<td>Time observance</td>
<td>.214</td>
<td>1.17</td>
<td>.316</td>
</tr>
<tr>
<td>Persistence</td>
<td>1.010</td>
<td>4.29</td>
<td>.017</td>
</tr>
</tbody>
</table>

df (2, 83)
<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>6.347</td>
<td>12.05</td>
<td>0.001</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>3.538</td>
<td>7.90</td>
<td>0.001</td>
</tr>
<tr>
<td>Cheating</td>
<td>0.158</td>
<td>0.47</td>
<td>0.626</td>
</tr>
<tr>
<td>Testing limits</td>
<td>0.101</td>
<td>10.86</td>
<td>0.001</td>
</tr>
<tr>
<td>Honesty I</td>
<td>0.436</td>
<td>9.39</td>
<td>0.001</td>
</tr>
<tr>
<td>Honesty II</td>
<td>0.197</td>
<td>0.37</td>
<td>0.692</td>
</tr>
</tbody>
</table>

df (2, 83)
(honesty), and reporting an accident involving minor liability (truthfulness) respectively.

Even though the MANOVA produced no overall interaction between age and sex, the univariate analysis of variance yielded two variables which showed a significant difference (see Table 7 and 8). The moral conduct situation, which was significant at the .01 level, was reporting an accident. The moral judgment story, which was significant at the .05 level, was ignoring test limits. Table 9 and 10 show no significant differences for sex on the constructs of moral conduct and moral judgment.

In order to determine the effects of race and SES as contributing factors to moral development, each factor was systematically deleted from the univariate analysis for age. For race, black subjects were deleted from the analysis to see if their presence or absence had a significant effect on the two moral development constructs. The results indicate that race effects two moral conduct variables, self-control and persistence (see Tables 11 and 12). The F-ratio for self-control was 2.133 (p .125) when
white subjects were used which compares with 4.757 (p. .001) when black subjects were included. The F-ratio for persistence was 2.523 (p .08) when black subjects were excluded which compares with 4.757 (p .01) when black subjects were included.

For SES analysis, subjects' whose SES level was 1 or 3 were deleted from the analysis to see if their presence or absence had a significant effect on the two moral development constructs. The results indicate that SES had a significant effect on one moral conduct variable, namely, self-control (see Tables 13 and 14). The F-ratio for self-control was 2.739 (p .07) when only middle class subjects were included which compares with 4.757 (p .01) when all SES levels were included. Therefore, it seems that SES does not significantly effect moral judgment variables among the TMR sample in this study.
TABLE 7

ANALYSIS OF VARIANCE FOR THE INTERACTION OF SEX AND AGE BASED ON BEHAVIORAL RESPONSES IN MORAL CONDUCT SITUATIONS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>.044</td>
<td>.39</td>
<td>.673</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>1.159</td>
<td>.19</td>
<td>.007</td>
</tr>
<tr>
<td>Cheating</td>
<td>.021</td>
<td>.12</td>
<td>.892</td>
</tr>
<tr>
<td>Testing limits</td>
<td>.034</td>
<td>.19</td>
<td>.827</td>
</tr>
<tr>
<td>Honesty I</td>
<td>.155</td>
<td>.16</td>
<td>.122</td>
</tr>
<tr>
<td>Rule observance</td>
<td>.084</td>
<td>.52</td>
<td>.594</td>
</tr>
<tr>
<td>Time observance</td>
<td>.210</td>
<td>1.14</td>
<td>.323</td>
</tr>
<tr>
<td>Persistence</td>
<td>.097</td>
<td>.41</td>
<td>.663</td>
</tr>
</tbody>
</table>

df (2, 83)
### TABLE 8

ANALYSIS OF VARIANCE FOR THE INTERACTION OF SEX AND AGE BASED ON VERBAL RESPONSES TO MORAL CONDUCT STORIES

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>.228</td>
<td>.43</td>
<td>.650</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.188</td>
<td>.42</td>
<td>.658</td>
</tr>
<tr>
<td>Cheating</td>
<td>.370</td>
<td>1.10</td>
<td>.337</td>
</tr>
<tr>
<td>Testing limits</td>
<td>.789</td>
<td>3.18</td>
<td>.046</td>
</tr>
<tr>
<td>Honesty I</td>
<td>.015</td>
<td>.02</td>
<td>.978</td>
</tr>
<tr>
<td>Honesty II</td>
<td>.376</td>
<td>.71</td>
<td>.496</td>
</tr>
</tbody>
</table>

df (2, 83)
**TABLE 9**

ANALYSIS OF VARIANCE FOR SEX BASED ON BEHAVIORAL RESPONSES IN MORAL CONDUCT SITUATIONS

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Control</td>
<td>0.039</td>
<td>0.35</td>
<td>0.554</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>0.029</td>
<td>0.13</td>
<td>0.717</td>
</tr>
<tr>
<td>Cheating</td>
<td>0.366</td>
<td>2.02</td>
<td>0.159</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>0.087</td>
<td>0.49</td>
<td>0.484</td>
</tr>
<tr>
<td>Honesty I</td>
<td>0.013</td>
<td>0.18</td>
<td>0.671</td>
</tr>
<tr>
<td>Rule observance</td>
<td>0.036</td>
<td>0.23</td>
<td>0.635</td>
</tr>
<tr>
<td>Time observance</td>
<td>0.017</td>
<td>0.09</td>
<td>0.760</td>
</tr>
<tr>
<td>Persistence</td>
<td>0.335</td>
<td>1.42</td>
<td>0.236</td>
</tr>
</tbody>
</table>

df (1, 83)
<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>MS</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>.147</td>
<td>.28</td>
<td>.599</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.285</td>
<td>.64</td>
<td>.427</td>
</tr>
<tr>
<td>Cheating</td>
<td>.007</td>
<td>.02</td>
<td>.886</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>.001</td>
<td>.00</td>
<td>.967</td>
</tr>
<tr>
<td>Honesty I</td>
<td>.038</td>
<td>.06</td>
<td>.814</td>
</tr>
<tr>
<td>Honesty II</td>
<td>.819</td>
<td>.54</td>
<td>.218</td>
</tr>
</tbody>
</table>

df (1, 83)
## TABLE 11

AN ANALYSIS OF VARIANCE FOR AGE IN MORAL CONDUCT SITUATION WITH BLACK SUBJECTS DELETED

<table>
<thead>
<tr>
<th>Variables</th>
<th>White Subjects N=64</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Self-control</td>
<td>2.133</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.717</td>
</tr>
<tr>
<td>Cheating</td>
<td>4.075</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>.181</td>
</tr>
<tr>
<td>Honesty I</td>
<td>2.118</td>
</tr>
<tr>
<td>Observance of Rules</td>
<td>1.391</td>
</tr>
<tr>
<td>Time Observance</td>
<td>.203</td>
</tr>
<tr>
<td>Persistence</td>
<td>2.523</td>
</tr>
</tbody>
</table>
**TABLE 12**

AN ANALYSIS OF VARIANCE FOR AGE ON MORAL CONDUCT STORIES WITH BLACK SUBJECTS DELETED

<table>
<thead>
<tr>
<th>Stories</th>
<th>White Subjects</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=64</td>
<td>F</td>
<td>P</td>
</tr>
<tr>
<td>Self-control</td>
<td>8.710</td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>6.570</td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td>Cheating</td>
<td>.223</td>
<td></td>
<td>.680</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>6.076</td>
<td></td>
<td>.002</td>
</tr>
<tr>
<td>Honesty I</td>
<td>11.395</td>
<td></td>
<td>.001</td>
</tr>
<tr>
<td>Honesty II</td>
<td>.124</td>
<td></td>
<td>.579</td>
</tr>
</tbody>
</table>
TABLE 13

AN ANALYSIS OF VARIANCE FOR AGE IN MORAL CONDUCT SITUATIONS WITH SES LEVELS 1 AND 3 DELETED

<table>
<thead>
<tr>
<th>Situations</th>
<th>Level II SES N=75</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Self-control</td>
<td>2.739</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.370</td>
<td>.67</td>
<td></td>
</tr>
<tr>
<td>Cheating</td>
<td>11.381</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Testing Limits</td>
<td>1.130</td>
<td>.33</td>
<td></td>
</tr>
<tr>
<td>Honesty I</td>
<td>1.867</td>
<td>.16</td>
<td></td>
</tr>
<tr>
<td>Observance of Rules</td>
<td>2.118</td>
<td>.13</td>
<td></td>
</tr>
<tr>
<td>Time Observance</td>
<td>.643</td>
<td>.53</td>
<td></td>
</tr>
<tr>
<td>Persistence</td>
<td>7.074</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Stories</td>
<td>Level II SES N=75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>$F$</td>
<td>$P$</td>
<td></td>
</tr>
<tr>
<td>Self-control</td>
<td>12.984</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Truthfulness</td>
<td>6.893</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Cheating</td>
<td>.561</td>
<td>.575</td>
<td></td>
</tr>
<tr>
<td>Testing Limits</td>
<td>8.423</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>Honesty I</td>
<td>6.684</td>
<td>.002</td>
<td></td>
</tr>
<tr>
<td>Honesty II</td>
<td>.343</td>
<td>.676</td>
<td></td>
</tr>
</tbody>
</table>
Pair Comparison for Age

A contrast analysis for age, using the Duncan Multiple Range, (Ferguson, 1971) was computed to determine which specific age groups differ significantly on moral conduct and moral judgment variables. Significant differences at the .05 level were found between age levels I and II (6-0 to 9-11 and 10-0 to 13-11) on the following variables: cheating and persistence in moral conduct situations and testing limits and honesty I in moral judgment stories.

Significant differences at the .05 level were found between age levels II and III (10-0 to 13-11 and 14-0 to 17-11) on two conduct variables, self-control and cheating, and one judgment variable, self-control.

At the .01 level, significant differences were found between age levels I and III (6-0 to 9-11 and 14-0 to 17-11) on two conduct variables, cheating and persistence, and four judgment variables, self-control, truthfulness, testing limits, and honesty I.

Linear Trend

To assess the hypothesis that there is no signifi-
cant developmental trend for age on the constructs of moral conduct and moral judgment, a polynomial analysis for trends was computed. The means and standard deviations for the three age levels on moral conduct and moral judgment are presented in Tables 15 and 16. The polynomial analyses for trends are displayed in Tables 17 and 18. The results show that two of the eight moral conduct variables and four of six moral judgment variables have a significant linear trend: The two conduct variables were cheating and persistence. The moral judgment responses involved self-control, truthfulness, ignoring test limits, and Honesty I. This would indicate a developmental progression.

Tables 17 and 18 indicate that certain variables showed a deviation from the linear which are in either a U-shaped curve or show a plateau effect. However, only one variable, the moral conduct variable of self-control, was significantly deviant (p .01) from the linear term (see Figures 1 and 2).

Therefore, the null hypotheses were rejected, that there is no significant developmental trend for
<table>
<thead>
<tr>
<th>Situations</th>
<th>Group I N=30</th>
<th>Group II N=30</th>
<th>Group III N=30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  SD</td>
<td>Mean  SD</td>
<td>Mean  SD</td>
</tr>
<tr>
<td>Self-control</td>
<td>.87 .34</td>
<td>.73 .45</td>
<td>1.00 .00</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.67 .48</td>
<td>.57 .50</td>
<td>.63 .49</td>
</tr>
<tr>
<td>Cheating</td>
<td>.06 .25</td>
<td>.30 .47</td>
<td>.53 .51</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>.73 .08</td>
<td>.80 .07</td>
<td>.83 .06</td>
</tr>
<tr>
<td>Honesty I</td>
<td>.96 .18</td>
<td>.93 .25</td>
<td>.86 .34</td>
</tr>
<tr>
<td>Rule Observance</td>
<td>.66 .48</td>
<td>.83 .38</td>
<td>.90 .31</td>
</tr>
<tr>
<td>Time Observance</td>
<td>.70 .47</td>
<td>.73 .45</td>
<td>.86 .35</td>
</tr>
<tr>
<td>Persistence</td>
<td>.33 .48</td>
<td>.60 .49</td>
<td>.70 .46</td>
</tr>
</tbody>
</table>
TABLE 16

MEANS AND STANDARD DEVIATIONS FOR THREE AGE GROUPS
BASED ON VERBAL RESPONSES TO MORAL CONDUCT STORIES

<table>
<thead>
<tr>
<th>Story</th>
<th>Group I N=30</th>
<th>Group II N=30</th>
<th>Group III N=30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean  SD</td>
<td>Mean  SD</td>
<td>Mean  SD</td>
</tr>
<tr>
<td>Self-control</td>
<td>1.9  .91</td>
<td>2.4  .72</td>
<td>2.8  .46</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>1.7  .64</td>
<td>1.9  .67</td>
<td>2.4  .68</td>
</tr>
<tr>
<td>Cheating</td>
<td>2.1  .51</td>
<td>2.2  .62</td>
<td>2.3  .60</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>1.8  .89</td>
<td>2.4  .72</td>
<td>2.7  .65</td>
</tr>
<tr>
<td>Honesty I</td>
<td>1.3  .66</td>
<td>1.9  .85</td>
<td>2.2  .92</td>
</tr>
<tr>
<td>Honesty II</td>
<td>2.5  .63</td>
<td>2.4  .76</td>
<td>2.5  .78</td>
</tr>
</tbody>
</table>
### TABLE 17

POLYNOMIAL ANALYSIS FOR TRENDS FOR THREE AGE LEVELS BASED ON BEHAVIORAL RESPONSES IN MORAL CONDUCT SITUATIONS

<table>
<thead>
<tr>
<th>Situations</th>
<th>Linear Term</th>
<th>P</th>
<th>Deviation from Linear</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>.267</td>
<td>.128</td>
<td>.800</td>
<td>.008</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.017</td>
<td>.687</td>
<td>.139</td>
<td>.457</td>
</tr>
<tr>
<td>Cheating</td>
<td>3.267</td>
<td>.000</td>
<td>.000</td>
<td>.326</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>.150</td>
<td>.351</td>
<td>.005</td>
<td>.655</td>
</tr>
<tr>
<td>Honesty I</td>
<td>.150</td>
<td>.148</td>
<td>.005</td>
<td>.688</td>
</tr>
<tr>
<td>Rule Observance</td>
<td>.817</td>
<td>.022</td>
<td>.050</td>
<td>.576</td>
</tr>
<tr>
<td>Time Observance</td>
<td>.417</td>
<td>.126</td>
<td>.050</td>
<td>.600</td>
</tr>
<tr>
<td>Persistence</td>
<td>2.016</td>
<td>.004</td>
<td>.139</td>
<td>.447</td>
</tr>
</tbody>
</table>
### TABLE 18

**POLYNOMIAL ANALYSIS FOR TRENDS FOR THREE AGE LEVELS BASED ON VERBAL RESPONSES TO MORAL CONDUCT STORIES**

<table>
<thead>
<tr>
<th>Stories</th>
<th>Linear Term</th>
<th>P</th>
<th>Deviation from Linear</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>12.150</td>
<td>.001</td>
<td>.005</td>
<td>.574</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>7.350</td>
<td>.001</td>
<td>.272</td>
<td>.439</td>
</tr>
<tr>
<td>Cheating</td>
<td>.417</td>
<td>.264</td>
<td>.005</td>
<td>.606</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>12.150</td>
<td>.001</td>
<td>.450</td>
<td>.384</td>
</tr>
<tr>
<td>Honesty I</td>
<td>11.267</td>
<td>.001</td>
<td>.800</td>
<td>.278</td>
</tr>
<tr>
<td>Honesty II</td>
<td>.017</td>
<td>.653</td>
<td>.450</td>
<td>.361</td>
</tr>
</tbody>
</table>
age on the constructs of moral conduct and moral judgment.

**Correlational Analysis**

A biserial correlation was computed to determine the degree of association between moral conduct and moral judgment, i.e., the relationship between stated opinions of expected behavior and the subject's observed conduct in similar structured situations. Table 19 shows the range in correlations from .01 to .31. Although the two variables of self-control and cheating have low correlations (.19 and .17 respectively), they are significant at the .05 level. The highest correlation (.31) is on the truthfulness variable and is significant at the .01 level.

Therefore, the null hypothesis that there is no significant relationship between moral conduct and moral judgment is rejected.

**Factor Analysis**

In order to explore the underlying structure of moral development, e.g., moral conduct and moral judgment, a factor analysis was computed. A principal
factoring method was used which replaces the main diagonal element of the correlation matrix with communality estimates. The factors were rotated orthogonally to the Varimax criteria (Kaiser, 1958). Table 20 presents the rotated factor matrix for the total population. A loading was considered significant when its value was .30 or higher.

Twelve of the fourteen moral development variables had significant loadings. Four of the variables had a significant loading on just one factor and three had loadings on only two factors.

As a result of the analysis of the moral conduct and moral judgment variables, the following factors were obtained.

**Factor I**

This factor is primarily defined by variables which require an awareness of and belief in the need to adhere to rules. This factor is composed of five moral conduct stories which show the retarded subject's ability to supply and verbally apply conduct rules to hypothetical situations which demonstrates
Fig. 1 Linear Trends for Moral Conduct Situations Across Three Age Levels of TMR Children.
Fig. 2 Linear Trends for Moral Conduct Stories Across Three Age Levels of TMR Children.
### TABLE 19

**CORRELATION COEFFICIENTS BETWEEN BEHAVIORAL RESPONSES IN MORAL CONDUCT SITUATION AND VERBAL RESPONSES TO ANALAGOUS MORAL CONDUCT STORIES**

<table>
<thead>
<tr>
<th>Variables</th>
<th>r</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-control</td>
<td>.19</td>
<td>.040</td>
</tr>
<tr>
<td>Truthfulness</td>
<td>.31</td>
<td>.002</td>
</tr>
<tr>
<td>Cheating</td>
<td>.17</td>
<td>.055</td>
</tr>
<tr>
<td>Testing Limits</td>
<td>.12</td>
<td>.129</td>
</tr>
<tr>
<td>Honesty I</td>
<td>.01</td>
<td>.471</td>
</tr>
</tbody>
</table>
TABLE 20

ROTATED FACTOR MATRIX FOR MORAL CONDUCT AND MORAL JUDGMENT VARIABLES FOR THE TOTAL GROUP (N=90)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Rotated Factors</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>h²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
<td>V</td>
<td>VI</td>
<td></td>
</tr>
<tr>
<td>Self-control-situation</td>
<td>.05</td>
<td>-.02</td>
<td>.09</td>
<td>-.09</td>
<td>.19</td>
<td>.04</td>
<td>.39</td>
</tr>
<tr>
<td>Truthfulness-situation</td>
<td>-.07</td>
<td>-.06</td>
<td>-.10</td>
<td>.65</td>
<td>-.01</td>
<td>.10</td>
<td>.49</td>
</tr>
<tr>
<td>Cheating-situation</td>
<td>.18</td>
<td>.73</td>
<td>.61</td>
<td>-.08</td>
<td>.13</td>
<td>.17</td>
<td>.99</td>
</tr>
<tr>
<td>Testing Limits-situation</td>
<td>.07</td>
<td>.26</td>
<td>-.19</td>
<td>-.11</td>
<td>.05</td>
<td>.42</td>
<td>.32</td>
</tr>
<tr>
<td>Honesty I-situation</td>
<td>-.20</td>
<td>.07</td>
<td>.15</td>
<td>-.07</td>
<td>.53</td>
<td>.13</td>
<td>.40</td>
</tr>
<tr>
<td>Rules Observance-sit.</td>
<td>.33</td>
<td>.05</td>
<td>.27</td>
<td>-.18</td>
<td>-.10</td>
<td>.11</td>
<td>.25</td>
</tr>
<tr>
<td>Time observance-sit.</td>
<td>.04</td>
<td>-.14</td>
<td>.73</td>
<td>-.05</td>
<td>.08</td>
<td>-.05</td>
<td>.58</td>
</tr>
<tr>
<td>Persistence-situation</td>
<td>.07</td>
<td>.94</td>
<td>-.22</td>
<td>.02</td>
<td>.05</td>
<td>.10</td>
<td>.95</td>
</tr>
<tr>
<td>Self-control-story</td>
<td>.61</td>
<td>.11</td>
<td>.01</td>
<td>.09</td>
<td>-.01</td>
<td>.11</td>
<td>.48</td>
</tr>
<tr>
<td>Truthfulness-story</td>
<td>.44</td>
<td>.07</td>
<td>.03</td>
<td>.57</td>
<td>-.05</td>
<td>-.13</td>
<td>.59</td>
</tr>
<tr>
<td>Cheating-story</td>
<td>.14</td>
<td>.02</td>
<td>.07</td>
<td>.06</td>
<td>.02</td>
<td>.45</td>
<td>.23</td>
</tr>
<tr>
<td>Testing limits-story</td>
<td>.65</td>
<td>-.01</td>
<td>.23</td>
<td>.05</td>
<td>-.16</td>
<td>.30</td>
<td>.61</td>
</tr>
<tr>
<td>Honesty I-story</td>
<td>.73</td>
<td>.07</td>
<td>-.05</td>
<td>.00</td>
<td>.26</td>
<td>.09</td>
<td>.62</td>
</tr>
<tr>
<td>Honesty II-story</td>
<td>.36</td>
<td>.05</td>
<td>-.06</td>
<td>.04</td>
<td>.58</td>
<td>.08</td>
<td>.49</td>
</tr>
<tr>
<td>Factor Variance</td>
<td>2.47</td>
<td>1.39</td>
<td>1.22</td>
<td>.91</td>
<td>.65</td>
<td>.40</td>
<td></td>
</tr>
<tr>
<td>Pct. of Variance</td>
<td>33.4</td>
<td>18.8</td>
<td>16.5</td>
<td>12.3</td>
<td>8.8</td>
<td>5.5</td>
<td></td>
</tr>
</tbody>
</table>
an awareness of and conformity to rules. The other variable in this factor is the moral conduct situation concerned with cheating by failure to observe the rules.

**Factor II**

This factor is defined by moral conduct variables in which the child persists in the execution of an assigned task and observes the task rules. Although these variables represent different performance attributes, they both derive from the same work situation. This suggests dependability in a work situation.

**Factor III**

This factor is primarily defined by those moral conduct situations in which the individual conforms by strictly adhering to the rules. This seems to be the conduct counterpart to the judgmental aspect of rule awareness defined in Factor I. This factor seems to represent the earlier stage in moral development hypothesized by Piaget, the heteronomous stage in which there is strict adherence to rules.
Factor IV
This factor is defined by the subject's truthfulness in reporting the misdeed of another.

Factor V
This factor is defined by the individual's honesty in seeking the owner of a found article. This factor seems to show concern for the rights of others and the concept of ownership.

Factor VI
This factor is defined by the individual's obedience to authority. This factor includes the moral conduct situation and story in which the child must adhere to rules without supervision and the cheating story. This factor also reflects some degree of internal control since rule adherence is required in the absence of external supervision.

In order to determine the differential importance of the obtained factors, sums of squares of loadings were computed for each factor. The factor variance suggests the relative importance of each factor in its relation to the total individual differences (see Table 20).
The results show that Factors I, II and III account for approximately 65% of the total variance. Of the six major loadings on the first factor, five were obtained from moral judgment variables. Therefore, it seems that there is an interrelatedness of moral judgments which suggests a common element in the judgments advanced for stories. This factor appears to represent the heteronomous level of moral reasoning in which rules are viewed as unchangeable dicta and strict adherence to rules is viewed as duty. The structure of moral conduct was composed of several factors and appeared more situation specific than the moral judgment factor.
This study was designed to determine if age and sex variables had a significant effect on measured moral conduct and moral judgment among TMR children. The second concern was to determine if there is a significant developmental trend for age on the constructs of moral judgment and moral conduct as measured in this study. The third purpose of this experiment was to explore the relationship between observed behavior in a structured moral conduct situation and verbal responses reflecting moral judgment in analogous moral conduct stories. The final purpose of this study was to determine the factor structure of moral development constructs, e.g., moral conduct and moral judgment.

MORAL CONDUCT

Sex

This study did not demonstrate a significant
relationship between sex and moral conduct scores (see Table 9). This is similar to findings of Burton, Maccoby and Allinsmith (1961), Grinder (1960), Jones (1936) and Walsh (1967 who reported no significant differences in boys and girls in the frequency of resisting temptation. Hartshorne and May (1960) found sex differences in three of eight cheating situations. One possible explanation for this discrepancy between Hartshorne and May's (1930) findings and those of the present study may be due to the sex of the experimenter. In the present study, the experimenter was always female; while in Hartshorne and May's work, the sex of the experimenter was varied. Burton, Allinsmith and Maccoby (1966) report that children conformed more to the rules with an adult of the opposite sex. This may account for boys receiving a higher score than in other studies and therefore minimizing the differences between their performances and the girls' performance.

**Age**

A significant relationship was found between age
and three moral conduct variables, i.e., self-control, cheating and persistence. In general, misconduct was inversely related to age, i.e., a decrease in acts of misconduct as age increased. This finding is similar to the cross-sectional data reported by Stephens, Miller and McLaughlin (1969) in which certain moral conduct variables were significantly affected by age, i.e., self-control, truthfulness, cheating, money return and persistence.

Other researchers (Grinder, 1963; Rau, 1964; Walsh, 1967) report that experimental measures of resistance to cheating or stealing do not increase significantly or regularly with age. Hartshorne and May (1930) found practically no correlation between age and conduct except in the scores on persistence tests. This study's findings parallel those of Hartshorne and May's results regarding persistence, i.e., older children are more persistent than younger children.

In the contrast analysis for age, the two moral conduct variables which significantly differentiated between age levels I and II and I and III were cheating
and persistence. Significant differences were found between age levels II and III on cheating and self-control. The polynomial analysis for trends revealed a linear trend for cheating and persistence, which indicates that these two variables follow a developmental sequence. Other researchers (Hartshorne and May, 1930; Stephens, et al., 1969) report similar results for persistence. Various factors may be contributing to account for the developmental nature of persistence. As children increase in age, they may concentrate better and be less distracted by extraneous stimuli. Also older children may drive greater satisfaction from task achievement.

The developmental trend of cheating found in this study parallels the results reported by Stephens, et al. (1969) in their research on moral conduct in retarded children. However, this finding is in contrast to other studies (Grinder, 1963; Hartshorne and May, 1930; Walsh, 1967) in which cheating was not affected by age in normal children. A possible explanation for this difference may be that the type of cheating situation used in the present study and the Stephen's
study was affected by the retarded subject's ability to comprehend the rules of the task. Therefore, the developmental nature of the cheating variable in this study may be representing the cognitive developmental aspect of listening and comprehension skills.

Self-control significantly deviated from the linear term and revealed a U-shaped curve. The younger (Group I) and older (Group III) age levels displayed a greater degree of control than the middle age level (Group II). These findings indicate that during the pre-adolescent and early adolescent period there is a decrease in the degree of self-control. This may be reflecting the "adolescent turmoil" period in which there is emotional and behavioral lability and an increase in social maladaptation among the retarded (Nihira, 1969).

In summary, this study provides evidence that certain moral conduct variables displayed a significant developmental trend. However, the author is cautious in concluding that the construct of moral conduct is developmental in nature.
Race and SES

Because of too small cell frequency, these two factors could not be analyzed in the multiple analysis of variance. However, to see if the presence or absence of black subjects or low or high SES subjects affected the results, the univariate analysis for age was recomputed systematically deleting black subjects and then SES Level I and Level II subjects. The results indicate that both race and SES affected the self-control variable and race affected the persistence variable. It seems that this type of self-control situation (taking candy) is affected by race and SES. The results are somewhat confounded since many of the black subjects were also in the SES Level I classification. A study to investigate the effects of race and SES on moral conduct is needed before hypotheses can be generated.
MORAL JUDGMENT

Sex

In this study, there was not significant relationship between sex and moral judgment as measured by verbal responses to moral conduct stories (see Table 10). This result is consistent with the findings of other studies (Boehm and Nass, 1961; Durkin, 1960; Whiteman and Kosier, 1964) in which there were no significant sex differences in the maturity of moral judgment.

It would appear that the cognitive bases of moral judgment, as presented in Piaget's and Kohlberg's theories, is more important than various environmental factors, such as parental pressures, cultural expectations, etc.

Age

This study found significant age differences in measured moral judgment. This parallels the findings of many researchers (Boehm, 1962; Grinder, 1964; Johnson, 1962; Lerner, 1937; MacRae, 1954; Medinnus, 1954; Piaget, 1932; Whiteman and Kosier, 1964) who have
examined various aspects of moral judgment and reported that changes in the conceptual approach to moral judgment occur with advancing age during the course of the childhood years. Table 16 show an increase in moral judgment scores across the three age levels on five of the six variables. However, the univariate analysis of variance shows that only four of these variables are significant (see Table 6). The significant variables are: self-control, truthfulness, testing limits and honesty I.

In the contrast analysis for age, the moral judgment variables which significantly differentiated between age levels I and II were testing limits and honesty I; between age levels II and III was self-control; and between age levels I and III were self-control, truthfulness, testing limits and honesty I. The polynomial analysis for trends revealed a linear trend for self-control, truthfulness, testing limits and honesty which indicates that these variables follow a developmental sequence. These findings suggest that moral judgment among TMR children progresses at a slower rate of development than moral judgment
among EMR children and normal children (Stephens, 1972). This hypothesis is based on the lack of significance on all four moral judgment variables between age levels I and II and II and III. It is not until age levels I and III are contrasted do all variables significantly differentiate the groups. This finding would parallel Inhelder's (1968) research on reasoning in the mentally retarded in which it was demonstrated that reasoning in the retarded progresses through the same hierarchical sequence as normal children but at a slower rate. However since the present study only used TMR children, additional research investigating moral judgment among normal, EMR, and TMR children using the same stimuli is needed to clarify this issue.

Race and SES

The results of the univariate analysis for age, in which black subjects and SES levels I and III were deleted, show that race and socioeconomic status does not significantly affect moral judgment. Thus results on SES differs from other studies which report
that socioeconomic status influences certain moral judgment variables (Boehm, 1962; Johnson, 1962; Lerner, 1937; MacRae, 1950). However, these studies used subjects of normal intelligence, while the present research used moderately retarded subjects. This seems to suggest that experiential variables do not significantly affect moral judgment when the reasoning skills of the subjects are at a retarded level. However since the N in this study was so small, further investigation is needed to research this topic thoroughly.

Race did not significantly affect moral judgment in this study. This study confirms the results of another study in which moral judgment in black and white adolescents was investigated (Fodor, 1969).

In general, the limited reasoning and verbal skills of subjects in the present study seems to make this group relatively homogeneous regardless of race and SES in judging actions in moral conduct stories.
RELATIONSHIP BETWEEN MORAL JUDGMENT AND MORAL CONDUCT

The relationship between stated opinions of expected behavior and the subject's observed conduct in similar situations was low and generally non-significant. These results support those of previous investigations in showing little association between a child's actual behavior and his verbally expressed attitudes (Brogden, 1940; Grinder, 1964; Hartshorne and May, 1928; Medinnus, 1966). McLaughlin and Stephens (1974) also report low correlations between moral conduct and moral judgment in their research using both normal and retarded subjects.

These findings suggest that behavioral and cognitive characteristics of moral development seem to develop independently. Children's compliance with social standards in the face of temptation probably occurs more as a function of social-learning experiences than as a result of changes in cognitive structure.

FACTOR STRUCTURE OF MORAL DEVELOPMENT

The factor analysis explored the underlying structure
of moral development. Table 20 shows the factors. In general, factors defined by the moral judgment variables did not have major loadings from measures of moral conduct. The independence of these factors seems to indicate that moral conduct and moral judgment are two different aspects of moral development. Moreover, the variables used to measure the moral conduct construct appears to be situation specific and not governed by one underlying dimension or structure. The fact that several factors rather than a unitary one emerged lends support to Hartshorne's and May's rejection of an "all or none" formulation regarding a person's character.

When scores for moral judgment variables were factor analyzed, one main interpretable factor was obtained. Factor I is suggestive of the ability to supply and verbally apply conduct rules to hypothetical situations which appears to signify awareness of and conformity to rules. This factor seems to represent the heteronomous level of moral reasoning.

The moral conduct variables loaded on several different factors. The two main factors include
persistence and rule observance in a work situation. It is interesting to note that Factors IV, V and VI have loadings from analogous moral conduct and moral judgment variables. This suggests that moral judgment does play a role in certain moral conduct situations although the correlation is quite low (see Table 19).

**IMPLICATIONS**

While the area of social deficits has long been cited as the principal reason for adjustment problems among the retarded, there has been little attempt to determine individual levels of functioning in these areas or to supply appropriate intervention activities. The measures of moral judgment and moral conduct employed in this study could be used to determine the level of moral development. If it is found unacceptable, remedial activities could be instigated which takes the person's present level of moral functioning as a baseline and supply structured experiences which are devised to promote step-by-step development.

The retarded exhibited difficulty in focusing on the intent of the doer rather than on the consequences of his act in determining the severity of misconduct.
In order to promote insightful judgment, situations which involve various aspects of moral reasoning could be introduced into training programs. Because of the lack of sophistication exhibited by the retarded in situations involving complex moral judgment, intervention should focus on fairly simple aspects of moral judgment rather than on more abstract motions of law. Attempts to promote growth in moral judgment would draw from the approach formulated by Turiel (1966) which is based on group discussion of situations concerning moral conflict. Conflict could be derived from the trainee's immediate environment. Verbal and pictorial situations could be used for training.

Training techniques for moral conduct could be derived from techniques used by Hartshorne and May (1929). For persons who exhibit deficits in moral conduct, the initial contrived situations would contain only slight opportunity for misconduct and social reward would follow desirable behavior.

Research on developing and evaluating intervention programs are needed in order to establish successful habilitation programs, such as those developed by
Edmonson, Leland, DeJung and Leach (1967) and Goldstein (1969a), would seem to be a good model for moral development programs.

LIMITATIONS AND FURTHER RESEARCH

Since the population was drawn from one training center in one city, the findings can only be generalized to the present school population. Cross-validation of the present study is needed before these results can be generalized to other populations.

Since an EMR and normal population were not investigated in this study, comparisons of these two groups with a TMR population can only be hypothetical based on the work of other researchers. This type of comparative study is needed before conclusions concerning differences in the development of moral judgment and moral conduct among normals and retarded can be made.

The present research is a cross-sectional analysis of moral conduct and moral judgment. A longitudinal study is needed to see if the developmental nature of certain moral judgment and moral conduct variables continue to progress in the hierarchical sequence as
obtained in this study and to see what is the highest level attained by a TMR sample.

Another limitation of the present study concerns the construct validity of translating the theory of moral conduct and moral judgment into operational procedures for quantifying these theoretical dimensions. The particular situations and stories in many instances do not appear to adequately measure the theoretical constructs of moral conduct and moral judgment. Additional research is needed to devise more accurate measurement techniques of these constructs. Extending the use of audio-visual material to present moral judgment stories with the retarded, may be useful. Also it may be interesting to develop a moral judgment scale where there are multiple choice questions and the subjects are forced to make a choice.

Also the present population did not include a large enough sample on the race and SES variables to assess the significance of these variables on moral conduct and moral judgment. Therefore further research with a larger N is needed to investigate the effect of these variables.
Future research with the retarded could investigate the relationship between moral development and adaptive behavior since adaptive behavior is one aspect in defining mental retardation. The Adaptive Behavior Scale (Nihira, Foster, Shellhaas and Leland, 1974) might be a useful instrument for such a project to determine which domains correlate with moral judgment and moral conduct.

Research investigating the influence of peer group on moral conduct and moral judgment among the retarded may be another extension of this study. The relationship between moral development and the ability to make social inferences should also be investigated.

SUMMARY

The present study examined the development of moral conduct and moral judgment among TMR children. The subjects were 90 moderately retarded children enrolled in a county training program. The sample was composed of 15 girls and 15 boys at three age groups, 6-0 to 9-11 years of age, 10-0 to 13-11
years of age and 14-0 to 17-11 years of age.

Moral conduct was measured by a subject's behavioral response in contrived social situations. Moral judgment was measured by verbal responses to moral conduct stories.

The general conclusions pertaining to the study were:

1. There were significant differences in moral conduct and moral judgment among TMR children at different age levels.

2. There was a significant developmental trend for age on certain moral conduct and moral judgment variables. The two conduct variables were cheating and persistence. The four judgment variables were self-control, truthfulness, ignoring test limits, and honesty.

3. There were no significant sex differences in moral conduct and moral judgment.

4. There was low and generally non-significant correlations between observed behavior in a structured moral conduct situation and verbal responses reflecting moral judgment in moral conduct stories.

5. A factor analysis of moral conduct and moral judgment variables produced a unitary factor for moral judgment and several factors with moral conduct loadings. The moral judgment factor seemed to reflect an awareness of rules and application of such rules reflecting a heteronomous level of moral reasoning. The conduct
factors were more situation specific, such as persistence and rule observance in work, honesty and truthfulness.

The research domain concerning moral development, specifically in moderately retarded children; is wide open to investigation. Various lines of investigation are necessary to expand our knowledge in this area. This study was just a small part of a beginning into this type of research.
Instructions in Use of the Index of Socioeconomic Status*

The index of socioeconomic status (SES) developed at the Institute for Developmental Studies in New York City utilizes two factors to estimate the relative social positioning of individuals in a given community. These factors are identified as:

1. occupation of main support of the family
2. education of main support of the family.

Implicit assumptions in the use of the scale are that:

1. within any family unit, the social status of an individual can be derived from certain characteristics of the head of that family, and
2. within a community certain individuals are accorded more prestige than others on the basis of their occupation, education and/or income.

The following instructions outline the steps in obtaining an SES rating for children who are to be tested. The procedure involved is simple and the rating can be obtained in a few short steps.
1. Find the occupation of the specified head of the family in the occupational classification given in the following pages:

**OCCUPATIONAL RATING SCALE**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Supreme Court Justice</td>
<td></td>
</tr>
<tr>
<td>U.S. Diplomat or Foreign Service</td>
<td></td>
</tr>
<tr>
<td>State Governor, Mayor of large city</td>
<td></td>
</tr>
<tr>
<td>U.S. Cabinet Member</td>
<td></td>
</tr>
<tr>
<td>U.S. Senator, Congressman</td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td></td>
</tr>
<tr>
<td>College President or Chancellor</td>
<td>10</td>
</tr>
<tr>
<td>College Professor</td>
<td></td>
</tr>
<tr>
<td>Scientist (Government or other)</td>
<td></td>
</tr>
<tr>
<td>State Attorney</td>
<td></td>
</tr>
<tr>
<td>Bank Executive</td>
<td></td>
</tr>
<tr>
<td>Investment Broker</td>
<td></td>
</tr>
<tr>
<td>Captain of ocean-going vessel</td>
<td></td>
</tr>
<tr>
<td>County Judge</td>
<td></td>
</tr>
<tr>
<td>Department Head. State Government</td>
<td></td>
</tr>
<tr>
<td>Motion Picture Actor, (not &quot;extra&quot;)</td>
<td></td>
</tr>
<tr>
<td>Minister</td>
<td></td>
</tr>
<tr>
<td>Lawyer</td>
<td></td>
</tr>
<tr>
<td>Architect</td>
<td></td>
</tr>
<tr>
<td>Postmaster, City</td>
<td></td>
</tr>
<tr>
<td>Chemist</td>
<td></td>
</tr>
<tr>
<td>Dentist</td>
<td></td>
</tr>
<tr>
<td>Electronic Engineer</td>
<td>9</td>
</tr>
<tr>
<td>Nuclear Physicid</td>
<td></td>
</tr>
<tr>
<td>Civil Engineer</td>
<td></td>
</tr>
<tr>
<td>Mathematician</td>
<td></td>
</tr>
<tr>
<td>Radio entertainer (except announcer)</td>
<td></td>
</tr>
<tr>
<td>Director, Large Corp.</td>
<td></td>
</tr>
<tr>
<td>Airplane Pilot</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Inventor
Editor-Owner Newspaper
Psychologist
Veterinarian
Historian, Economist
Sociologist
Medical Researcher, Biologist
Author
Accountant, C.P.A.
Registered Nurse
Justice of the Peace
Gov. Investigator (FBI, Justice Dept., etc.)
Artist, performing artist
Professional Athlete
Interior Decorator, Industrial Designer, Fashion Designer
Factory, Department Store Owner
High School Teacher
Building Contractor
Radio Operator

Mine owner-operator
Owner of Logging camp
Musician in symphony orchestra
Small Retail Owner
Sheriff-County
Army-Captain or above
Elementary School Teacher
Railroad-Supervisor
Real Estate Agent
Agricultural Agent-County
Laboratory Technician
Detective of Police
Fire Lt. or above

Private Secretary
Undertaker
Social Welfare Worker
Foreman or Supervisor, Factory
Labor Union official - National only
Radio Announcer
Farm owner-operator
Hotel Manager
Newspaper Columnist
Electrician
Watchmaker, factory
Trained Mechanist
Mason
Dental Technician
Auto Salesman
Office Manager

Owner-operator dry cleaning
Linotype operator, printer
Newspaper reporter, proofreader
Oil well driller (not engineer)
Manager small store
Policeman, private investigator
Mail clerk, carrier
Bookkeeper
Insurance Agent
Traveling Salesman
Receptionist, typist secretary
Bank Clerk
Railroad Conductor, ticket agent
Practical Nurse
I.B.M. Keypunch operator

Playground worker
Teachers Aid
Structural Iron worker
Carpenter
Tenant farmer
Auto mechanic
Dressmaker
Beutician
Plumber
Telephone operator, lineman
Labor union official - local only
Lunch stand operator
Painter, house and/or non factory
Salesclerk, grocery clerk
Musician - popular, dance, singer
Furniture finisher
T.V. repairman
Fireman
Welder, offset pressman
Machinist-Factory
Barber
Shoe repairman
Railroad baggage handler
Other semi-skilled
Cook - restaurant or hotel, short order
Chauffeur - private
Fisherman
Motorman, bus driver, conductor
Milk route man
Shipping clerk
Cashier
Merchant seaman
Truck driver

Gas station attendant
Quarry worker
Night club singer
Porter - railroad
Taxi driver
Waiter - Bartender
Farm worker
All unskilled laborers
Coal miner
Night watchman
Janitorial - Building superintendent
Elevator operator
Freight handler
Nurse's Aide

Laundry worker
Newsboy
Soda clerk
Peddler
Grinder - tool, etc.
Odd job worker
Share cropper - migratory worker
Scrub woman
Garbage collector
Street sweeper
Shoe shiner

2. Occupational categories have been grouped into clusters; each has a prestige rating. Assign a rating to each child based on the occupation of main support of his family. For example, U.S. Supreme Court Justice is rated "10", Milk Route Man is rated "3". This number will be the occupation rating of each child.

3. Similarly, the education level of the head of the child's family is to be rated.

4. The following table specifies the ratings to be assigned for level of education of the main support in the child's family.

<table>
<thead>
<tr>
<th>EDUCATION</th>
<th>RATING</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-4 years</td>
<td>1</td>
</tr>
<tr>
<td>5-6 years</td>
<td>2</td>
</tr>
<tr>
<td>7-8 years</td>
<td>3</td>
</tr>
<tr>
<td>Some high school</td>
<td>4</td>
</tr>
<tr>
<td>High school graduate</td>
<td>5</td>
</tr>
<tr>
<td>Some college</td>
<td>6</td>
</tr>
</tbody>
</table>
College graduate 7
Post graduate or professional Trng. 8

5. You now have two (2) ratings for each child. On the basis of these two ratings (occupation and education) you can now derive an estimated SES rating for each child as follows:

6. Referring to the table below:

SES CONVERSION TABLE

<table>
<thead>
<tr>
<th>Education of Main Support</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupation of Main Support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>11</td>
<td>111</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>111</td>
<td>111</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>111</td>
<td>111</td>
<td>111</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>111</td>
<td>111</td>
<td>111</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>11</td>
<td>11</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
<td>111</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. Locate the occupation rating of main support for a given child on the left hand side of the figure;
2. locate the education of main support for a given child across the top of the figure;
3. find the coordinate of these two by bringing your finger down to the point where they meet. you will find that they meet in a box numbered 1, 11, or 111. This numerical value is the overall SES rating for the child.

7. Enter this number in the space marked "SES-A" in the lower right hand corner of the child's Background Information Sheet.

8. In the space marked "SES-B" enter your own judgmental estimate of the child's relative social status based on any familiarity that you may have with the child or his family. Use the numerals I,
II, or III where I will represent "Low" and III will represent "High".
APPENDIX B
TABLE B

Descriptive Variables of Age Level I

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Age Mean</th>
<th>S.D.</th>
<th>IQ* Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>11</td>
<td>8.5</td>
<td>1.3</td>
<td>42.00</td>
<td>6.2</td>
</tr>
<tr>
<td>SES 1</td>
<td>2</td>
<td>8.9</td>
<td>1.1</td>
<td>47.50</td>
<td>2.1</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>8.4</td>
<td>1.4</td>
<td>40.78</td>
<td>6.2</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>4</td>
<td>8.7</td>
<td>1.1</td>
<td>39.50</td>
<td>6.5</td>
</tr>
<tr>
<td>SES 1</td>
<td>1</td>
<td>9.1</td>
<td>0</td>
<td>32.00</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>8.6</td>
<td>0.2</td>
<td>42.00</td>
<td>5.2</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td></td>
<td>7.7</td>
<td>1.0</td>
<td>42.60</td>
<td>6.1</td>
</tr>
<tr>
<td>White</td>
<td>12</td>
<td>7.1</td>
<td>1.1</td>
<td>42.41</td>
<td>5.5</td>
</tr>
<tr>
<td>SES 1</td>
<td>2</td>
<td>7.0</td>
<td>0.5</td>
<td>42.50</td>
<td>9.2</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>7.6</td>
<td>1.1</td>
<td>42.40</td>
<td>5.2</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>3</td>
<td>8.3</td>
<td>0.8</td>
<td>43.33</td>
<td>9.8</td>
</tr>
<tr>
<td>SES 1</td>
<td>0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>8.3</td>
<td>0.8</td>
<td>43.33</td>
<td>9.9</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

* Stanford-Binet
APPENDIX C
TABLE C

Descriptive Variables of Age Level II

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Age</th>
<th>IQ*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>MALES</td>
<td>15</td>
<td>12.0</td>
<td>1.1</td>
</tr>
<tr>
<td>White</td>
<td>8</td>
<td>12.2</td>
<td>1.0</td>
</tr>
<tr>
<td>SES 1</td>
<td>1</td>
<td>12.2</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>7</td>
<td>12.3</td>
<td>1.1</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Black</td>
<td>7</td>
<td>11.8</td>
<td>1.1</td>
</tr>
<tr>
<td>SES 1</td>
<td>3</td>
<td>11.0</td>
<td>0.9</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>12.4</td>
<td>1.2</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FEMALES</td>
<td>15</td>
<td>12.4</td>
<td>1.3</td>
</tr>
<tr>
<td>White</td>
<td>13</td>
<td>12.3</td>
<td>1.4</td>
</tr>
<tr>
<td>SES 1</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>12.4</td>
<td>1.4</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>10.9</td>
<td>0</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>13.3</td>
<td>0.3</td>
</tr>
<tr>
<td>SES 1</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>13.3</td>
<td>0.3</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Stanford-Binet
APPENDIX D
## TABLE D

Descriptive Variables of Age Level III

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>Age Mean</th>
<th>Age S.D.</th>
<th>IQ* Mean</th>
<th>IQ* S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MALES</td>
<td>15</td>
<td>15.7</td>
<td>.9</td>
<td>43.80</td>
<td>5.2</td>
</tr>
<tr>
<td>White</td>
<td>10</td>
<td>15.9</td>
<td>1.0</td>
<td>43.50</td>
<td>5.3</td>
</tr>
<tr>
<td>SES 1</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>15.9</td>
<td>1.1</td>
<td>43.33</td>
<td>5.5</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>15.8</td>
<td>0</td>
<td>45.00</td>
<td>0</td>
</tr>
<tr>
<td>Black</td>
<td>5</td>
<td>15.3</td>
<td>.9</td>
<td>44.40</td>
<td>5.6</td>
</tr>
<tr>
<td>SES 1</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>15.3</td>
<td>.9</td>
<td>44.40</td>
<td>5.6</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>FEMALES</td>
<td>15</td>
<td>16.4</td>
<td>1.4</td>
<td>44.86</td>
<td>5.7</td>
</tr>
<tr>
<td>White</td>
<td>10</td>
<td>16.6</td>
<td>1.4</td>
<td>45.50</td>
<td>6.6</td>
</tr>
<tr>
<td>SES 1</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>16.3</td>
<td>1.5</td>
<td>45.13</td>
<td>6.9</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>17.8</td>
<td>.1</td>
<td>47.00</td>
<td>7.0</td>
</tr>
<tr>
<td>Black</td>
<td>5</td>
<td>15.9</td>
<td>1.4</td>
<td>43.60</td>
<td>3.5</td>
</tr>
<tr>
<td>SES 1</td>
<td>2</td>
<td>14.5</td>
<td>.7</td>
<td>45.50</td>
<td>3.5</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>16.8</td>
<td>.9</td>
<td>42.33</td>
<td>3.5</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

*Stanford-Binet*
The child will be brought to the testing room. (In the testing room is a one-way mirror so the child can be observed without his knowledge). A dollar bill has been placed on the floor just inside the room's doorway. The E will send the S into the room while she gets some paper. She will tell the child to sit at the table and wait for E.

The E will then enter the room. The pre-test story will be read.* If the S meets criteria, the E will draw attention to the candy dish which is on the table. The E will say in a surprised voice: "Hey, look at that! Someone's left this candy here. I wonder who left it; we'd better not touch any because it doesn't belong to us. Right?"

E then asks the S to draw a picture of something to see at the circus. After the child starts the task, the E looks at her watch and then says to S: I'll be

---

* Pretest: This story is about Tom and Betty. Tom and Betty are going to the circus. Tom and Betty like the circus. Tom and Betty will see clowns and animals at the circus.

What is in the story?
Accepted answer. Tom, Betty, or both.

Where are they going?
To the circus.

What will Tom and Betty see at the circus?
Clowns, animals, or both.
right back, I have to make a phone call. Finish the picture and then find a toy which you'd like to play with. After the E gets up, she points out to the S that she/he will not be disturbed since she'll put the DND sign up.

The S is left alone in the room for a total of five minutes. (During this time – data is taken to see if the child took any). After the X has been alone for three minutes, an unfamiliar young woman enters the room to get a book (against orders). While getting the book, she accidentally knocks a box of checkers off the shelf and they fall all over the floor. As she leaves, she asks the S not to tell anyone she had been there. Two minutes later, E returns and finds the blocks all over; she questions the S to see if he/she will provide any information on the mishap.

The E now lets each S select a toy with which he/she would like to play. After the S has played with a toy for a couple of minutes, the E tells the child to put the toy away because it is time to do the following task.
A board with 3 - 3" bolts filled with 5/6" washers. When the bell rings, remove the washers, one by one as quickly as possible. The E then demonstrates the correct and incorrect way to perform the task. The E then repeats the directions - sets the timer. the S practices the routine. The E then has the S repeat the directions.

After the S understands the rules, the E tells the child that after he/she finishes the task, they may play with any toy (but not what selected) again.

The E sets the timer and then excuses herself for a minute. Tells child do not touch toy - do work. The S will be left alone for three minutes.

The E returns to the room. At that time, she tells the S if he/she has seen a dollar.

Then the S will be told that the time is up for the day and that the E will see the child again next week.
ADMINISTRATION INSTRUCTIONS FOR MORAL CONDUCT STORIES

Today you are going to listen to some stories. Also, I will show you some pictures about the stories. (Each picture is a black photo depicting the action described).

Listen carefully because at the end of each story, I am going to ask you some questions.

Are you ready? Listen.

Story I:

(1) A girl (boy) sees a dish of candy.
(2) Teacher tells the girl "Don't touch the candy, it does not belong to us."
(3) Teacher leaves the girl in the room alone.
What should the girl (boy) do? (If no response - prompt - take candy or leave candy alone?)
Why?

Story II:

(1) A girl is told to draw a picture.
(2) Teacher leaves room - puts a sign on the door "STAY OUT PLEASE".
(3) A lady comes in.
(4) Lady gets a book and accidentally knocks blocks over.
(5) Lady tells the girl not to tell on her.
(6) Teacher comes back - sees the blocks - says "what happened?"
What should the girl do? Prompt: does she tell or not.
Why?
Story III:
Teacher tells the girl these rules for a job.

(1) Take pegs out one at a time.
(2) Wait until the bell rings to start.
(3) Take all of the pegs out.
(4) Teacher sets the timer and leaves the room.

What should the girl do? Prompts: did girl wait or not? did girl take one peg out? did girl take all pegs out? Why?

Story IV:
(1) Girl is reading her favorite book.
(2) Teacher takes book away from the girl.
(3) Teacher gives the girl work to do.
(4) Teacher tells girl "do not look at book - do your work -
(5) Teacher leaves room.
(6) What should girl do? Prompt: does girl read book or do work? Why?

Story V:
(1) Somebody dropped a dollar bill.
(2) Girl comes into the room and sees the dollar bill.
(3) What should the girl do? Prompt: pick up the dollar bill? Why?

Story VI: (This story is built upon Story V)
(1) Teacher comes into the room.
(2) Teacher says she's missing a dollar
(What should girl do - prompt (tell about the dollar) Why?)
MORAL JUDGMENT--STORIES--DATA SHEET

<table>
<thead>
<tr>
<th>Subject ID #</th>
<th>Date</th>
</tr>
</thead>
</table>

**STORY 1**
What should the boy (girl) do?
Why?

**STORY 2**
What should the boy (girl) do?
Why?

**STORY 3**
What should the boy (girl) do?
Why?

**STORY 4**
What should the boy (girl) do?
Why?

**STORY 5 & 6**
What should the boy (girl) do?
Why?
BIBLIOGRAPHY


Durkin, D. Children's concepts of justice: a comparison with the Piaget data. *Child Development,* 1959, 30, 59-67. (c)


Lerner, E. *Constraint areas and moral judgment of children*. Menesha, Wisc.: Banta, 1937


