1983

An investigation of cognitive and affective prerequisites for conventional moral reasoning

Robert Bowers Thompson
College of William & Mary - Arts & Sciences

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https://dx.doi.org/doi:10.21220/s2-2r1d-fr91

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AN INVESTIGATION OF COGNITIVE AND AFFECTIVE PREREQUISITES
FOR CONVENTIONAL MORAL REASONING

A Thesis
Presented to
The Faculty of the Department of Psychology
The College of William and Mary in Virginia

In Partial Fulfillment
of the Requirements for the Degree of
Master of Arts

by
Robert Bowers Thompson
This thesis is submitted in partial fulfillment of the requirements for the degree of Master of Arts.

Approved,

W. Larry Ventis, Ph.D., Chairman
Deborah G. Ventis, Ph.D.
Neill Watson, Ph.D.

Peter L. Derks, Chairman
To my parents
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I have never had so many people to thank at a single time. To save time and space I thought I should just mention the people that I didn't want to thank but I can't think of any. This dilemma is certainly a reflection of the philosophy, program, and people of the department of psychology. I want to sincerely thank the whole of the psychology department for its genuine friendship and helpfulness, and for a very happy two years. I am most grateful.
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ABSTRACT

This study focuses on Lawrence Kohlberg's stage theory of moral reasoning. The purpose of the research was to investigate the relationship between role-taking ability and the movement from a preconventional to conventional level of moral reasoning. In order for children to move from preconventional (stage 2) to conventional (stage 3) moral reasoning, it was hypothesized that they must be able to view an interaction from a third-person perspective (reciprocal role taking). It was further hypothesized that along with this type of role-taking ability the preconventional moral reasoner would need a sufficient degree of affective development (high in the need for affiliation) in order to make the shift to conventional moral reasoning.

Sixty-two fourth grade children were assessed on (1) stage of moral reasoning, (2) role-taking development, (3) Ability to assimilate stage 3 moral reasoning and (4) affiliation and security needs. Forty-six children were assessed as stage 2 moral reasoners. Twenty-six of the stage two reasoners were assessed as reciprocal role takers. Twenty-two of the twenty-six reciprocal role-takers assimilated stage 3 moral reasoning while only seven of the twenty non-reciprocal role takers assimilated higher reasoning ($X^2 = 11.944$, df = 1, p < .001). Establishing a relationship between the children's affective needs and stage 3 assimilation was unsuccessful.

Results were discussed in terms of their implications for intervention programs and future moral development research.
AN INVESTIGATION OF COGNITIVE AND AFFECTIVE PREREQUISITES FOR CONVENTIONAL MORAL REASONING
INTRODUCTION

Individual differences in ideas and attitudes about justice, right and wrong, and the nature of the conscience have been subject to a vast amount of research and thought during the first half of this century (Baldwin, 1906; Hartshorne and May, 1930; Dewey and Tufts, 1932; Piaget, 1932). Although in recent years Piaget did little work in the area of moral judgment, his earlier work (1932) provided a starting point for a number of subsequent theorists and investigators. Piaget studied moral judgment by observing children's responses to stories and the way children play games with each other (understanding of the rules). He also directly questioned children about good and bad actions, duties and punishment. On the basis of these observations, Piaget conceptualized two broad stages of moral development - heteronomous and autonomous.

Heteronomous implies that one is subject to the rule or law of another. This is the earliest form of morality and it is derived from a respect for the parents, which is at first dependent on the presence of the parents but gradually becomes internalized. Heteronomous morality is characterized by obedience to authority for its own sake.
The heteronomous preoperational child will connect "badness" to "bigness" in a literal sense - the child will primarily focus on the physical consequences (large or small) of an act instead of the intentions (good or bad). A progression from preoperational through concrete operational thought coincides with the rise of autonomous moral thought. Autonomous implies that one is subject to one's own rules or laws. In this stage morality is based on mutual respect and punishments begin to be understood in the context of intentions and motives.

Piaget's description of the development of moral reasoning from heteronomy to autonomy was an important contribution and it provided both methods and concepts for later researchers. Importantly, Piaget gave developmental psychologists a perspective - to see the world through the eyes of the child. Although his work is critical, Piaget's account of moral reasoning was inadequate in the sense that it did not allow for more complex and developmentally advanced levels.

More recently Lawrence Kohlberg (1958; 1969; 1976) has investigated extensively the development of 75 boys at three-year intervals from early adolescence through manhood, supplemented by a series of studies on moral development in other cultures. Through these studies and the influence of Piaget's studies on moral and cognitive development in children, Kohlberg has hypothesized three levels of moral thinking - preconventional, conventional, and
postconventional. He further postulates that each level contains two related stages of moral development. Table 1 contains a summary of the six hypothesized stages.

Kohlberg defined these stages by recording responses to hypothetical moral dilemmas. The dilemmas involve moral issues found in all countries (punishment, justice, life, property, truth). The "Heinz" story is a classic example of the type of dilemma administered:

In Europe, a woman was near death from a special kind of cancer. There was a drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could get together only about $1,000 which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So, Heinz got desperate and broke into the store to steal the drug for his wife.

Kohlberg views the six stages as forming a "universally invariant developmental sequence" in which the attainment of an advanced stage is dependent on each of the preceding stages. Extending this assumption, Kohlberg maintained that a more advanced stage is not simply an addition to a less advanced stage, but represents a reorganization of less advanced levels. His postulations do not imply any particular rate of progress or the eventual attainment of stage six, but if children progress they must do so in accordance with these stages. Examples of such a stepwise
TABLE 1

DEFINITION OF KOHLBERG'S STAGES OF MORAL DEVELOPMENT*

I. Preconventional level
At this level, the child is responsive to cultural rules and labels of good and bad, right or wrong, but interprets these labels in terms of either the physical or the hedonistic consequences of action (punishment, reward, exchange of favors), or in terms of the physical power of those who enunciate the rules and labels. The level is divided into the following two stages:

Stage 1: The punishment and obedience orientation. The physical consequences of action determine its goodness or badness regardless of the human meaning or value of those consequences. Avoidance of punishment and unquestioning deference to power are valued in their own right, not in terms of respect for an underlying moral order supported by punishment and authority (the latter being stage 4).

Stage 2: The instrumental relativist orientation. Right action consists of that which instrumentally satisfies one's own needs and occasionally the needs of others. Human relations are viewed in terms like those of the market place. Elements of fairness, of reciprocity, and of equal sharing are present, but they are always interpreted in a physical pragmatic way. Reciprocity is a matter of "you scratch my back and I'll scratch yours", not of loyalty, gratitude or justice.

II. Conventional level
At this level, maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. The attitude is not only one of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order, and of identifying with the persons or group involved in it. At this level, there are the following two stages:

Stage 3: The interpersonal concordance of "good boy - nice girl" orientation. Good behavior is that which pleases or helps others and is approved by them. There is much conformity to stereotypical images of what is majority of "natural" behavior. Behavior is frequently judged by intention - "he means well" becomes important for the first time. One earns approval by being "nice".

Stage 4: The "law and order" orientation. There is orientation toward authority, fixed rules, and the maintenance of the social order. Right behavior consists of doing one's duty, showing respect for authority, and maintaining the given social order for it's own sake.

III. Postconventional, autonomous, or principled level.
At this level, there is a clear effort to define moral value and
principles which have validity and application apart from the authority of the groups or persons holding these principles, and apart from the individual's own identification with these groups. The level again has two stages:

Stage 5: The social-contract, legalistic orientation, generally with utilitarian overtones. Right action tends to be defined in terms of general individual rights, and standards which have been critically examined and agreed upon by the whole society. There is a clear awareness of the relativism of personal values and opinions and a corresponding emphasis upon procedural rules for reaching consensus. Aside from what is constitutionally and democratically agreed upon, the right is a matter of personal "values" and "opinion". The result is an emphasis upon the "legal point of view", but with an emphasis upon the possibility of changing law in terms of rational considerations of social utility (rather than freezing it in terms of stage 4 "law and order"). Outside the legal realm, free agreement and contract is the binding element of obligation. This is the "official" morality of the American government and constitution.

Stage 6: The universal ethical principle orientation. Right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency. These principles are abstract and ethical (the Golden Rule, the categorical imperative); they are not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice, of the reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons.

*Source: Kohlberg and Turiel, 1973*
movement through the conceptions of the moral worth of human life ("Heinz" dilemma) are provided in Table 2.

Furthermore, Kohlberg defines each stage as a total way of thinking, not just a set of attitudes toward particular situations. Accordingly, a stage is a way of thinking which may be used to support either side of an action choice. A stage implies "qualitative differences in mode of response, rather than quantitative increases in information or in strength of response" (Kohlberg, 1971, p. 169).

For more than a decade, Kohlberg and his colleagues have advanced empirical evidence supporting his theory of moral development. Kohlberg attempted to document the universality of his stages by testing the moral reasoning of people from villages and cities in the United States, Great Britain, Taiwan, Israel, Yucatan, and Turkey (Kohlberg, 1969). In all of these cultures he found evidence of the same basic six stages through which moral values and judgments progress (however, the evidence for universality of moral reasoning stages is more convincing for the lower stages). Turiel (1966) investigated the postulation that Kohlberg's stages form an invariant sequence by testing the implication that any movement to a moral stage differing from the person's own should be directed at the next stage. In his experiment, subjects were given a pretest to determine their level of moral reasoning. The subjects were then exposed to moral judgments either one or two stages above or one below their determined stage. Turiel found
TABLE 2
SIX STAGES IN THE CONCEPTIONS OF THE MORAL WORTH OF LIFE*

Stage 1: No differentiation between moral value of life and its physical or social status value.

Tommy, age 10 (Why should the druggist give the drug to the dying woman when her husband couldn't pay for it?): "If someone important is in a plane and is allergic to heights and the stewardess won't give him medicine because she's only got enough for one and she's got a sick one, a friend, in back, they'd probably put the stewardess in a lady's jail because she didn't help the important one."

(Is it better to save the life of one important person or a lot of unimportant people?): "All the people that aren't important because one man just has one house, maybe a lot of furniture, but a whole bunch of people have an awful lot of furniture and some of these poor people might have a lot of money and it doesn't look it."

Stage 2: The value of a human life is seen as instrumental to the satisfaction of the needs of its possessor or of other persons. Decision to save life is relative to, or to be made by, its possessor. (Differentiation of physical and interest value of life, differentiation of its value to self and to other.)

Tommy, age thirteen (Should the doctor "mercy kill" a fatally ill woman requesting death because of her pain?): "Maybe it would be good to put her out of her pain, she'd be better off that way. But the husband wouldn't want it, it's not like an animal. If a pet dies you can get along without it—it isn't something you really need. Well, you can get a new wife, but it's not really the same."

Jim, age thirteen (same question): "If she requests it, it's really up to her. She is in such terrible pain, just the same as people are always putting animals out of their pain."

Stage 3: The value of a human life is based on the empathy and affection of family members and others toward its possessor. (The value of human life, as based on social sharing, community, and love is differentiated from the instrumental and hedonistic value of life applicable also to animals.)

Tommy, age sixteen (same question): "It might be best for her, but her husband—it's a human life—not like an animal, it just doesn't have the same relationship that a human being does to a family. You can become attached to a dog, but nothing like a human you know."

Stage 4: Life is conceived as sacred in terms of its place in a categorical moral or religious order of rights and duties. (The value of human life, as a categorical member of a moral order, is differentiated from its value to specific other people in the family, etc. Value of life is still partly dependent upon serving the group, the state, God, however).
Jim, age sixteen (same question): "I don't know. In one way, it's murder, it's not a right or privilege of man to decide who shall live and who should die. God put life into everybody on earth and you're taking away something from that person that came directly from God, and you're destroying something that is very sacred, it's in a way part of God and it's almost destroying a part of God when you kill a person. There's something of God in everyone."

Stage 5: Life is valued both in terms of its relation to community welfare and in terms of being a universal human right. (Obligation to respect the basic right to life is differentiated from generalized respect for the socio-moral order. The general value of the independent human life is a primary autonomous value not dependent upon other values.)

Jim, age twenty (same question): "Given the ethics of the doctor who has taken on responsibility to save human life— from that point of view he probably shouldn't but there is another side, there are more and more people in the medical profession who are thinking it is a hardship on everyone, the person, the family, when you know they are going to die. When a person is kept alive by an artificial lung or kidney, it's more like being a vegetable than being a human who is alive. If it's her own choice, I think there are certain rights and privileges that go along with being a human being. I am a human being and have certain desires for life and I think everybody else does, too. You have a world of which you are the center, and everybody else does, too, and in that sense we're all equal."

Stage 6: Belief in the sacredness of human life as representing a universal human value of respect for the individual. (The moral value of a human being, as an object of moral principle, is differentiated from a formal recognition of his rights.)

Jim, age twenty-four (Should the husband steal the drug to save his wife? How about for someone he just knows?): "Yes. A human life takes precedence over any other moral or legal value, whoever it is. A human life has inherent value whether or not it is valued by a particular individual."

(Why is that?): "The inherent worth of the individual human being is the central value in a set of values where the principles of justice and love are normative for all human relationships."

Source: Kohlberg, 1971
that subjects exposed to reasoning directly above their own stage were influenced more than those exposed to stages further above their own. Turiel had hypothesized that if the acquisition of each stage is not simply an addition process but a reorganization of the preceding stages, then the subjects should resist lower stages. In support of this hypothesis, the results indicated that the children exposed to moral judgments one stage above their own assimilated more than did either of the other groups. When asked in a post test to present their own advice on the moral situations, the children exposed to the stage directly above their own used more reasoning at the stage to which they were exposed than did the other two groups.

Turiel, Rest, and Kohlberg (1969) extended the Turiel study by investigating preference, comprehension and assimilation of the moral stages. In their study they proposed the following three hypotheses:

1) Stages of thinking above subject's predominant stage would be preferred to those below his stage if the subjects were asked to choose among them.

2) Stages of thinking above a subject's predominant stage are increasingly more difficult for the subject to understand than are the stages below his own level and hence cannot be correctly reproduced as readily as lower stages.

3) These two principles - preference for more advanced stages and increasing cognitive difficulty - interact such that subjects maximally accept into their own thinking moral reasoning one stage above their dominant stage (p. 227).

To test these hypotheses, the subjects were exposed to moral advice at stages one above, two above, and one below
their own. Measures of preference, comprehension, and assimilation were then obtained. The results confirmed the original hypotheses: subjects strongly preferred the plus two stage advice over the minus one and on the subsequent post test, subjects were generally found to be at a plus one level of functioning. The findings of this study indicate that the assimilation effect demonstrated in the Turiel study was due to rejection of lower level messages, which were comprehended, and to noncomprehension of the plus two stage message, which were liked.

Kohlberg has openly accepted philosophy as essential to his or any study of moral development. He adamantly states that "the fact that the cognitive categories of the philosopher are central for understanding the behavior development of the child is so apparent, once pointed out, that one recognizes that it is only the peculiar epistemology of the positivist behaviorist which could have obscured it" (Kohlberg, 1971, p. 152). Kohlberg has exhaustively argued that it is logically possible to move from his description of what moral stage development is to a statement of what such development ought to be. This argument directly implies that persons at a higher level of moral development reason better and act in accordance with their judgment. Empirical findings do support the contention that principled individuals act more honestly and live up to their beliefs when confronted by inconvenience and authority more so than individuals at lower stages of
moral development (Krebs, 1967; Kohlberg, Scharf, and Hickey, 1972). The relationship between moral reasoning and moral behavior is, however, a very controversial area. There are just as many or more studies that have found no relationship between stages of moral reasoning and moral behavior (for a comprehensive review see Blasi, 1980).

On the basis of his "is to ought" contention, the properties of the individual moral stages and research (Turiel, 1966; Rest, Turiel, and Kohlberg, 1969; Rest, 1973) Kohlberg (1973) has developed and instrumental approach to the area of value education. The basic goal of this approach is the stimulation of development stepwise through the moral stages. Recounting the limitations of early "indoctrination" approaches to moral education, Kohlberg introduces his approach:

Assuming that moral development passes through a natural sequence of stages, the approach defines the aim of moral education as the stimulation of the next step of development rather than indoctrination into the fixed conventions of the school, the church, or the nation. It assumes that the movement to the next step of development rests not only on exposure to the next level of thought, but to experiences of conflict in the application of the child's current level of thought to problematic situations. In contrast to conventional moral education, then, the approach stresses:

1) Arousal of genuine moral conflict, uncertainty, and disagreement about genuinely problematic situations. (In contrast, conventional moral education has stressed adult "right answers," and reinforcement of the belief that virtue is always rewarded."

2) The presentation of modes of thought one stage above child's own. (In contrast, conventional moral education tends to shift between appeals to adult abstractions far above the child's level and appeals to punishment and
prudence liable to rejection because they are above the child's level). (Blatt and Kohlberg, 1973, p. 6).

An example of the application of these principles to the classroom is provided by a study conducted by Blatt and Kohlberg (1973). Initially they tested all the children in the class for their stage of moral reasoning. During a twelve-week program, the members of the class discussed and argued a series of moral dilemmas different from those used in the pretest. In the course of these discussions among students, the teacher supported and clarified those arguments which were one stage above the majority of the children. At the end of the twelve weeks, all of the children were retested in order to assess the immediate effects of the discussion. A majority of the children in the class were found to have moved ahead almost one full stage. The classroom experience of moral education had led to a significant increase in moral judgment as compared to the control groups, and that this increase was still evident one year later.

The progress of moral development is by no means autonomous from other developmental processes. Intelligence relates strongly to moral judgment and behavior (Kohlberg, 1973). Also Piaget's stage sequence of cognitive development seems to closely parallel that of Kohlberg's. Kohlberg (1971) states that "it is logically necessary that the two stages (cognitive and moral) be isomorphic" (p. 186). He argues, however, that the isomorphism of cognitive
and moral stages does not mean that moral judgment is simply the application of a level of intelligence to moral problems. Kohlberg (1971) contends that:

Moral development is its own sequential process, rather than the reflection of cognitive development in a slightly different content area. A child deprived of all moral social stimulation until adolescence might perhaps develop principled or formal operational, logical thought in adolescence, but would still have to go through all the stages of morality before developing moral principles, rather than automatically reflecting his cognitive principles in a morally principled form of thought. While moral stages are not simply special application of logical stages, logical states must be prior to moral stages. (p. 187)

Recent research (Lee, 1971; Colby, 1975; Tomlinson-Keasy, 1974; Kuhn, Langer, Kohlberg, and Haan, 1977) has supported Kohlberg's contention of a general correlation between the stages of the two developmental sequences. The Piagetian cognitive stages appear to be necessary but not sufficient conditions for the corresponding moral stages. Specifically, the attainment of concrete operations seems to be a necessary but not sufficient condition for the movement to stage 2 moral judgment; a similar relationship seems to exist for formal operations and stage 5. This specific dependent model is based on correlational studies in which subjects were tested on their stages of Piagetian reasoning and moral reasoning. For example, all subjects at moral reasoning stages 2 and 5 passed the parallel Piagetian stage cognitive task, but not all subjects at the concrete and formal operational stages passed the equivalent moral task.
Recently a number of investigations (Stuart, 1967; Moir, 1974; Ambron and Irwin, 1974; Selman, 1971a, 1971b, 1975; Selman and Byrne, 1974; Selman and Damon, 1975; for review, see Kurdek, 1978) have indicated that a similar necessary-but-not-sufficient relationship exists between role-taking ability and moral stages.

A critical contribution has been made by Robert Selman in his extensive work to complete the theory of a developmental sequence of social role taking and its relation to moral development. Selman elaborated on the development of role taking by employing the open-ended clinical method used by Piaget and Kohlberg in their conceptualizations of developmental stages. A brief description of Selman's role-taking stages and their relationship to Kohlberg's cognitive-developmental stages of moral development are located in Table 3.

Selman describes role-taking as a "form of social cognition intermediate between logical and moral thought" (p. 307). With this outlook in mind, he postulates:

... the child's cognitive stage indicates his level of understanding of physical and logical problems, while his role-taking stage indicates his level of understanding of the nature of social relations; and his moral judgment stage indicates the manner in which he decides how to resolve social conflicts between people with different points of view. Moral judgment considers how people should think and act with regard to each other, while social role taking considers how and why people do in fact think about and act toward each other. The stage at which the moral claims of self and others are considered, builds on the structurally parallel role-taking stage of understanding the relationship between the perspective of self and others. If the subject
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<td><strong>Stage 0 - Egocentric Viewpoint</strong></td>
<td><strong>Stage 0 - Premoral Stage</strong></td>
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<td>Child has a sense of differentiation of self and other but fails to distinguish between the social perspective (thoughts, feelings) of other and self. Child can label other's overt feelings but does not see the cause and effect relation of reasons to social actions.</td>
<td>Judgements of right and wrong are based on good or bad consequences and not on intentions. Moral choices derive from the subject's wishes that good things happen to self. Child's reasons for his choices simply assert the choices, rather than attempting to justify them.</td>
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<td><strong>Stage 1 - Social-Information Role-Taking</strong></td>
<td><strong>Stage 1 - Punishment and Obedience Orientation</strong></td>
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<td>Child is aware that other has a social perspective based on other's own reasoning, which may or may not be similar to child's. However, child tends to focus on one perspective rather than coordinating viewpoints.</td>
<td>Child focuses on one perspective, that of the authority or the powerful. However, child understands that good actions are based on good intentions. Beginning sense of fairness as equality of acts.</td>
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<td><strong>Stage 2 - Self-Reflective Role-Taking</strong></td>
<td><strong>Stage 2 - Instrumental Orientation</strong></td>
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<tr>
<td>Child is conscious that each individual is aware of the other's perspective and that this awareness influences self and other's view of each other. Putting self in other's place is a way of judging his intentions, purposes, and actions. Child can form a coordinated chain of perspectives, but cannot yet abstract from this process to the level of simultaneous mutuality.</td>
<td>Moral reciprocity is conceived as the equal exchange of the intent of two persons in relation to one another. If someone has a mean intention toward self, it is right for self to act in kind. Right defined as what is valued by self.</td>
</tr>
<tr>
<td><strong>Stage 3 - Mutual Role Taking</strong></td>
<td><strong>Stage 3 - Orientation to Maintaining Mutual Expectations</strong></td>
</tr>
<tr>
<td>Child realizes that both self and other can view each other mutually and simultaneously as subjects. Child can step outside the two-person dyad and view the interaction from a third-person perspective.</td>
<td>Right is defined as the Golden Rule: Do unto others as you would have others do unto you. Child considers all points of view and reflects on each person's motives in an effort to reach agreement among all participants.</td>
</tr>
</tbody>
</table>
(Table 3—continued)

<table>
<thead>
<tr>
<th>Stage 4 - Social and Conventional System Role-Taking</th>
<th>Stage 4 - Orientation to Society's Perspective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person realizes mutual perspective taking does not always lead to complete understanding. Social conventions are seen as necessary because they are understood by all members of the group (the generalized other) regardless of their position, role, or experience.</td>
<td>Right is defined in terms of the perspective of the generalized other or the majority. Person considers consequences of actions for the group or society. Orientation to maintenance of social morality and social order.</td>
</tr>
</tbody>
</table>

* Source: Selman, 1976
has not reached a given stage of role taking, he cannot apply this stage of social cognition to the moral domain.

Selman views role taking not as simply a quantitative accumulation of social knowledge, but in terms of qualitative changes in the child's structuring of his understanding of the relation between the perspective of self and others. In his analysis of role taking, Selman (1973) examines and considers both structural aspects and context. Selman defines structural aspects by the answers to the following questions: How do children differentiate the perspectives of self and other? How do children coordinate or relate their perspective to that of another? In what way are the new differentiation and coordination of a given stage based upon, but more advanced than, those of the previous stage? Content is defined by the following: What are children's conceptions of the subjective aspects of self and others? What are their understanding of another's capabilities, personality attributes, expectations, emotions and social judgments? The definitions found in the context questions are closely related to role-taking structure "because their own form is particularly defined for the child by his structural role-taking stage" (p. 301).

Empirical studies conducted by Selman (1971a; 1971b; Selman and Byrne, 1974, Selman and Damon, 1975) were typically based on the collection of the Kohlberg moral judgment scale and role-taking task measures and investigating the relationship between the two measures. In
a representative study (1971a), Selman administered Kohlberg's moral judgment scale, two role-taking tasks (a coin and picture game) and the Peabody Picture Vocabulary Test (a measure of conventional intelligence) to 60 middle-class children. He defined role-taking skill as "the ability to make specific inferences about another's capabilities, attributes, expectations, feelings and potential reactions" (p. 80). Development of reciprocal role-taking ability implies an increasingly accurate perception of what another will do in a given situation, and specifically, of how one's own actions will affect the attitude of another toward one's self. On the basis of this definition, subjects were categorized as being either reciprocal or non-reciprocal in their role-taking abilities on the respective tasks. The subjects who were scored at stage 3 and 4 on the moral judgment scale were found to be also categorized as reciprocal role-takers. Subjects who were low scorers on role-taking ability and moral judgment were tested again a year later. No subject in this group was found to attain conventional moral judgment without reciprocal role-taking ability. However, reciprocal role-taking ability was attained by subjects without conventional moral judgments. Selman concluded from this study that the development of the ability to reciprocally role-take is a necessary but not sufficient condition for the development of conventional moral thought.
Elizabeth Simpson (1976) has proposed a transformation from Kohlberg's and Selman's cognitive-developmental view of moral development into what she labels a holistic view. She refers to this holistic theory of moral development as a cognitive-affective-conative developmental theory because it attempts to give attention to three aspects of human personality: thought, emotion, and motivation. Central to her theory is the noted relationship between Maslow's (1954) hierarchy of needs and Kohlberg's stage structure of moral reasoning. He hypothesizes that "individuals who remain motivated by unfulfilled psychological needs may not be able to function at higher levels of moral development, regardless of their stage of cognitive development: and that "... when the satisfaction of these basic needs can be taken for granted, the person is freed to utilize his potential as a human being" (p. 160). Table 4 depicts the hypothesized parallels between Maslow's hierarchy of needs and Kohlberg's stages of moral development. Although Simpson's hypotheses offer theoretical basis for congruence, nowhere has the relationship between emotional development and cognitive development in the realm of moral development been explored or tested empirically.

The empirically based relationships of role-taking ability and Piagetian reasoning to moral reasoning and the theoretical prescription for a relationship between an individual's need system and moral development seem to have implications for Kohlberg's moral educational approach (and
### TABLE 4

PARALLELS BETWEEN MOTIVATIONAL ASPECTS OF KOHLBERG’S AND
MASLOW’S THEORIES

<table>
<thead>
<tr>
<th>Kohlberg: states of motives for moral actions</th>
<th>Maslow: Hierarchy of needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Fear of Punishment by another</td>
<td>1. Physiological needs</td>
</tr>
<tr>
<td>2. Desire to manipulate goods and obtain rewards from another</td>
<td>2. Security needs</td>
</tr>
<tr>
<td>3. Anticipation of approval or disapproval by others</td>
<td>3. Belongingness or affiliation needs</td>
</tr>
<tr>
<td>4. Anticipation of censure by legitimate authorities, followed by guilt feelings</td>
<td>4. Need for esteem from others</td>
</tr>
<tr>
<td>5. Concern about respect of equals and of the community</td>
<td>5. Need for self-esteem from sense of competence</td>
</tr>
</tbody>
</table>

*Adopted from Simpson, 1976.*
A consistent finding within moral education programs is that there are a number of participants who do not benefit from the process (Blatt and Kohlberg, 1973; Keasey, 1973). Faust and Artuthnot (1978) tested the relationship between Piagetian and moral reasoning in the context of moral education programs. They found that college students in a moral education program who were scored as conventional reasoners and who had reached a formal operations level of Piagetian reasoning showed significantly greater moral development than those individuals with no reasoning discrepancy (concrete and conventional reasoners). The previously reported findings of an existing necessary but not sufficient relationship between concrete reasoning and stage 2 moral reasoning and between reciprocal role taking and stage 3 moral reasoning seems to be very salient to this line of research. For example, if reciprocal role-taking is a prerequisite for conventional moral reasoning, then it would be reasonable to question the meaningfulness of a moral education program unless the participants have the necessary cognitive capacities. Furthermore, it could be hypothesized that even when a discrepancy of cognitive abilities indicates a readiness for movement the level of emotional development of that individual could determine whether movement will take place. The purpose of the present study is to place these questions into a model for research. Specifically, I would like to test these hypotheses employing the previously
discussed Rest, Turiel and Kohlberg (1969) study as a model for moral education. It was noted earlier that the Turiel studies showed a statistically significant upward change by introducing a moral dilemma and exposure to a +1 stage of moral reasoning. The study by Blatt and Kohlberg takes the Rest, Turiel, and Kohlberg study one step further by applying this principle to a program of moral education. Although in the Blatt and Kohlberg study, the conflict and exposure take place in the context of continual, intense moral discussion between peers in a classroom setting, the basic processes of assimilation and movement found in the two studies seem to be identical.

According to Kohlberg, the shift from stage 2 to stage 3 is marked by the acceptance of the individual that the right way is playing the "good" role - being concerned about other people and their feelings, and being motivated to follow rules and expectations. What is right to stage 3 reasoners is living up to the expectations of the people close to them or what people generally expect of people in their role as a son or daughter, friend, etc. (Kohlberg et al., 1978). It seems reasonable to propose that the ability to take the role of another and the need for affiliation are prerequisites for the shift from stage 2 to 3. The stage 3 reasoners shift from the relation of their actions to their instrumental needs (stage 2) to a concern for how others will evaluate their actions. Role-taking ability seems to be essential for the occurrence of this shift in
orientation. Stage 3 reasoners take the position of the parents or "generalized other" and derive normative values (what is expected of the child) as opposed to values derived from their instrumental needs (stage 2) or a specific external force (stage 1).

Even though individuals may be cognitively ready (i.e., role-taking ability) they still have to want to change their orientation. Piaget (1981) refers to affect as an "energizing" force and cognition as providing the structure for this energy. An individual's cognitive structure may be "ready" to assimilate stage 3 moral thought but something has to initiate the movement. Individuals motivated by a need for affiliation would be concerned about what other people think of them and would want to live up to the expectations of the people close to them. Individuals who feel that they live in an insecure and untrustworthy world (security need) would be concerned with controlling the contingent rewards provided by their environment (stage 2 orientation) and would not care whether they are liked or disliked in the process (for example, an individual in a prison system).

Measurement of the need for affiliation would not simply involve the assessment of affiliation need gratification. According to Maslow's theory of human motivation, once a need is fulfilled higher needs immediately emerge and these, rather than the fulfilled need, dominate the individual. Gratification is just as
important a concept as deprivation in Maslow's theory. For the purpose of this study fulfillment of the security need and affiliation need were both assessed. An unfulfilled affiliation need would not necessarily indicate that the child is motivated at this level. Only when the child's security needs are met and his affiliation needs unfulfilled could one infer a motivational need state of affiliation.

This study investigates the relationship between the movement from a non-reciprocal role-taking level to a reciprocal level, and the movement from a pre-conventional (stages 1 and 2) to conventional (stages 3 and 4) level of moral judgment. In order for children to move from a moral stage 2 to a moral stage 3 in the context of moral education, it is proposed that they must be able to view an interaction from a third-person perspective. It is further hypothesized that a reciprocal role-taker at stage 2 moral reasoning will need a sufficient degree of affective development (high in the need for affiliation) in order to make the "primed" shift.
METHODS

Subjects. Subjects were sixty-two fourth grade children enrolled in the Williamsburg-James City County school system. Forty-six students were identified as stage 2 moral reasoners during the pretest. The forty-six stage 2 moral reasoners consisted of nineteen males and twenty-seven females. Eleven of the subjects were black and thirty-five were white. Ages ranged from 113 to 132 months with an average age of 120 months.

Procedure. The experimental procedure consisted of separate or combined sessions in which the subjects were assessed on (1) stage of moral reasoning, (2) role-taking development, (3) exposure to a series of moral arguments, and (4) affiliation and security needs. In addition to the experimental sessions IQ scores were obtained from the school system records.

The sequence of these tasks was counterbalanced within the subject pool except for the requirement that the pretest of moral judgment precede the exposure condition. Temporal factors between testing were also considered and differences were kept at a minimum.
The pretest of moral judgment involved the administration of three hypothetical conflict situations from Kohlberg's moral judgment interview (Kohlberg et al., 1978) (Appendix A). For each of the hypothetical situations, Kohlberg and colleagues (1978) have formulated a detailed "sentence coding guide" developed on the basis of responses in a large subject pool. A subject's responses to a given situation were divided into "thought-content" units roughly corresponding to sentences. Each unit was classified according to aspect and stage. A profile of each subject was formed from the percentage of statements given at each stage as determined by the scoring guide. The subjects were classified in terms of the predominate stage(s); the profile of percent usage of each stage yields a Moral Maturity Score. The Moral Maturity Score has a range from 0 to 600, and one stage is equivalent to 100 points.

The role-taking measure was adopted from Flavell's published studies (1968) of role-taking ability (also employed by Selman, 1971a). The role-taking measure focuses on children's ability to hold their own perspective independent from that of another. In the role-taking task, the experimenter introduces a second experimenter to the subject and after short conversation the second experimenter leaves the room. The first experimenter then presents to the subject seven cards (Appendix B) in the following sequence:
Card 1. The boy is walking along the sidewalk, whistling and waving a stick.

Card 2. The boy looks frightened and drops his stick as he sees a rather ugly looking dog running towards him.

Card 3. The boy runs, looking anxiously over his shoulder at the dog, who is in hot pursuit.

Card 4. The boy is shown running with arms outstretched toward an apple tree laden with fruit. The dog is not shown in the picture.

Card 5. The boy scrambles up the tree, with the dog nipping at his heels.

Card 6. The boy is shown standing up in the tree. The dog can be seen across the street, trotting away (he looks smaller in this picture, and with no visible evidence of ferocity). Although the boy's head is partly turned in the dog's direction, it shows no particular emotional expression.

Card 7. The boy is seated in the tree, munching an apple, with the dog nowhere in evidence. After the cards were placed on the table, the following instructions were given:

"He (E₂) has left the room and he won't be able to see what we are going to do, will he? Here is a series of seven pictures which tell a story, just like the comics in the newspaper." The cards are then placed in proper sequence on the table. "You tell me what's going on. Begin here at the beginning." If the child failed to indicate these things in his narration, he was asked why the boy climbed the tree and what he was
doing in the last picture. "That's fine. Now Mr. hasn't seen any of these pictures. I'm going to call him back into the room and show him just these four pictures (cards 1, 4, 6, and 7). I want you to pretend you are he and tell the story that you think he would tell. Okay (calls in E). Now (speaking to E) these pictures tell a story." E then addresses the child and says: "What story do these pictures tell me?" Again, if the child failed to clarify these matters spontaneously, in the course of his story, he was asked: "Why does he (point to E) think the boy climbed the tree?" Or: "What does he think about that dog there (card 6), what does he think the dog is there for?"

The subject's responses were analyzed and scored as being either reciprocal or non-reciprocal. Subjects were categorized non-reciprocal if they established the dog as clearly being the motive for climbing the tree in the four card presentation or if the fear of dog motive is not mentioned in his narration but is readily supplied during the inquiry. Responses are scored as being reciprocal if they involve a description saying that the boy is climbing the tree in response to a non-fear motive (to get an apple) and the dog is said to be irrelevant to the story (just walking along).

The exposure condition was adopted directly from the Rest, Turiel, and Kohlberg study (1969). During this session the subjects were given three booklets (Appendix C), each containing a conflict situation that had not been used in the pretest and four sets of instructions. In each booklet, the first set of instructions contains a conflict situation from the Kohlberg interview. Following the conflict story, a statement will be read implying that the
character involved in the conflict is having a difficult time in reaching a conclusion so he asks a number of friends for advice.

The second part of the booklet contains six sets of advice on possible solutions to the dilemma: Two are one stage below the subject's dominant stage (stage 1), two are one stage above (stage 3), and two are two stages above (stage 4). When possible, the two sets at any given stage advocate opposing courses of actions. The expressed advice is based on actual responses of subjects derived from the Kohlberg, Colby, Gibbs, Speicher-Dubin, and Power (1978) coding forms.

The third section of instructions has a set of questions aimed at eliciting the subject's preference and understanding of the presented advice.

In the fourth section of the booklet, subjects were asked what type of advice they would give to the character involved in the dilemma. The experimenter read aloud the instructions to the subject in order to insure that there is no difficulty in reading the material. Subjects were able to refer back to original advice statements when answering questions except when asked for their own advice.

The subject's "own advice" were scored for stage level. In assessing the amount of assimilation, stage usage in the pretest interview will be compared with stage usage in the subject's "own advice."
Additionally, subjects pretested as stage 1 reasoners/non-reciprocal role-takers were placed in the exposure condition. Their six sets of advice include two stage 1, two stage 2, and two stage 3 (see Appendix D). These particular subjects were assessed on assimilation in order to test the hypotheses that role-taking ability would enhance the subject's ability to successfully follow and understand the directions to consider six other sets of advice.

The need for security was assessed with the children's Manifest Anxiety Scale (Casteneda, McCandless, and Palermo, 1956). Children with higher anxiety scores were hypothesized to have a higher security need. A child who has an unstructured, unstable environment (and thus has a need for security) should exhibit signs of anxiety. The children's Manifest Anxiety Scale (see Appendix E) consists of fifty-three items in which children indicate agreement or disagreement regarding the applicability of the behavior to themselves. Forty-two are anxiety items and eleven refer to an L scale that provides an index of the subjects' tendency to falsify their responses. The anxiety score is obtained by summing the number of anxiety items answered "Yes." The L scale consisted of item numbers 5, 10, 17, 21, 30, 34, 36, 41, 49, 52. Items 10 and 49, if answered "No," contribute to the L scale as do the remaining nine items if answered "Yes."
The test was given on a group basis. The subjects were divided into three groups (approximately twenty in a group). The three group tests were given at different intervals during the general individual testing sessions. The following instructions were given to each group:

"I am going to ask you some questions. No one but myself will see your answers to these questions, not your teacher or your principal or your parents. These questions are different from other questions that you are asked in school. These questions are different because there are no right or wrong answers. You are to listen to each question and then put a circle around either "yes" or "no." These questions are about how you think and feel and, therefore they have no right or wrong answers. People feel and think differently. The person sitting next to you might put a circle around "yes" and you may put a circle around "no." Now let us start by everybody purring their fingers on Number 1. Here is the first question."

Five cards selected from Murray's Thematic Apperception Test were employed for the assessment of affiliation need (see Appendix F). The subjects were individually tested and given the following instructions:

This is a test of your creative imagination. Five pictures will be shown to you and you will have about five minutes to tell me what you think about it. Obviously, there are no right or wrong answers, so you may feel free to make up any kind of a story about the picture that you choose. The more dramatic the better. Try to say as much about the picture as you can. Also, try to be as imaginative as you can - remember this is a test of creative imagination. Do not merely describe the picture. Anyone can do that. Make up a story about it. While telling your story you should answer the following four questions:

1. What is happening? Who are the persons?
2. What has led up to this situation? That is, what has happened in the past?
3. What is being thought? What is wanted? By whom?
4. What will happen? What will be done?
The cards were always presented in the same order (see Appendix F) with each successive card being a more "powerful" stimulation of the need for affiliation. Subject's responses were recorded on audio cassettes.

The responses were scored according to the Heyns, Veroff and Atkinson Scoring Manual for the affiliation motive (1958). Affiliation imagery was scored when the story contained some evidence of concern in one or more of the characters over establishing, maintaining, or restoring a positive affective relationship with another person. This relationship can be most adequately described by the word friendship. The minimum basis for scoring would be that the relationship of one of the characters in the story to someone else is described as friendship (Heyns, Veroff, and Atkinson, 1958). Affiliation need scores were based on the number of stories (0-5) in which affiliation imagery was scored.

The Moral Judgement Interview, role-taking task, exposure condition, and TAT were administered by six female research assistants. Five assistants were recruited from an experimental psychology course and one was a first-year graduate student. Each interviewer was trained and evaluated by the author before testing began. The author administered the group anxiety test.

The author scored all of the administered tests. The scorer was unaware of the subject's identity because of a coding system employed by the interviewers. Interater
reliability was established by having a second independent rater score the responses of selected protocols of the role-taking task, TAT, and the Moral Judgment Interview. The second rater was a third-year graduate student who was familiar with the scoring procedures for the Moral Judgment Interview. Interjudge agreement for categorization of role-taking ability on ten randomly selected protocols was 100%. Interjudge agreement for affiliation imagery (whether it was present or not) on 10 randomly selected stories was 80%. Interater reliability for the moral dilemmas was established by having the second rater score the interviews of 15 randomly selected subjects. There was 100% agreement in the scoring of dominant and minor stages. The interater reliability coefficient for the two sets of Moral Maturity Scores was .85.
RESULTS

Forty-six out of the sixty-two subjects interviewed were assessed as stage 2 moral reasoners. Eleven of the remaining sixteen subjects were stage 1 reasoners with the remaining five having interviews that were deemed unscorable. Twenty-six of the stage 2 reasoners were categorized as reciprocal role-takers; the remaining stage 2 reasoners were categorized as nonreciprocal. A chi-square analysis was performed on the following pairs: Role-taking (reciprocal, nonreciprocal) vs Assimilation (assimilators, nonassimilators) (see Table 5); Assimilation vs Race (black, white) (see Table 6); Assimilation vs Sex (male, female) (see Table 7); Role-taking vs Race (see Table 8); Role-taking vs Sex (see Table 9). Frequency of assimilation significantly differed between non-reciprocal and reciprocal role-takers. The obtained $x^2 = 11.944$, df=1, was significant at the .001 level. The other frequency comparisons were non-significant.

The t statistic was employed to test the hypothesis that the means for the following comparison groups are equal for age, IQ, moral maturity score, and anxiety: Non-reciprocal vs. Reciprocal (see Table 10); Non-assimilating vs assimilating (see Table 11); Black vs White
TABLE 5
OBSERVED FREQUENCIES AND CHISQUARE STATISTIC
FOR ROLE-TAKING VS ASSIMILATION GROUPS

<table>
<thead>
<tr>
<th></th>
<th>Reciprocal Role-takers</th>
<th>Non-reciprocal Role-takers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assimilation</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>Non-assimilation</td>
<td>4</td>
<td>13</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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<th>VALUE</th>
<th>D.F.</th>
<th>PROB.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEARSON CHISQUARE</td>
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<td>1</td>
<td>.0005</td>
</tr>
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<td>YATES CORRECTED CHISQUARE</td>
<td>9.909</td>
<td>1</td>
<td>.0016</td>
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TABLE 6
OBSERVED FREQUENCIES AND CHISQUARE STATISTIC
FOR ASSIMILATION VS RACE GROUPS

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<td>21</td>
</tr>
<tr>
<td>Non-assimilation</td>
<td>3</td>
<td>14</td>
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STATISTIC

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<td>Yates Corrected Chisquare</td>
<td>0.164</td>
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<td>.6857</td>
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TABLE 7
OBSERVED FREQUENCIES AND CHISQUARE STATISTIC
FOR ASSIMILATION VS SEX GROUPS

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<tr>
<th></th>
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<th>Female</th>
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<tbody>
<tr>
<td>Assimilation</td>
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<tr>
<td>Non-assimilation</td>
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<td>Male</td>
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</tbody>
</table>

STATISTIC | VALUE | D.F. | PROB. |
PEARSON CHISQUARE | 1.573 | 1   | .2098 |
YATES CORRECTED CHISQUARE | 0.891 | 1   | .3451 |
TABLE 8
OBSERVED FREQUENCIES AND CHISQUARE STATISTIC
FOR ROLE-TAKING VS RACE GROUPS

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<td>2.533</td>
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TABLE 9
OBSERVED FREQUENCIES AND CHISQUARE STATISTIC
FOR ROLE-TAKING VS SEX GROUPS

<table>
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<th>Female</th>
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<tbody>
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<td>14</td>
</tr>
<tr>
<td>Non-reciprocal Role-takers</td>
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<td>13</td>
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<table>
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</tbody>
</table>
(see Table 12); Male vs Female (see Table 13). Reciprocal role-takers were significantly older than the non-reciprocal group ($t=2.53$, $df=44$, $p=.01$). The assimilation group was significantly older ($t=2.02$, $df=44$, $p=.05$) and higher in moral maturity scores ($t=2.51$, $df=44$, $p=.02$) than the non-assimilating group. Females showed significantly higher anxiety scores than males ($t=3.10$, $df=40$, $p=.004$). All other comparisons were nonsignificant at the $p=.05$ alpha level. Group means, standard deviations, and frequency distributions can also be found in Tables 10, 11, 12, and 13.

Thirty-nine of the forty-six stage 2 reasoners were scored on the need for affiliation (seven sessions were not recorded properly). Of the thirty-nine that were scored only six were designated as exhibiting a need for affiliation, and only one subject from this group was scored for the need on more than one story. Five of the six affiliation need subjects did assimilate higher reasoning. All six were reciprocal role-takers.
### Table 10

**Differences between Non-Reciprocal and Reciprocal Group Means Among Combined and Single Variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1 Recip</th>
<th>Group 2 Recip</th>
<th>1 Recip (N= 26)</th>
<th>2 Recip (N= 20)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAHALANOBIS D SQUARE</td>
<td>1.7649</td>
<td>17.1635</td>
<td>0.0634</td>
<td>0.0220</td>
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<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1 Recip</th>
<th>Group 2 Recip</th>
<th>1 Recip (N= 19)</th>
<th>2 Recip (N= 16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.Q.</td>
<td>1 Recip</td>
<td>2 Recip</td>
<td>1 Recip (N= 26)</td>
<td>2 Recip (N= 20)</td>
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</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1 Recip</th>
<th>Group 2 Recip</th>
<th>1 Recip (N= 24)</th>
<th>2 Recip (N= 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANX</td>
<td>1 Recip</td>
<td>2 Recip</td>
<td>1 Recip (N= 24)</td>
<td>2 Recip (N= 18)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1 Recip</th>
<th>Group 2 Recip</th>
<th>1 Recip (N= 24)</th>
<th>2 Recip (N= 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSC</td>
<td>1 Recip</td>
<td>2 Recip</td>
<td>1 Recip (N= 24)</td>
<td>2 Recip (N= 18)</td>
</tr>
</tbody>
</table>
**TABLE 11**

DIFFERENCES BETWEEN NON-ASSIMILATING AND ASSIMILATING GROUP MEANS AMONG COMBINED AND SINGLE VARIABLES

<table>
<thead>
<tr>
<th>MAHALANOBIS D SQUARE</th>
<th>P-VALUE</th>
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<tr>
<td>1.8363</td>
<td>0.0312</td>
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</table>

<table>
<thead>
<tr>
<th>HOTELLING T SQUARE</th>
<th>P-VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.8640</td>
<td>0.0238</td>
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</table>

<table>
<thead>
<tr>
<th><strong>VARIABLE NUMBER</strong></th>
<th><strong>GROUP</strong></th>
<th><strong>ASSIM</strong></th>
<th><strong>NASSIM</strong></th>
<th><strong>STATISTICS</strong></th>
<th><strong>P-VALUE</strong></th>
<th><strong>DF</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 ASSIM</td>
<td>2 NASSIM</td>
<td>1 ASSIM (N= 29)</td>
<td>2 NASSIM (N= 17)</td>
<td>T (SEPARATE)</td>
<td>2.29 0.0274</td>
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<tr>
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<td>MINIMUM</td>
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</tr>
<tr>
<td></td>
<td>1 ASSIM</td>
<td>2 NASSIM</td>
<td>1 ASSIM (N= 23)</td>
<td>2 NASSIM (N= 12)</td>
<td>T (SEPARATE)</td>
<td>1.64 0.1136</td>
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<tr>
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<td></td>
<td>MINIMUM</td>
<td>100.0000</td>
</tr>
<tr>
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<td>2 NASSIM</td>
<td>1 ASSIM</td>
<td>1 ASSIM (N= 29)</td>
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<td>MINIMUM</td>
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<tr>
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<td>1 ASSIM</td>
<td>1 ASSIM (N= 26)</td>
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<td>T (SEPARATE)</td>
<td>1.15 0.2573</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MINIMUM</td>
<td>13.0000</td>
</tr>
<tr>
<td>9</td>
<td>2 NASSIM</td>
<td>1 ASSIM</td>
<td>1 ASSIM (N= 26)</td>
<td>2 NASSIM (N= 16)</td>
<td>T (SEPARATE)</td>
<td>0.73 0.4741</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MINIMUM</td>
<td>4.0000</td>
</tr>
</tbody>
</table>

**FORS VARIANCES**

| LEVENE | 7.03 0.0111 | 1, 44 |
|        | 0.26 0.6139 | 1, 33 |
|        | 5.14 0.0204 | 1, 44 |

**FORS VARIANCES**

| LEVENE | 0.10 0.7533 | 1, 40 |
|        | 0.24 0.6296 | 1, 40 |

**NOTES**

- The table presents a comparison of means for different variables among non-assimilating and assimilating groups.
- The variables include "Age", "MDI", "MDI", "MDI", and "LSSC".
- The table shows the Mahalanobis D square, Hotelling's T square, and F for variances.
- The significance levels are given for each comparison.

- **MAHALANOBISS D SQUARE**
  - 1.8363
- **HOTELLING T SQUARE**
  - 16.8640
- **P-VALUE**
  - 0.0312
  - 0.0238

- **VARIABLE NUMBER 1**
  - Group 1: ASSIM
  - Group 2: NASSIM
  - Mean: 121.3792
  - Std. Dev.: 4.8434
  - T (Separate): 2.29
  - P-VALUE: 0.0274

- **VARIABLE NUMBER 4**
  - Group 1: ASSIM
  - Group 2: NASSIM
  - Mean: 115.1739
  - Std. Dev.: 12.3251
  - T (Separate): 1.64
  - P-VALUE: 0.1136

- **VARIABLE NUMBER 5**
  - Group 1: ASSIM
  - Group 2: NASSIM
  - Mean: 120.0000
  - Std. Dev.: 4.0000
  - T (Separate): 2.89
  - P-VALUE: 0.0070

- **VARIABLE NUMBER 8**
  - Group 1: ASSIM
  - Group 2: NASSIM
  - Mean: 21.2307
  - Std. Dev.: 4.5250
  - T (Separate): 1.15
  - P-VALUE: 0.2573

- **VARIABLE NUMBER 9**
  - Group 1: ASSIM
  - Group 2: NASSIM
  - Mean: 1.3763
  - Std. Dev.: 0.7442
  - T (Separate): 0.73
  - P-VALUE: 0.4741
TABLE 12

DIFFERENCES BETWEEN BLACK AND WHITE GROUP MEANS AMONG COMBINED AND SINGLE VARIABLES

<table>
<thead>
<tr>
<th>MAHALANOBIS D SQUARE</th>
<th>HOTELLING T SQUARE</th>
<th>F VALUE</th>
<th>P-VALUE</th>
<th>DEGREES OF FREEDOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.3823</td>
<td>3.2242</td>
<td>5.9342</td>
<td>0.0005</td>
<td>23 4</td>
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</table>

**FUNCTIONS**

<table>
<thead>
<tr>
<th>VARIABLE NUMBER</th>
<th>GROUP</th>
<th>1 BLACK</th>
<th>2 WHITE</th>
<th>P-VALUE</th>
<th>DF</th>
<th>F (FOR VARIANCES)</th>
<th>LEVENE</th>
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</thead>
<tbody>
<tr>
<td><strong>AGE</strong></td>
<td>1</td>
<td>1 BLACK (N= 11)</td>
<td>2 WHITE (N= 35)</td>
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<tr>
<td><strong>IQ</strong></td>
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<td>1 BLACK (N= 9)</td>
<td>2 WHITE (N= 26)</td>
<td>0.3863</td>
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<tr>
<td><strong>MDI</strong></td>
<td>5</td>
<td>1 BLACK (N= 11)</td>
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<td>13 1</td>
<td>1.57 0.1375</td>
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<td><strong>ANX</strong></td>
<td>8</td>
<td>1 BLACK (N= 11)</td>
<td>2 WHITE (N= 31)</td>
<td>0.3863</td>
<td>23 4</td>
<td>-0.39 0.6976</td>
<td>1.44</td>
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<td><strong>LSC</strong></td>
<td>9</td>
<td>1 BLACK (N= 11)</td>
<td>2 WHITE (N= 31)</td>
<td>0.3863</td>
<td>23 4</td>
<td>-0.09 0.9296</td>
<td>1.44</td>
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</table>
## Table 13

Differences Between Male and Female Group Means Among Combined and Single Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number</th>
<th>Group</th>
<th>Male (N=19)</th>
<th>Female (N=27)</th>
<th>P-value</th>
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<tr>
<td>MAHALANOBIS D SQUARE</td>
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<td>F VALUE</td>
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<td>DEGREES OF FREEDOM</td>
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### Age

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<tr>
<td>T (Separate)</td>
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<td>T (Pooled)</td>
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### IQ

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<th>Female</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T (Separate)</td>
<td>-1.88 0.070</td>
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<tr>
<td>T (Pooled)</td>
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### MDI

<table>
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<th>Group</th>
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<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T (Separate)</td>
<td>0.71 0.489</td>
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<td>0.000</td>
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<td>T (Pooled)</td>
<td>0.68 0.496</td>
<td>44</td>
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</table>

### ANX

<table>
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<th>Group</th>
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<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>T (Separate)</td>
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<tr>
<td>T (Pooled)</td>
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<td>0.000</td>
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</table>

### LSC

<table>
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<th>Female</th>
<th>P-value</th>
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</thead>
<tbody>
<tr>
<td>T (Separate)</td>
<td>0.54 0.591</td>
<td>38.5</td>
<td>0.000</td>
</tr>
<tr>
<td>T (Pooled)</td>
<td>0.54 0.591</td>
<td>40</td>
<td>0.000</td>
</tr>
<tr>
<td>F (For Variances)</td>
<td>LEVENE</td>
<td>0.00 0.979</td>
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</table>
DISCUSSION

The most striking result of this study is the relationship between role-taking ability and assimilation of stage 3 reasoning. Twenty-two of the twenty-six reciprocal role-takers assimilated stage 3 moral reasoning while only seven of the twenty non-reciprocal role-takers assimilated the higher reasoning. Role-taking ability appears to be a powerful predictor of whether the child will assimilate stage 3 advice. There are, however, at least three other alternate explanations for this result:

1. There could be a significant IQ difference between the assimilation/non-assimilation groups and/or reciprocal/non-reciprocal groups.

2. There could be a significant difference in pre-tested moral judgment scores between reciprocal/non-reciprocal groups.

3. Role-taking ability could be instrumental in the ability to understand the assimilation task - for example, in order to assimilate higher reasoning, the task could require the subject to role-take Valjean's perspective and the perspective of the characters who give advice.

Although there were no significant differences in IQ scores between assimilators and non-assimilators or between reciprocal and non-reciprocal role-takers, there was in both cases a difference of approximately 7 IQ points (see Tables
10 and 11). These differences, however, seem to reflect several extreme scores and not an over-all group difference.

The pre-tested moral judgment scores of the reciprocal and non-reciprocal groups are almost identical (174.9 and 174.2, respectively). There is a significant difference between the moral judgment scores of assimilation and non-assimilation groups. The subjects that assimilated higher reasoning were about 14 points higher than the non-assimilators. This difference is a result of the reciprocal role-takers/non-assimilators having comparatively low moral maturity and the non-reciprocal/assimilators having comparatively high scores. Seemingly, if the subject's pre-tested level of moral judgment is relatively close to or far away from the next highest stage (i.e. stage 3) restrictions are placed on the influence of role-taking ability as a predictor of assimilation.

The third alternative explanation was addressed by giving subjects who were designated stage 1/non-reciprocal role-takers the exposure condition booklet (see Procedure section; Appendices C and D). If these subjects assimilated stage 2 reasoning then reciprocal role-taking ability would not be essential for the understanding of the task. Ten stage 1/non-reciprocal subjects were given the exposure test and five assimilated higher reasoning (stage 2). This seems to be a weak disclaimer for the third alternate explanation but the procedure is somewhat different for these particular subjects. The lowest stage advice was the same as the
subjects pretested moral reasoning (stage 1) and hence they could have been more attracted to the "lower" stage advice than the pre-tested stage 2 reasoner.

Even with the preceding reservations, role-taking ability does seem to be a predicating factor of stage 3 assimilation. This portion of the data fits into a growing body of research which suggests a dependent relationship between cognitive abilities (i.e. Piagetian cognitive development and role-taking ability) and the acquisition of various stages of moral reasoning (e.g. Faust and Arbuthnot, 1978; Kuhn, Langer, Kohlberg, and Haan, 1977; Selman, 1975; Tomlinson-Keasey and Keasey, 1974; Walker and Richards, 1979; Walker, 1980). Intervention programs which pursue the goal of stimulating higher stages of moral reasoning should consider the cognitive abilities of the individuals involved. An analysis of this type might merit a change in the type of approach employed. For example, if the majority of your target group's moral reasoning is at the stage 2 level and role-taking ability at the non-reciprocal level, presentation of stage 3 reasoning would probably prove fruitless. In this case, the educators should initially direct their energy toward the development of the participants' role-taking skills. The success of a moral education program may depend, in part, on how accurately the teacher assesses the participants' cognitive abilities.

The most disappointing aspect of the results is the affiliation need data. The hypothesis that, in addition to
the ability to take a third-person perspective, an
individual should have a high degree of affiliation need in
order to shift from an "instrumental hedonism" perspective
to "good person" perspective seems to be untestable because
of the lack of subjects scored as high in the need for
affiliation. The inability to analyze this portion of the
data could be due either to the insensitivity of the
affiliation assessment task or the possibility that children
at this age rarely exhibit a need for affiliation. The use
of a projective test was risky. The scoring of a projective
test is subjective and complex. Also, lack of enough
scorable material is an inherent risk of using a projective
test. In addition to the problems associated with the use
of projective techniques, four out of the five TAT cards
originally selected because of their reported sensitivity to
the affiliation need were banned by the school
superintendent because he felt that they were inappropriate
(?!?). Four less suitable cards were selected.

Certainly, the construction of a task which accurately
reflects the motivational needs of a child is a major
obstacle for future attempts in this type of research. I am
not confident that a researcher can ever capture a picture
of a child's needs in a one-shot procedure. An individual's
motivational state is most likely the result of a complex
interaction between the person and the environment. A
suitable measure would probably utilize a multivariate
procedure.
The results of this study do not directly support Elizabeth Simpson's hypothesis of a definitive relationship between Maslow's hierarchy of needs and Kohlberg's states of moral development. In retrospect I do not feel that an empirical establishment of inter-theoretical relations is as important to the understanding of moral development as is her more central or general proposition that morality is relative to the needs of the individual's context. Simpson's perspective merits additional research and is reflected in recent theoretical and methodological shifts in moral development research. There has been a noticeable shift in recent moral development research from an emphasis on the individual reasoner to the importance of ideological context and community atmosphere. Kohlberg (1978) recently pointed out two major directional changes in his research:

First, we have moved from the study of individual development to the study of group development (the stages and phases in the norms of the group qua group). And second, we have passed from a study of the internal mental structure of moral reasoning to an analysis of something in between: group norms and expectations, ethnographically defined. . . . Thus we examine behavior not in terms of individual moral character but in terms of the character or the moral atmosphere of a group or community. (p. 85)

The beginnings of this shift in orientation can be traced to an attempt by Kohlberg and his colleagues to set up a moral education program in a Connecticut prison system (Kohlberg, Scharf, and Hickey, 1975). Although inmates exhibited tremendous gains in higher stage resolutions to the traditional hypothetical dilemmas, it soon became
apparent that there was a distinct contrast in how real-life dilemmas were actually resolved. Real-life dilemmas raised by the inmates from their prison experiences were resolved with stage 1 or stage 2 reasoning. The prisoners were cognitively capable of understanding and producing higher reasoning but everyday moral reasoning was based on the context of the prison system. Life in prison reflected the lowest stages of moral reasoning: a moral system based on external consequences and a system of reciprocity based on a matter of "you scratch my back and I'll scratch yours." It appeared that the morality of the individual acclimated to the needs of the environment.

It follows that the successful moral development educator or researcher must not only construct an individual's cognitive topology but have an understanding of the supporting environmental/motivational structure. Although the present study only supports the need to consider cognitive abilities, research concerning the relationships between motivational need systems and moral development is certainly worth pursuing. Assuredly, there are many questions left to be answered.
APPENDICES
APPENDIX A

MORAL JUDGEMENT INTERVIEW
MORAL JUDGMENT INTERVIEW

Story 1.

In Europe, a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost him to make. He paid $200 for the radium and charged $2000 for a small dose of the drug.

The sick woman’s husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000 which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I’m going to make money from it.” So Heinz got desperate and broke into the man’s store to steal the drug for his wife.

1. Should Heinz steal the drug? Why?

2. Which is worse, letting someone die or stealing? Why?

2a. What does the value of life mean to you, anyway?
3. Is there a good reason for a husband to steal if he doesn't love his wife?

4. Would it be as right to steal it for a stranger as his wife? Why?

5. Suppose he was stealing it for a pet he loved dearly. Would it be right to steal for the pet? Why?

6. Heinz steals the drug and is caught. Should the judge sentence him or should he let him go free? Why?
7. The judge thinks of letting him go free. What would be his reasons for doing so?

8. Thinking in terms of society, what would be the best reasons for the judge to give him some sentence?

9. Thinking in terms of society, what would be the best reasons for the judge to not give him some sentence?
Story 2.

Two young men, brothers, had gotten into serious trouble. They were secretly leaving town in a hurry and needed money. Karl, the older one, broke into a store and stole $500. Bob, the younger one, went to a retired old man who was known to help people in town. Bob told the man that he was very sick and he needed $500 to pay for the operation. Really he wasn't sick at all, and he had no intention of paying the man back. Although the man didn't know Bob very well, he loaned him the money. So Bob and Karl skipped town, each with $500.

1. Which would be worse, stealing like Karl or cheating like Bob? Why?

2. Suppose Bob had gotten the loan from a bank with no intention of paying it back. Is borrowing from the bank or the old man worse? Why?
3. What do you feel is the worst thing about cheating the old man?

4. Why shouldn't someone steal from a store?

5. What is the value or importance of property rights?

6. Which would be worse in terms of society's welfare, cheating like Bob or stealing like Karl? Why?
7. Would your conscience feel worse if you cheated like Bob or stole like Karl? Why?

8. What do people mean by conscience? What do you think of as your conscience and what does it do?

8a. What or who tells you what is right or wrong?

9. Is there anything about your sense of conscience which is special or different from that of most people? What?

10. How do people get their consciences? (How did you get or develop a conscience?)
Story 3.

Joe is a fourteen-year-old boy who wanted to go to camp very much. His father promised him he could go if he saved up the money for it himself. So Joe worked hard at his paper route and saved up the $40 it cost to go to camp and a little more besides. But just before camp was going to start, his father changed his mind. Some of his friends decided to go on a special fishing trip, and Joe's father was short of the money it would cost. So he told Joe to give him the money he saved from the paper route. Joe didn't want to give up going to camp, so he thought of refusing to give his father the money.

1. Should Joe refuse to give his father the money? Why?

2. Is there any way in which the father has a right to tell the son to give him the money? Why?
3. What is the most important thing a good father should recognize in his
callation to his son? Why that?

4. What is the most important thing a good son should recognize in his
callation to his father? Why that?

5. Why should a promise be kept?

6. What makes a person feel bad if a promise is broken?

7. Why is it important to keep a promise to someone you don't know well
   or are not close to?
APPENDIX B

ROLE TAKING TASK CARDS
APPENDIX C

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

Louise, the older sister, is not sure what to do in this difficult situation. She doesn't know if she should tell their mother that Judy had lied about the money or just keep quiet about it. So Louise went to some of her friends and asked them for advice. Listed on the next page are the names of the six friends Louise went to and next to each name you will find the advice given by that friend.
Mary. You should tell before your mother finds out on her own. If your mother finds out you knew about it she would be bad on you, too.

Denise. You should tell your mother about Judy's lie because if you don't you would be lying to your mother and then you could get in trouble, too.

Anne. I think if your mother is understanding you should tell. If your mother is not understanding then you should take up the matter with your sister yourself.

Cathy. I don't think you should tell because it would wreck your relationship with your sister and would spoil the confidence, which Judy trusted in you.

Debbie. You shouldn't tell on Judy because it's important to be trustworthy and because Judy's character is forming. You should be as reliable as possible because people are remembered for this.

Betsy. You should tell because Judy is telling a lie here and also it shows a lack of respect for her mother's authority and that is also wrong.
1. Would you choose the two friends whom you think have given the best advice?

1a. Can you say why you have chosen these?

2. How choose the two friends whom you think have given the worst advice.

2a. Why did you pick these?

3. Which one of the friends do you think is the smartest person?

3a. Why?

4. Which one of the friends do you think is the "most good" person?

4a. Why?
I. Suppose you were one of Louise's friends and she came to you for advice. What would you tell her to do? Why?
In a country in Europe, a poor man named Valjean could find no work, nor could his sister and brother. Without money, he stole food and medicine that they needed. He was captured and sentenced to prison for six years. After a couple of years, he escaped from the prison and went to live in another part of the country under a new name. He saved money and slowly built up a big factory. He gave his workers the highest wages and used most of his profits to build a hospital for people who couldn't afford good medical care. Twenty years had passed when a tailor recognized the factory owner as being Valjean, the escaped convict whom the police had been looking for back in his home town.

The tailor is not sure what to do in this difficult situation. He doesn't know if he should report Valjean to the police or not. So the tailor went to some of his friends and asked them for advice. Listed on the next page are the names of the six friends the tailor went to and next to each name you will find the advice given by that friend.
Bert. You should report him because otherwise you would be as guilty, as Valjean and when the cops find out they will put you in jail, too. If you don't report convicts then they will take you to court.

Charlie. I think you should report Valjean to the police because he stole and he broke out of jail. Convicts are dangerous and you shouldn't fool around with them.

Tom. It is your duty as a good citizen to report Valjean because he has done something wrong. People who aren't good citizens don't care about their city and they never report anything that is wrong.

Bill. You shouldn't tell the police because before Valjean stole he had tried everything and he couldn't find a job. I really don't think it was right to put him in jail in the first place.

David. You shouldn't report Valjean because he would be sent to prison and prison serves to protect society. Society would be hurt more than helped by sending Valjean to jail.

Andy. You should report him because you have a right as a citizen and member of society to uphold the laws. You shouldn't take the law into your own hands.
1. Would you choose the two friends whom you think have given the best advice?

1a. Can you say why you have chosen these?

2. How choose the two friends whom you think have given the worst advice.

2a. Why did you pick these?

3. Which one of the friends do you think is the smartest person?

3a. Why?

4. Which one of the friends do you think is the "most good" person?

4a. Why?
I. Suppose you were one of the tailor's friends and he came to you for advice. What would you tell him to do? Why?
The tailor was still really having trouble deciding whether to turn Valjean in or not. He couldn't think of what would happen to Valjean if he did turn him in. So the tailor went to six other friends and asked them what they thought would happen. Listed on the next page are the names of the six friends the tailor went to and next to each name you will find what each friend said.
Gary. He should be sent back to jail because he only took two years. That very bad and it is even worse because he escaped and probably did damage to the prison.

Steve. The judge gave him a six year sentence and the judge must be obeyed. You should always do what the judge tells you to do, so Valjean should go back to jail.

Jim. He shouldn't be sent back to jail because Valjean worked more for other people than for himself. He didn't hurt anyone but helped them. All he wanted was to make a good life for himself.

Mark. Valjean is helping people and is a good person so the judge would not send him back to jail. He just stole to help his family in, the first place.

Ken. Valjean shouldn't be sent back to jail because he is a positive member of society. He was convicted of course, but they can commute sentences of people who are reformed.

Rick. You should send Valjean back to jail to satisfy the strict legal code that guarantees order in society. It would be a warning to future potential thieves.
1. Would you choose the two friends whom you think have given the best advice?

1a. Can you say why you have chosen these?

2. How choose the two friends whom you think have given the worst advice.

2a. Why did you pick these?

3. Which one of the friends do you think is the smartest person?

3a. Why?

4. Which one of the friends do you think is the "most good" person?

4a. Why?
I. Suppose you were one of the tailor's friends and he asked you what you thought should happen to Valjean if he turned him in. What would you tell him? Why?
APPENDIX D

STAGE 2 ADVICE USED IN THE EXPOSURE CONDITION BOOKLET
Story 1

Debbie. It is none of your business to tell your mother that Judy went to the concert. Judy saved the money and should be able to spend it the way she wants.

Betsy. You should tell because Judy might start doing this all the time. If she gets away with it once, she might start doing it all the time.

Story 2

David. You could get yourself into a situation like that some day and Valjean might help him out by keeping quiet so it would be best for you not to report.

Andy. Valjean stole those things and should pay for them. Whoever saw the convict should report him.

Story 3

Ken. It's none of your business, he is not committing crimes now, he is not doing any harm to you or your business.

Rick. You should follow the law if everyone else was going to know about it. It wouldn't do anything but start other troubles.
APPENDIX E

THE CHILDREN MANIFEST ANXIETY SCALE
1. It is hard for me to keep my mind on anything. Yes No
2. I get nervous when someone watches me work. Yes No
3. I feel I have to be best in everything. Yes No
4. I blush easily. Yes No
5. I like everyone I know. Yes No
6. I notice my heart beats very fast sometimes. Yes No
7. At times I feel like shouting. Yes No
8. I wish I could be very far from here. Yes No
9. Others seem to do things easier than I can. Yes No
10. I would rather win than lose in a game. Yes No
11. I am secretly afraid of a lot of things. Yes No
12. I feel that others do not like the way I do things. Yes No
13. I feel alone even when there are people around me. Yes No
14. I have trouble making up my mind. Yes No
15. I get nervous when things do not go the right way for me. Yes No
16. I worry most of the time. Yes No
17. I am always kind. Yes No
18. I worry about what my parents will say to me. Yes No
19. Often I have trouble getting my breath. Yes No
20. I get angry easily. Yes No
21. I always have good manners. Yes No
22. My hands feel sweaty. Yes No
23. I have to go to the bathroom more than most people. Yes No
24. Other children are more happier than I. Yes No
25. I worry about what other people think about me. Yes No
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<tr>
<td>26.</td>
<td>I have trouble swallowing.</td>
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<tr>
<td>27.</td>
<td>I have worried about things that did not really make any difference later.</td>
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<tr>
<td>28.</td>
<td>My feelings get hurt easily.</td>
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<td>29.</td>
<td>I worry about doing the right things.</td>
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<td>30.</td>
<td>I am always good.</td>
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<tr>
<td>31.</td>
<td>I worry about what is going to happen.</td>
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<tr>
<td>32.</td>
<td>It is hard for me to go to sleep at night.</td>
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<tr>
<td>33.</td>
<td>I worry about how well I am doing in school.</td>
</tr>
<tr>
<td>34.</td>
<td>I am always nice to everyone.</td>
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<tr>
<td>35.</td>
<td>My feelings get hurt easily when I am scolded.</td>
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<tr>
<td>36.</td>
<td>I tell the truth every single time.</td>
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<tr>
<td>37.</td>
<td>I often feel lonesome when I am with people.</td>
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<td>38.</td>
<td>I feel someone will tell me I do things the wrong way.</td>
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<td>39.</td>
<td>I am afraid of the dark.</td>
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<td>40.</td>
<td>It is hard for me to keep my mind on my school work.</td>
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<td>41.</td>
<td>I never get angry.</td>
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<tr>
<td>42.</td>
<td>Often I feel sick in my stomach.</td>
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<td>43.</td>
<td>I worry when I go to bed at night.</td>
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<td>44.</td>
<td>I often do things I wish I had never done.</td>
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<td>45.</td>
<td>I get headaches.</td>
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<td>46.</td>
<td>I often worry about what could happen to my parents.</td>
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<td>47.</td>
<td>I never say things I shouldn't.</td>
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<td>48.</td>
<td>I get tired easily.</td>
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<td>49.</td>
<td>It is good to get high grades in school.</td>
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<td>50.</td>
<td>I have bad dreams</td>
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<td>51.</td>
<td>I am nervous.</td>
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<td>52.</td>
<td>I never lie.</td>
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<tr>
<td>53.</td>
<td>I often worry about something bad happening to me.</td>
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APPENDIX F

THEMATIC APPRECEPTION CARDS
REFERENCES


VITA

Robert Bowers Thompson

Born March 18, 1954 in Fredericksburg, Virginia. Graduated from James Monroe High School in that city, June 1972. The author was a psychology major at Hampden-Sydney College, from which he graduated in 1976. In September 1977, the author entered the College of William and Mary and is now a candidate for the degree of Master of Arts in general psychology.