

MORAL REASONING IN ADULTS: THE RELATION
OF AGE, SEX, AND LOCUS OF CONTROL TO
THREE MEASURES OF MORAL REASONING

By

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CHAPTER I

INTRODUCTION

In recent years the study of moral development has taken a variety of turns and yet one question has come up time and again. "Why do people bother with morality in the first place?" Or as Kohlberg and Power so eloquently put it, "Why be moral at all?" (Kohlberg and Power, 1981). In his own cognitive-developmental theory of moral reasoning, Kohlberg sees the individual progressing through a series of stages of moral reasoning, but he himself concedes that the theory cannot provide an answer to the "Why be moral?" question (Kohlberg, 1973b).

Indeed it would appear that this is a question that needs to be dealt with apart from the study of moral development per se. As Peters (1971) points out, there is a definite difference between understanding what is moral and caring about it, and it is the concept of moral motivation that connects the two. It does us little good as a society to teach our children what they should do if we cannot have at least some slight assurance that this is what they will do. Moral motivation, then, is concerned with how a person moves from what he believes he should do to what he actually chooses to do.

In constructing his four-component model of moral development, James Rest places the moral motivation concept in perspective by

postulating that it is only one component of moral development. The major concern of this component is as follows.

Given that a person is aware of various possible courses of action in a situation, each leading to a different kind of outcome or goal, why then would a person ever choose the moral alternative, especially if it involves sacrificing some personal interest or enduring some hardship? (Rest, 1984, p. 32)

In order to be more specific, the question, for the purposes of this study, will be rephrased to ask, "What factors are related to the way in which an individual decides whether or not to 'choose the moral alternative'?"

The very fact that Rest talks about making a moral choice at all implies that there are alternatives from which to make that choice, and research would appear to support that contention. As Alston (1971) points out, while an individual may behave in a manner consistent with one stage of moral reasoning, it is entirely possible that he may be capable of reasoning and understanding at a higher stage. This would suggest that the individual is not locked into a single stage, but that he has a range of alternatives at his disposal. Along this line, Mischel and Mischel (1976) note that in testing situations individuals tend to respond with reasoning from several different stages, and it is not at all uncommon to find less than fifty percent of an individual's moral judgments falling within any one particular stage. Despite this low percentage, the modal stage is often taken as an indicator of overall moral development. It seems clear that the fact that an individual ever uses anything other than the modal stage is an indication that some process of choosing from a range of possibilities is occurring.

In suggesting his hierarchy of spontaneous use, comprehension, and preference for moral stage reasoning, Rest (1973) has suggested not only that there is, in fact, a range of alternatives, but that this range has some very definite characteristics. Wherever an individual may fall in the stages of moral development, these three aspects of moral development will exist and will exist in a consistent order.

Spontaneous use will consistently be the lowest of the three. Spontaneous use refers to the type of reasoning used by an individual when he is presented with a moral dilemma and given no guidelines as to how it should be solved. This is the type of moral reasoning discussed by Kohlberg and measured by his Moral Judgment Interview. Asked an open-ended question such as, "What should be done in this situation?" the individual is free to respond in whatever way he chooses. As mentioned earlier, this is often measured by the modal stage, the stage at which he responds most often. Thus, if he responds to dilemmas most often with solutions that employ Stage Three moral reasoning, his level of spontaneous use is said to be Stage Three.

Somewhat higher than this will be the level of moral comprehension. While an individual may spontaneously use Stage Three moral reasoning most of the time, if presented with arguments that exemplify a variety of stages of moral reasoning, he would probably be able to comprehend a Stage Four argument, that is, he would be intellectually capable of understanding the reasoning used in a Stage Four argument. His level of comprehension would thus be higher than his level of spontaneous use. Higher still would be the level of preference. When asked to pick the best moral arguments out of several presented, an individual can usually

be expected to show a preference for arguments at stages even higher than that which he comprehends (Rest, 1973).

Each person, then, has a level of moral reasoning that he spontaneously uses, a slightly higher level that he comprehends, and a still higher level that he prefers. It has been shown clearly that spontaneous use, comprehension, and preference actually do form a hierarchy (Rest, 1973), but the question of why differences between these three measures may be large for one individual and small for another has gone largely unexplored. Rest's work has been used primarily for the purpose of theory-building (Rest, 1976), but to this point, very little notice has been taken of the individual differences involved. How is it that two people may both spontaneously use Stage 3 moral reasoning and yet one of them shows a preference for Stage 6 reasoning and the other shows a preference for Stage 4? And what do these differences tell us about each of these individuals' motivation to behave morally or about how their patterns of moral reasoning can be expected to change over time?

Before these questions can be answered, it will be necessary to describe more completely (1) the exact nature of the relationship between spontaneous use, comprehension, and preference, and (2) the relationship between other important variables and these aspects of moral reasoning. As a first step in approaching the question of individual differences in range of moral reasoning, this study will examine the relationship between selected variables and each of these three aspects. If, as Rest (1973) suggests, these three aspects comprise the range of an individual's responses to a moral dilemma, then whatever factors are related to these aspects, individually, should be related to the range.

Spontaneous use will be operationally defined in this study by performance on the Standard Moral Judgment Interview (Colby and Kohlberg, in press); comprehension by performance on the Comprehension of Social-Moral Concepts Test (Rest, Cooper, Coder, Masanz and Anderson, 1974); and preference by performance on the Defining Issues Test (Rest, 1979). The variables to be examined in looking for relationships to these measures will be age, sex, and locus of control as measured by Rotter's I-E Scale (Rotter, 1966). A brief rationale for the inclusion of each of these variables will now be stated.

Age

The very nature of moral development theory suggests that as individuals age, they move through stages of moral reasoning from lower to higher. Since each of the three measures of moral reasoning involved here (spontaneous use, comprehension, and preference) can be expected to increase with age, it seems reasonable to expect that they might also change in relationship to each other. In fact, research suggests that that may very well be the case.

First of all, as an individual's spontaneous use of moral reasoning approaches the upper stages (5 and 6) of moral development, it appears that there may be some sort of shift in the way the developmental process continues. As Gibbs (1977) suggests, reflection may be very important and the individual's awareness of the developmental process itself may be what initiates the stages of post-conventional moral reasoning. A similar suggestion is made by Murphy and Gilligan (1980) where they contend that there is a cognitive shift in adult moral development that is based on the different experiences of moral choice and

responsibility that typically occur after adolescence. Both Rest (1973) and Coder (1975) also report that change in adult moral reasoning may have more to do with real-life experiences than do changes that occur in adolescence or childhood which seem to have more to do with general cognitive development.

All of this seems to relate to the original concern for how a person comes to "choose the moral alternative." Indeed it is Kohlberg's contention that in adulthood autonomous choice becomes more important than social pressure in making moral judgments (Kohlberg, 1984). And it should be remembered at this point that choice is what the differentiation between spontaneous use, comprehension, and preference is all about. Even though an individual may display a preference for higher stage moral reasoning, he still chooses (spontaneously uses) a lower stage. If, as Carroll and Rest (1981) contend, preference (which is the highest of the three measures) shows little or no increase over time, then might it not be that in the course of development the two lower measures would move up to meet it, or come close to meeting it? The net effect of aging, then, would be for the differences between the three measures to decrease. That being the case, if preference is thought of as potential, might it not be said that an older person could come closer to actually behaving up to his moral potential than a younger person? And conversely it might also suggest that a younger person with a wider range of moral reasoning would, for some reason or other, not be behaving up to his potential.

Sex

The basic controversy in this area is whether or not men and women use the same rationales in making moral judgments. It is Kohlberg's contention (Kohlberg, 1984) that there are no significant differences in moral reasoning between the sexes. The primary opposition to this point of view comes from Carol Gilligan and her associates (Gilligan, 1982; Gilligan, Langdale, Lyons, and Murphy, 1982). Their position is (1) that there are two orientations involved in the moral decision-making process--one based upon justice and one based upon care, and (2) that women predominately tend to base their moral judgments on the ethic of care while men tend to use the ethic of justice (Gilligan et al., 1982). They contend that Kohlberg's theory of moral development largely ignores the ethic of care and that it is, therefore, biased against women.

The present study will not attempt to determine whether or not Kohlberg's theory is biased, but will focus rather on whether or not any pattern of differences can be shown between the sexes across all three measures of moral reasoning. By looking at all three measures on the same sample, it can be determined whether or not there are any consistent differences in moral reasoning as a whole or if the differences are restricted to only one or two measures of moral reasoning.

Locus of Control

This variable will be included mainly on logical grounds. It simply stands to reason that a person whose locus of control is highly internal would be less likely to allow what Rest calls "preemption" of his moral ideals than a person whose locus of control is external, and this does, in fact, appear to be the case. In his study of the

relationships of self-esteem, achievement motivation, and locus of control to moral reasoning, Prawat (1976) found that high degrees of internality correlated with high levels of moral reasoning.

Methodology and Hypotheses

In summary, each of the variables, age, sex, and locus of control, included in this study has been shown to be related to one or more of the three aspects of moral reasoning. That being the case, it seems reasonable to expect that they might be related to the particular grouping of these three aspects for a given individual.

Briefly, the methodology used to study these relationships was as follows. All of the subjects in the sample (which included equal numbers of males and females) were given each of the previously mentioned tests in order to assess the following:

1. level of spontaneous use of moral stage reasoning
2. level of comprehension of moral stage reasoning
3. level of preference for moral stage reasoning
4. locus of control.

Correlations were then calculated between each of the three measures of moral reasoning and the other variables involved in the study. It was hypothesized that significant relationships would be found between:

1. spontaneous use and the set of variables including age, sex, locus of control.
2. comprehension and the set of variables including age, sex, and locus of control.
3. preference and the set of variables including age, sex, and locus of control.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this study is to examine the factors that are related to the way in which an individual engages in the moral decision-making process. In order to address this purpose, this review will be organized in the following manner:

A. General Theory. This is an overview of the moral stage theory of Lawrence Kohlberg and its significance to this study.

B. Moral Motivation. This section presents support for a general theory of moral motivation; motivation not to moral behavior but to moral development. The concern here is not why people choose the moral alternative, but why, as Kohlberg's theory suggests, they are constantly deriving more sophisticated rationales for making their moral choices. In simple terms, the question is "Why does moral development take place?"

C. Hierarchy of Measures of Moral Development. This section deals with the hierarchy of spontaneous use, comprehension, and preference for moral stages; how it was created and how it was used in this study. The section is a logical extension of Sections A and B. Section A presented the basic developmental process of moral decision-making, Section B suggested why the process takes place, and this section suggests how the process takes place and how it can be measured.

D. Adult Development. This is the next step in the progression set forth in the first three sections. It deals with how the moral decision-making process changes throughout the life-span, and why age is, therefore, an important variable in this study.

E. Other Variables. Variables other than age are introduced, and supporting research is presented.

F. Hypotheses.

General Theory

The basic framework within which this study will operate is the cognitive-development theory of Lawrence Kohlberg. Since the theory was first introduced (Kohlberg, 1958), it has been the subject of much discussion and the basis for considerable research. As might be expected, it has also been severely criticized. A summary of some of the more substantial criticisms and Kohlberg's reply can be found in Kohlberg, Levine and Hewer (1983), but these are, for the most part, beyond the scope of this study and will not be discussed here. It should be noted, however, that none of Kohlberg's critics have suggested that his stage structure is totally inaccurate. Shortcomings have been pointed out and refinements proposed particularly for the later stages (some of these will be discussed later in this chapter), but there has generally been a consensus that something similar to Kohlberg's stages do, in fact, occur in the course of normal development. In keeping with this consensus, this study will use Kohlberg's stages as a rough outline of the development of moral reasoning. A summary of that stage structure is presented in Table I.

TABLE I
 CLASSIFICATION OF MORAL JUDGMENT INTO
 LEVELS AND STAGES OF DEVELOPMENT

Levels	Basis of Moral Judgment	Stages of Development
I	Moral value resides in external, quasiphysical happenings, in bad acts, or in quasiphysical needs rather than in persons and standards.	<p>Stage 1: Obedience and punishment orientation. Egocentric deference to superior power or prestige, or a trouble-avoiding set. Objective responsibility.</p> <p>Stage 2: Naively egoistic orientation. Right action is that instrumentally satisfying the self's needs and occasionally others'. Awareness of relativism of value to each actor's needs and perspective. Naive egalitarianism and orientation to exchange and reciprocity.</p>
II	Moral value resides in performing good or right roles, in maintaining the conventional order and the expectations of others.	<p>Stage 3: Good-boy orientation. Orientation to approval and to pleasing and helping others. Conformity to stereotypical images of majority or natural role behavior, and judgment by intentions.</p> <p>Stage 4: Authority and social-order maintaining orientation. Orientation to "doing duty" and to showing respect for authority and maintaining the given social order for its own sake. Regard for earned expectations of others.</p>

TABLE I (Continued)

Levels	Basis of Moral Judgment	Stages of Development
III	Moral value resides in conformity by the self to shared or sharable standards, rights or duties.	<p>Stage 5: Contractual legalistic orientation. Recognition of an arbitrary element or starting point in rules or expectations for the sake of agreement. Duty defined in terms of contract, general avoidance of violation of the will or rights of others, and majority will and welfare.</p> <p>Stage 6: Conscience or principle orientation. Orientation not only to actually ordained social rules but to principles of choice involving appeal to logical universality and consistency. Orientation to conscience as a directing agent and to mutual respect and trust.</p>

Source: Kohlberg, 1967, p. 171.

One point that should be made regarding Kohlberg's theory is that it deals with moral reasoning. As Kohlberg himself states, "I have always tried to be clear that my stages are stages of justice reasoning, not of emotions, aspirations, or action" (Kohlberg, 1984, p. 224). The importance of this distinction for the purpose of this study is that the stages deal with how an individual reasons about morality and not with how he feels about it. Reasoning is a rational process, feeling is an emotional process. Feeling goes beyond reasoning in that it includes things which are not necessarily rational and which the individual may

not even fully understand. This will be discussed further in the section on moral motivation.

It should also be noted at this point that this study is not attempting to either prove or disprove Kohlberg's ideas on how an individual progresses through these stages. They are included here merely as background material for the discussion of moral motivation and various factors associated with moral motivation.

Moral Motivation

At its simplest level, moral motivation is concerned with the basic "Why be moral?" question. Why does an individual ever choose the moral alternative, especially when it may conflict with his own interests? At this level, the question may be sufficiently complicated that it cannot be answered. "Why be moral?" may very well belong in the same category with "What is the meaning of life?" and that is certainly beyond the scope of this study.

What was studied then was a measurable situation in which people don't choose the moral alternative, or at least don't choose the alternative that they, themselves, actually feel is best for a given situation. This is precisely what happens when an individual's level of preference considerably exceeds his level of spontaneous use. This is a rather curious situation, and when looked at with respect to moral motivation (why the individual is choosing the alternative he is choosing), it is very different from the situation in which an individual's level of preference does not exceed his level of spontaneous use. It is one thing for a person to choose a particular course of action (at whatever stage of moral reasoning it may be) because that is the best he can do,

but it is very different for him to choose that same course of action when it can be empirically demonstrated that he understands and even prefers higher stages of moral reasoning. It would certainly seem that the motivational influences in these two situations must be different.

As a first step toward trying to determine what those influences might be, this study will look at relationships between the measures of moral reasoning and several variables (age, sex, and locus of control) which might be related to the moral decision-making process. Where significant relationships are found, follow-up studies can then address the motivation question more directly, but the main practical benefit of the present study will be to provide direction for future research.

In reviewing the literature on moral motivation, the focus will be on the individual's reasoning processes regarding morality and his emotional responses to moral dilemma situations. It is suggested that differences between these two correspond in a very general way to differences between spontaneous use and preference, spontaneous use being considered to be primarily a reasoning process and preference being considered to be primarily an emotional response.

In using Kohlberg's theory as a starting point for the discussion of moral motivation, it should be noted first of all that the theory really does not include any source of motivation. This is not, however, a damning accusation. Kohlberg himself readily admits (Power & Kohlberg, 1980) that his theory provides no answers to questions such as "Why be moral?" or "Why be at all?" and suggests that these questions are only to be answered in terms of religious convictions. He sees the usefulness of the theory lying in its ability to provide understanding

and problem-solving in the area of moral dilemmas rather than motivation. As others have noted, though, this is a distinction that can be very difficult to draw. Peters (1971) suggests:

This links with another central aspect of morality, to which Kohlberg pays too little attention, namely, the intimate connection between knowing the difference between right and wrong, and caring. It is not a logical contradiction to say that someone knows that it is wrong to cheat but has no disposition not to cheat, but it could not be the general case; for the general function of words like "right" and "wrong", "good" and "bad" is to move people to act. If there is no such disposition to act in a particular case, we would say that the person is using the term in an external sort of way, or that he is not sincere, or something similar to that. (Peters, 1971, p. 261)

What this appears to suggest is that there must be a connection between a person's concept of what is ideally "right" and what that person actually chooses to do in a particular situation.

This connection is also taken up by Pahel (1976) in his discussion of moral motivation. He suggests that moral growth involves the gradual development of (a) moral understanding and (b) feeling dispositions such as a sense of justice or an abhorrence of suffering. He further suggests that there needs to be a harmony or fit between these two capacities in order for the individual to achieve anything like genuine conviction or sincerity. Without this harmony or fit, moral judgments tend to be rather intellectual and shallow and do not actually serve as motivating influences. It is only when moral judgments are backed up by the feeling dispositions that they become a sound basis for moral conviction and moral action. The implication here for the present study lies in the changing pattern of the three measures of moral reasoning over time. If the "gaps" between these measures do, in fact, decrease as a person matures, does this not create a greater harmony between

understanding and feeling as Pahel sees them? And following his line of reasoning, does this greater harmony not then produce a greater depth of conviction?

A study by Sharie McNamee (1977) gives at least a suggestion of an answer to these questions. In her study she examined the reactions of 102 college students (all volunteers) to a carefully prepared moral dilemma situation. As each subject and the experimenter were about to enter the testing room:

A confederate arrived, presenting himself as the next subject for the experiment. He stated that he was not going to be able to do the experiment. He said that he has just taken drugs and was having a bad time. He came to the experiment because he thought that the experimenter, being a psychologist, could help him.

The response of the experimenter was that she was a research psychologist, not a therapist.

The drug-user persisted in soliciting aid, hoping that the experimenter could refer him to help.

The experimenter replied that she had no experience with drugs and did not know what facility could help him.

She told him to reschedule his testing session.

The drug-user slowly left the room (McNamee, 1977, pp.27-28).

The subjects were faced with the possibility of either remaining uninvolved observers or intervening and offering assistance to the drug-user. At the end of this encounter, the Kohlberg Moral Judgment Interview was administered to each subject. The actual purpose of the experiment was to examine the relationship between the subject's levels of moral reasoning and their willingness to offer help to the drug-user.

It was found that for each ascending stage of moral reasoning, a greater percentage of subjects made a helping response: Stage 2, 9 percent; Stage 3, 28 percent; Stage 4, 38 percent; Stage 5, 68 percent;

Stage 6, 100 percent. However, more importantly for the purposes of this study, when interviewed after completion of the experiment, 72 percent of the subjects stated that they thought they should have helped the drug-user, when in fact only 43 percent did help. Similar figures were reported for each stage of moral reasoning, and as moral reasoning level increased, the discrepancies between these two percentages decreased. As McNamee reports:

At Stage 2, 36 percent thought they should help, but only 11 percent did help. At Stage 3, 77 percent thought they should help, but only 27 percent did. At Stage 4, 69 percent thought they should help and 38 percent did. At Stage 5, 80 percent thought they should help and 60 percent did. At Stage 6, 100 percent thought they should help and 100 percent did in fact help. There can be seen a trend toward increased consistency between the subject's feeling of responsibility and actual helping behavior at progressive stages of development. Only at Stage 6 did everyone do what they thought they should do (McNamee, 1977, p. 29).

For the purposes of this study, the specific behavior is not that important, but it does suggest that the subjects must first make some sort of decision as to what course of action to take. There are two important points to note in regard to this finding. First, the fact that more subjects said the drug-user should be helped than actually helped him, and second, the fact that both of these percentages increased as moral reasoning level increased. Since "feeling of responsibility" was consistently more common than actual helping behavior, it might be suggested that "feeling" could serve as a motivation for advances in moral reasoning. Many of the subjects in this experiment felt responsible for the drug-user, they thought they should help him. Yet whatever levels of reasoning they used to decide on a course of action did not allow them to carry out these feelings. But as

moral reasoning levels increased, they became increasingly able to do so, and at Stage 6 they did so perfectly.

The implication for a theory of moral motivation is this. At lower stages of moral reasoning, an individual is unable to put his feelings about moral situations into practice. In order to do so he must develop higher stages of moral reasoning, and the fact that moral feelings are more advanced than moral reasoning serves as motivation for advances in moral reasoning.

Although interpretations vary, the idea of moral feelings serving as a motivation toward higher moral reasoning has been discussed by others, perhaps most prominently by Martin Hoffman (1982a, 1982b, 1984). The major component of Hoffman's theory is a concept that he calls empathic arousal. This term refers to a state of emotional alertness that is brought about by seeing another person in distress. Hoffman (1982a) suggests that people of all ages experience empathic arousal and that it may even be a largely involuntary reaction. Logically, this fits in nicely with the theories already discussed and can serve as a strong motivation. However, as Hoffman also points out, while the state of empathic arousal and the guilt that may accompany it generally serve as motivations toward action, they may not motivate a person toward higher levels of moral reasoning. If the individual's only concern is to relieve guilt and reduce the pangs of empathic arousal, he may simply try to avoid the situation that produced the arousal (Hoffman, 1980). A good example of this idea is found in the well-known Biblical account of the Good Samaritan. Seeing the man who had fallen among thieves lying by the side of the road was an empathy-arousing situation for all three passersby, but the priest and the Levite reduced that arousal by

avoiding the situation while the Samaritan reduced the arousal by helping (Luke 10:30-35).

In much the same way that the need to reduce empathic arousal or avoid guilt can be a motivation to moral action, the need to reduce cognitive dissonance can serve as a motivation to moral development. This is the contention of Rholes, Bailey, and McMillan (1982) and supported by their research. On the pretext that they were assisting the experimenter in a study of persuasion techniques, the subjects (college students) were asked to video tape persuasive messages on the subject of euthanasia that would subsequently be shown to high school students. For each subject the message was to be counterattitudinal, that is, opposite the subject's own position on the issue. Supporters of euthanasia delivered messages against it and vice versa. The purpose was to observe what sort of effect this would have on the subject's levels of moral reasoning. The subjects were randomly assigned to two groups, one in which they were simply assigned to tape the counterattitudinal messages (no choice), and the other in which they were given a choice to either make the tapes or not (free choice). Those who chose to make the tapes were thus in a dissonance-producing situation; they were choosing to advocate a position with which they did not agree.

In addition, the messages were tailored to the individual subjects. Each subject delivered a message that contained arguments either one stage above or one stage below that individual's own characteristic level of moral reasoning, as assessed prior to taping by Rest's Defining Issues Test (Rest, 1979). The most significant result of the study was the finding that subjects in the free choice/higher stage argument group showed both significantly more advanced moral reasoning after the taping

and greater change in attitude toward euthanasia than the other groups. This would appear to suggest two things concerning moral development. First of all, it will be more likely to occur under circumstances that promote cognitive dissonance (free choice) than under circumstances that don't (no choice). Secondly, it will be more likely to occur in situations in which people are exposed to moral arguments at a stage higher than their own characteristic level of functioning.

The importance of the Rholes, et al., (1982) findings to this study lie in the fact that they appear to build on the foundation of Hoffman's ideas. Empathic arousal motivates moral action, according to Hoffman, and this leads to a choice on the part of the individual. Like the characters in the Good Samaritan story, one either helps or avoids the situation. Then, according to Rholes, et al., the act of making the choice, particularly if it is a choice that goes against one's natural inclinations, produces cognitive dissonance, and this motivates advances in moral reasoning. So the Good Samaritan, besides earning honorable mention in the Bible, also placed himself in a state of cognitive dissonance which very likely brought about an increase in his level of moral reasoning.

In summary, the discussion of moral motivation to this point has focused on the relationship between moral reasoning and moral feelings and the way in which motivation can arise from this relationship. There are, of course, other theories of moral motivation (see Rest, 1984 for a brief review of several), but only this one is presented here because it is this one which serves as a basis for this study. The general consensus of the literature presented so far is that moral motivation stems from some sort of interaction between moral reasoning and the

individual's feelings about morality. Given that, the question is asked, "How shall this relationship be studied?" In considering this question, Robert Kegan points out that one must consider more than simply moral stages. In addition to this structure, the movement from stage to stage is also important. As he says,

When the structures are taken as the basic consideration, the framework is unavoidably cognitive. When we study the motion which gives rise to these constructions, and the experience of this motion, we discover the very source of our emotions (Kegan, 1980, p. 408).

Thus by studying the process or the motion of moral development, and the motivation which necessitates it, the effects of feelings are added to the effects of reasoning to produce a more comprehensive picture of what actually happens as a person progresses through the stages of moral reasoning.

Hierarchy of Measures of Moral Development

Taking into account the role of feelings and other factors which influence an individual's choice of a course of action is part of what James Rest has done in constructing his four-component theory of morality (Rest, 1984). In this theory, each component is part of a step-by-step process that leads to action. The four components can be briefly summarized as follows: (1) interpreting the situation in terms of recognizing what actions are possible for the actor and how each course of action affects all parties involved (assessment); (2) figuring out what one ought to do, applying moral ideals to the situation to determine the moral course of action (reasoning); (3) choosing among moral and nonmoral values to decide on what one actually intends to do (judgment); and (4) executing and implementing what one intends to do

(action). Additional information on these components and supporting research are presented in Table II which is reprinted from Rest (1984).

The stages of moral reasoning that have so often been used in moral development research are part of what Rest calls Component 2. Useful as the concept of moral reasoning has been, Rest does not at all see it as being complete.

Reasoning about justice is no more the whole of morality than is empathy. A score from a moral judgment test does not tell us how sensitive the person is even to noticing moral problems. It does not tell us what other values may pre-empt or compromise one's moral ideals, nor does it tell us how well a person is able to carry through on one's moral convictions (Rest, 1984, p. 32).

For the purposes of this study, Component 3 will be the most important one. This component is primarily a practical evaluation of the second component. Once the individual has decided what would be the moral thing to do in a given situation (Component 2), he asks himself, "All things considered (moral and nonmoral values), is that really what I want to do?" (Component 3). This paper will obviously not consider all moral and nonmoral values, but it will consider age, sex, and locus of control and examine how they are related to the difference between an individual's moral reasoning (Component 2) and what he actually intends to do (Component 3).

In order to study the process by which an individual moves from stage to stage in moral development, one must know where that individual is in the first place. Since Kohlberg introduced his interview measurement technique in 1958, it has been a primary means of assessing this position. But in addition to this, the pattern of responses to Kohlberg's questions also gives an indication of where the individual is headed. As Alston (1971) points out, the stage which Kohlberg's

TABLE II
INNER PROCESSES PRODUCING BEHAVIOR

Component 1

Major functions of the process: To interpret the situation in terms of how one's actions affect the welfare of others.

Exemplary research: Response to emergencies, Staub (1978, 1979) and Schwartz (1977); social cognition development, Shantz (in press and Selman (1980); Empathy, Hoffman (1977, in press).

Cognitive-affective interactions: Drawing inferences about how the other will be affected and feeling empathy, disgust, and so on, for the other.

Component 2

Major functions: To formulate what a moral course of action would be; to identify the moral ideal in a specific situation.

Exemplary research: Cognitive-developmental, Piaget (1932/1965) and Kohlberg (1969, 1976); DIT research, Rest (1979) and Damon (1977); social psychology "norms", Berkowitz & Daniels (1963) and Schwartz (1977); post-Piagetian, Keasey (1978).

Cognitive-affective interaction: Both abstract-logical and attitudinal valuing aspects are involved in the construction of systems of moral meaning; moral ideals are composed of cognitive and affective elements.

Component 3

Major functions: To select among competing value outcomes of ideals, the one to act on; deciding whether or not to try to fulfill one's moral ideal.

Exemplary research: Decision-making models and factors that affect decision making, Pomazel & Jacard (1976), Lerner (1971), Schwartz (1977), and Isen (1978); theories of moral motivation, E. Wilson (1975), Aronfreed (1968), Bandura (1977), Kohlberg (1969), Hoffman (in press), Durkheim (1925/1961), and Rawls (1971).

Cognitive-affective interactions: Calculation of relative utilities of various goals; mood influencing outlook; defensive distortion of perception; empathy impelling decisions; social understanding motivating the choice of goals.

Component 4

Major function: To execute and implement what one intends to do.

Exemplary research: Ego strength and self-regulation, Mischel & Mischel (1976), Krebs (Note 1), and Staub (1979).

Cognitive-affective interaction: Task persistence as affected by cognitive transformation of the goal.

interview describes as the individual's predominate stage of moral reasoning is his modal response. It does not represent his capacity, it is merely the stage at which he most often responds. It is obvious from the fact that he sometimes responds with moral reasoning from stages higher than his predominate stage that he does have some understanding of these higher stages.

It is this type of finding that has brought about the study of the differences between spontaneous use, comprehension, and preference for stages of moral reasoning. One of the earliest studies to examine these differences was done by Rest, Turiel, and Kohlberg (1969). In this study, Kohlberg's interview was administered to a group of fifth graders and a group of eighth graders in order to determine their predominate stages of moral reasoning. This is considered to be a measure of spontaneous use. After this the subjects were exposed to moral arguments using reasoning from three different stages in relation to the subject's predominate stage: one stage below the subject's predominate stage, one stage above the predominate stage, and two stages above the predominate stage. The subject's task was to select the "best" argument from this group of three.

The results of this study include two statistically significant findings that have relevance for the present study. First of all, the subjects expressed a significant preference for the arguments one stage above and two stages above their own predominate stages. The probability of subjects preferring the lower stage argument at less than expectancy was less than .01. Despite the fact that they themselves generally functioned at a lower stage, the subjects somehow felt that these higher stage arguments were "better" than their own predominate

stages. The second important finding deals with the way in which these two higher stages were differentiated from each other. In order to determine how well the subjects understood the higher stage arguments, they were asked to recapitulate the arguments (reconstruct them from memory) after the testing was completed. It was found that of the subjects who preferred the +1 arguments, 43 percent of them accurately recapitulated that argument. Of the subjects who preferred the +2 arguments, only 28 percent could accurately recapitulate the +2 argument. This difference in accuracy was found to be significant at the .001 level and was interpreted to mean that the +2 argument was more difficult for subjects to understand than the +1 argument.

The importance of these findings lies in the fact that they suggest the general hierarchy of spontaneous use, comprehension, and preference. Clearly preference tends to be for a higher stage than that which is used spontaneously. Comprehension also exceeds spontaneous use, but not to as great a degree. Thus for any individual, one would expect to observe, in ascending order, the level of spontaneous use, followed by comprehension, and then preference. This order was confirmed in another study by Rest (1973).

These findings are important also in regard to the earlier discussion of reasoning and feeling. In a general way the concepts of spontaneous use, comprehension, and preference can be seen as including reasoning and feeling, and this has definite implications for motivation. Despite the fact that an individual may choose to function at a particular stage, these studies provide evidence that he comprehends higher stages than that, and more importantly that he has a preference for stages even higher than the highest he comprehends. Thus at

whatever stage a person finds himself predominately functioning, he still knows that there is a better way, there is a higher level of morality, even though he may not be able to understand it. And therein lies the motivation. The awareness of a higher level, the preference for a higher level, is a counterpart of the "feeling of responsibility" previously mentioned in the McNamee (1977) study. This is where feelings are out in front of reasoning. It is the advanced level of an individual's feelings (preference) about morality that tells him his predominate level of reasoning (spontaneous use) is not the most adequate level available, and this knowledge serves as his motivation to try and bring his reasoning abilities up to the level of his feelings.

Adult Development

If the gap between an individual's reasoning and feelings is seen as the motivation for advances in moral reasoning, what does that suggest about changes in motivation over time? If an individual is, in fact, attempting to close that gap by developing more sophisticated moral reasoning, couldn't it be expected that he would eventually get the job done? And doesn't that imply that there is a limit to how far this type of motivation can take a person? Current research in this area would appear to suggest that the answer to all of these questions is "Yes" (Gibbs, 1977; Gibbs, 1979; Mischel & Mischel, 1976; Murphy & Gilligan, 1980; Rest, 1978).

In combining the results of over fifty different studies dealing with 5,714 subjects, Rest (1979) observes that there appears to be a leveling out of moral development in early adulthood. For the most part, moral development tends to advance as long as an individual is in

school and then remain pretty much the same. Although, as Rest points out, there is not sufficient longitudinal evidence to say that moral development stops in early adulthood, this has been the general indication from a large number of cross-sectional studies.

At least a partial explanation for this finding is put forth by Mischel and Mischel (1976). They suggest that a certain portion of what passes for moral development can actually be accounted for by general cognitive development.

Consider, for example, the differences in how a 12-year-old delinquent from a lower socioeconomic class family and a professor in an Ivy League college might handle moral dilemmas in ways that result in the delinquent's being assigned to Stage 2 or 3 of Kohlberg's scale of moral maturity, while the professor is likely to reach higher levels. To understand the differences between these two people it is necessary to take account of the differences in their cognitive and verbal skills as well as in the ways in which moral issues and conduct are represented and treated in their respective experiences. In part, the delinquent youngster and the professor differ in the cognitive and linguistic maturity with which they can conceptualize and articulate "reasons." That is likely to be the case regardless of whether the issues about which they are asked to reason are moral dilemmas or morally irrelevant--for example, esthetic judgments about why they prefer particular paintings, books, movies, or music. When justifying either his moral reasoning or his esthetic preferences (or any other choice, morally relevant or not) the professor is likely to deal in "higher" abstractions (e.g., about justice, about beauty), to invoke more generalized rules (e.g. about reciprocity in ethics, about harmony in esthetics) than will the 12-year-old. The latter is likely to be not only more concrete but also more self-centered and peer-centered in his explanations (Mischel & Mischel, 1976, pp. 95 & 96).

Considering this argument, then, it might be expected that as the 12-year-old matures and gains greater cognitive skills and great ability to express himself, many of the apparent differences between him and the professor will disappear. If this is taken to be true, what then becomes of moral development once the maturational process has removed differences in cognitive skills?

In dealing with this question, Gibbs (1979) divides Kohlberg's six stages into two parts: stages 1 through 4 and stages 5 and 6. He sees the first four stages as being a natural, developmental progression. But stages 5 and 6, according to Gibbs, are of a more existential nature and do not develop naturally. Rather they are achieved only through "meta-ethical reflection" (Gibbs, 1977). This involves a basic shift at some point from standard (child) moral development to existential (adult) moral development. In essence what Gibbs is saying is that stages 5 and 6 are not simply a continuation of what went before, they are qualitatively different, and they come about as a result of a conscious effort on the part of the individual to find meaning, or as it has been described here, to bring reasoning in line with feelings.

Murphy and Gilligan (1980) also suggest some kind of shift in moral development as an individual reaches the upper stages of Kohlberg's framework. They have labelled this shift "contextual relativizing" and they contend that at some point the individual will come to the realization that all moral judgments are not black and white and that they are, in fact, contextually relative. The right thing to do then may very well change from situation to situation. For an individual who espoused that position, the determination of what is right in a given situation could not be an "off-the-rack" statement of the individual's present level of development, but instead would require the kind of reflection that Gibbs discussed.

The last three authors cited have suggested that there is more involved in the upper stages of moral development than merely increased cognitive ability. There is also a logical problem with the cognitive development idea that is pointed out by Locke (1980). If cognitive

conflict is used to explain why a person moves from stage to stage, what happens when that person reaches the highest stage and all conflicts are resolved? This same problem can be stated in the terms of the hierarchy already discussed. If the hierarchy of spontaneous use, comprehension, and preference exists, and each of these three concepts advances as an individual ages, what happens when preference, being the highest of the three, reaches the highest stage? At this point it appears that the hierarchy cannot continue to exist in the form that it has previously. It seems a logical necessity that something else must happen.

Eventually even Kohlberg himself comes to that conclusion, or seems to (Kohlberg, 1984). For one thing he talks about soft stage development in adulthood. The following quotation describes the role of soft stages:

There are hierarchical levels of positive development in adulthood and this development is something other than life phases (Levinson, 1978). In addition we should note that the soft stages of the sort described here differ from Erikson's functional stages. Soft stage development depends neither on the emergence of new functions nor on the performance of new tasks. Instead, soft stage development depends on formal reflection. Models of soft stage development describe the adult's attempt to interpret the task of metaphysics and religion, the task of integrating the ideals of justice, love, and truth with one's understanding of the ultimate nature of reality (Kohlberg, 1984, pp. 40-41).

In addition to this, Kohlberg has collaborated with Richard Shulik to suggest that two types of post-conventional development are possible (Kohlberg, in press). After attaining Stage 5 moral reasoning, the individual may either progress to Stage 6 at which rational justice is the prime concern, or he may depart the stage structure altogether and adopt an ethic of agape (putting the other before the self; Kohlberg, 1985).

The general consensus of all the literature presented here is that there is something qualitatively different about adult development. As an individual matures and begins to approach the upper stages of moral reasoning, something other than a simple step-by-step progression through the stages begins to take place. It is the contention of this author that this other process is a narrowing of the gaps between spontaneous use, comprehension, and preference. There has been very little research in this area, but one study that hints at this process was conducted by Carroll and Rest (1981). In looking for advances in moral reasoning among high school students (seventh, ninth and eleventh graders), they focused on rejection of lower-stage reasoning rather than acceptance of higher-stage reasoning. Their finding was that this rejection of lower-stage reasoning by an individual could actually be a better indicator of moral development than acceptance of higher stages. As they said,

When individuals give up thinking at stages lower than their modal stage, this can be viewed as developmental advance in the sense of consolidation at the higher stage. Progress need not be thought of solely as the acquisition of new forms of thought (Carroll & Rest, 1981, p. 543).

This takes on special meaning when applied to the higher stages of development and does logically suggest a narrowing of the gaps. If one has reached the highest stage of moral reasoning, then there are theoretically no new forms of thought and any development that is to take place would have to be, as Carroll and Rest call it, a "consolidation at the higher stage." In the terminology of the hierarchy again, if preference has no higher stage into which to advance, then any advance in spontaneous use or comprehension would have to result in a narrowing of the distance between the three measures of moral reasoning.

The only study located in this review of literature to directly address this relationship clearly found this to be the case. Pratt, Golding, and Hunter (1983) administered Kohlberg's Moral Judgment Interview (a measure of spontaneous use) and Rest's Defining Issues Test (a measure of preference) to three groups of subjects aged 18-24, 30-50, and 60-85. For the youngest group there was no correlation between the two measures, for the middle-aged group the correlation was .37, and for the older group the correlation was .70 ($p < .01$). This would appear to be a very clear indication that as individuals get older there becomes less and less difference between their preference for the ideal moral reasoning and the reasoning which they spontaneously use.

The importance of this finding for moral motivation is seen when the study is viewed in the light of the third component of Rest's four-component model of morality. As previously mentioned, Component 3 is the point in the moral decision-making process at which non-moral factors may pre-empt or compromise the individual's moral ideals. It appears from the Pratt, et al. (1983) study that age (a non-moral factor) has a definite effect here. As individuals grow older they apparently become much less likely to allow any preemption or compromise, and instead they tend to choose actions more nearly in accord with their moral ideals than they did at earlier ages.

In summary, the overall thrust of this section has been to suggest that there is a qualitative difference in the way moral development proceeds for adults as opposed to children. It is proposed that this difference is a narrowing of the gaps between spontaneous use, comprehension, and preference, and research, particularly Pratt et al. (1983), would appear to support this idea. It is these gaps which are

the focus of this study, regarding both their relationship to age and to the other variables which will be discussed in the following section.

Other Variables

Sex

Research on sex differences in moral reasoning is not altogether conclusive. In addition to the fact that many studies have shown differences between the sexes and many have not, there is also the problem of determining whether these differences are actually the result of different moral reasoning processes for males and females or whether they can be explained by differences in education or occupation.

In a study for the National Institute of Education, Gilligan et al. (1982), working with a sample of 14 males and 16 females ranging in age from 8 to 60+, found that 75 percent of females chose considerations of care rather than consideration of justice in dealing with real-life moral dilemmas. Only 14 percent of the males in the sample chose considerations of care, and this difference was found to be significant at the .001 level. These results are used to suggest that the moral reasoning process for women is different than it is for men; however, it is interesting to note that this study also found a mean Moral Maturity Score (MMS) for men of 413 (on the Moral Judgment Interview) as opposed to a mean of 400 for women. This difference was not found to be statistically significant. Although an alternative method of comparison based upon individual judgments in the interview rather than overall scores found a significant difference ($p < 0.25$), this procedure has been called into question by other researchers (Kohlberg, 1984).

One study that did show a statistically significant difference between sexes was done by Holstein (1976). Using a sample of 53 adult males and their wives, Holstein found mean MMS of 408.65 for men and 366.06 for women. This difference was found to be significant at the .001 level. A retest three years later showed that males still tended to show higher MMS (409.67 to 393.82) but the difference was no longer significant. Holstein suggests that these differences may be due to the fact that Kohlberg's stages were originally defined and empirically tested on an all-male sample, and that as a result of this, emotional responses to moral conflict which are more common in females than males tend to cause adult female reasoning to be scored at lower stages than adult male reasoning.

On the other side of the coin, other studies have looked for sex differences in moral reasoning and found none. With a sample of 37 male and 41 female subjects (ages 21 to 39), Weisbroth (1970) found mean MMS of 421 for men and 409 for women which was not significant. In summarizing result of 21 different studies using the Defining Issues Test, Rest (1979) notes that only 2 found significant sex differences and in both of those the difference favored females.

All of these findings are presented here to show that there does not seem to be a clear indication of whether there are actually any differences between the sexes or not. Given this, the present study will certainly not prove anything conclusively, but will only add support to one side of the discussion or the other. However, by looking at levels of spontaneous use, comprehension, and preference, the study should be able to suggest whether or not observed sex differences are

actually differences in over all moral reasoning, or whether they are specific to any one measure of moral reasoning.

Locus of Control

This variable will be included mainly on theoretical grounds. Considering the nature of the moral hierarchy being studied, it seems logical to assume that an individual who shows only small differences between the three measures of moral reasoning and who is, therefore, highly resistant to compromise of his moral ideals, is also fairly resistant to the influences of other people in general. Thus, small differences are expected to correlate with internal locus of control.

In addition, there is some research to support the idea of a relationship between moral development and locus of control. In one study of middle-school students, Richard Prawat (1976) found a significant positive correlation between locus of control as measured by the Bialer Locus of Control Scale (Bialer, 1961), and moral development measured by the Defining Issues Test (Rest, 1974), but only among the female students. Another study (Lambert, DeJulio, and Cole, 1976) using undergraduate students as subjects employed both the Defining Issues Test and two locus of control measures: the I scale of the Personal Orientation Inventory (Shostrom, 1964) and Rotter's I-E scale (Rotter, 1966). In this study the correlation of the principled level of moral reasoning (Stages 5 and 6) to locus of control on the POI was found to be .34 which was significant at the .01 level. However, the correlation to the I-E scale was virtually non-existent (.01). These conflicting results would certainly suggest that the relationship between moral reasoning and locus of control bears further study.

Hypotheses

Based on the review of the literature, the following hypotheses were formulated:

1. There is a significant relationship between spontaneous use of moral stage reasoning and a set of variables including age, sex, and locus of control.

2. There is a significant relationship between comprehension of moral stage reasoning and a set of variables including age, sex, and locus of control.

3. There is a significant relationship between preference for moral stage reasoning and a set of variables including age, sex, and locus of control.

CHAPTER III

METHODS

Introduction

The purpose of this chapter is to describe how the study was conducted. This description addresses four general areas: subjects, instruments, procedures, and statistical analysis. The subjects section describes general characteristics (age, sex, education, etc.) of the individuals involved in the study and discusses to what extent these characteristics make the sample representative of a larger population. Instruments used in the study are described in terms of general format and means of administration. Current reliability and validity information are also presented. The procedures section includes the method in which the testing was conducted as well as a brief description of the scoring procedures. The statistical method used in this study is presented along with the rationale for using this particular method.

Subjects

The sample used in this study was selected with the intent of generalizing to the widest possible population. There were, however, limitations imposed by both geography and by theory that should be mentioned. For one thing, the sample consisted entirely of American citizens or persons raised in the United States. This was done to

eliminate the cultural differences that might be present in a multinational sample.

Secondly, with Rest's (1978) finding of a significant relationship between educational level and moral reasoning in mind, all subjects were college graduates. This was done in an attempt to avoid confounding educational level with the other variables being examined. The target population was thus considered to be college-educated, American adults. Particular characteristics of the sample and the degree to which it is representative of the population are presented in the Discussion section of this paper.

The sample consisted of 100 subjects--10 males and 10 females in each of the following age groups: 22-32, 33-43, 44-54, 55-65, 66 and older. Using alpha level (.05), the number of independent variables (3), and assuming a medium effect size ($f^2 = .15$), this sample size yields a power of .91 (Cohen, 1977) which would appear to be sufficient. Subjects were recruited from university faculty, professional organizations, alumni associations, civic groups, and church groups and participated on a volunteer basis. More complete information regarding subjects can be found in Appendix E. Although no geographical boundaries were intended, practicality dictated that nearly all subjects were from the midwestern United States. All subjects were assured anonymity and confidentiality and signed informed consent statements to that effect.

Instruments

Standard Moral Judgment Interview

The Standard Moral Judgment Interview (Colby & Kohlberg, in press) was used as a measure of spontaneous use of moral reasoning. The purpose of this instrument according to its authors is:

. . .to elicit the subject's own construction of moral reasoning, his or her moral frame of reference or assumptions about right and wrong, and the way that s/he uses these beliefs and assumptions to make and justify moral decisions. . .The questions asked are explicitly prescriptive in order to elicit normative judgments about what one should do rather than descriptive or predictive judgments about what one would do (Colby & Kohlberg, in press, p. 105).

The interview consists of three dilemmas or stories which are designed to pose a conflict between two moral issues. After hearing each dilemma, the subject responds to a series of questions, the intent of which is to elicit not only the individual's judgment about the issues involved but also about the norms and values employed in reaching that judgment. The responses are then categorized by issues, norms, and value elements and assigned a stage score within Kohlberg's stage structure (i.e. Stage Three, Stage Four, etc.). The overall score for the test can then be reported one of two ways. One is the Global Stage Score which is simply the subject's modal stage, the stage at which he has responded most often throughout the test. The other method involves combining the subject's responses from all stages to yield a Weighted Average Score (WAS). The WAS was used for this study mainly because it provides a continuous measure rather than discrete stage scores.

The authors report the test-retest reliability of the interview as ranging from .96 to .99 for a variety of raters, inter-rater reliability

as .98, and internal consistency ranging from .92 to .96 (Colby & Kohlberg, in press).

In addressing the validity of the instrument, the authors contend that the appropriate concern for an instrument of this type is construct validity (Colby & Kohlberg, in press). Considering that what a person says he should do and what he actually does may not be the same, they suggest that the focus should not be on whether the instrument predicts behavior, but on whether it supports the developmental assumptions of the theory, namely invariance of stage structure and structural wholeness or generality of stage usage across moral issues. They cite a variety of studies (Colby, Kohlberg, Gibbs, & Lieberman, 1983; Erickson, 1980; Gilligan & Murphy, 1979; Nisan & Kohlberg, 1982; Snarey, Kohlberg, & Reimer, 1984) in an attempt to support these assumptions, but perhaps the most important thing that can be said about the instrument's validity is that its widespread approval and use (Alston, 1971; Locke, 1979; Mischel & Mischel, 1976; Rest, 1973 to name a few) have indicated a consensus among experts that it does, in fact, possess construct validity.

Comprehension of Social-Moral Issues Test

The Comprehension of Social-Moral Issues Test (Rest, Cooper, Coder, Masanz, & Anderson, 1974) will be used as a measure of comprehension. This instrument consists of ten paragraphs each of which advances some type of moral argument. After each paragraph, the subject is asked to select from a group of four statements the one which best represents the meaning of the paragraph. It should be noted that this has nothing to do with the subject's own level of moral reasoning or his own agreement or disagreement with the argument presented in the paragraph. It is

simply intended to check whether or not the subject understands the argument. The score reported for this test is simply the number of correct choices.

Reliability figures reported by the authors (Rest, et al., 1974) show a test-retest reliability of .51 for a sample of 24 ninth-graders, which is quite poor. For the purposes of this study, new reliability figures were calculated in the hope that more acceptable test-retest reliability could be shown. A random sample of the subjects were re-tested two weeks after the initial testing. One male and one female were randomly selected from each of the five age groups to participate in this re-testing. For this sample group of ten subjects, test-retest reliability was calculated to be .70.

The only validity information available is the expert judgment of a group of graduate students in political science and moral philosophy. Their collective opinion was used to determine the correct choice for each paragraph (Rest, et al., 1974).

Defining Issues Test

The Defining Issues Test (Rest, 1979) will be used in this study as a measure of preference of moral stage reasoning. The major differences in this instrument as compared to the other two are that unlike the Kohlberg interview it does not require the production of moral reasoning, and unlike the comprehension test it does require a judgment as to what issues should be the basis for a moral decision. The test consists of six moral dilemmas presented in written form. Each of these is followed by twelve questions or statements designed to address issues which may or may not be important in making a decision about that

particular dilemma. The subject is asked first of all to make a decision about how to resolve the dilemma and then to rate the twelve issues on a five-point scale of their importance (great, much, some, little, no) to the subject's decision. In addition, the subject is asked to rank his four most important issues in order from most important to least important.

There are two scores that can be reported for the DIT. One is the P score which is simply the percentage of the subject's responses made at the Stage Five and Stage Six levels of moral reasoning. The other score is the D score which is a weighted index of responses at all stages and which is similar to the WAS for the Standard Moral Judgment Interview. In most cases there are significant differences between the P and D scores only in adolescent or younger subjects. Therefore, considering the age range in this study, only the P score was used.

In addition, there are two checks of subject reliability built into the DIT. These are the M score which measures the extent to which the subject tends to select complex but intentionally meaningless test items, and the Consistency Check which measures the extent to which the subject is inconsistent in the way he responds to test items. Either an excessively high M score or a failure on the Consistency Check are grounds to invalidate the subjects test score; however, the author suggests (Rest, 1979) that results be reported for purged (invalid scores removed) and unpurged samples. The results of this study are therefore presented both ways.

The reliability of the DIT would appear to be within the acceptable range. Davison (1979), in a study combining the results of seven different sample groups, reports an internal consistency of .79 and

test-retest reliability ranging from .67 to .92 for the different sample groups.

In discussing the validity of the instrument, Rest (1979) points out the same problem mentioned by Colby and Kohlberg (1984). For tests of moral judgment there is no clear-cut set of behaviors which moral judgment can be expected to predict. He suggests that a variety of criteria must be used in establishing validity and lists seven that were considered in regard to the DIT. They are briefly summarized here as follows.

1. Face validity. In addition to the fact that the DIT deals specifically with moral issues, it also is directly concerned with the processes of moral decision-making and the ordering of different stages of reasoning--all of which is relevant to face validity.

2. Psychometric reliability. The DIT appears to be internally consistent, to have no problems with inter-rater reliability due to its objective scoring, and to be stable over short periods of time (Davison, 1979).

3. Criterion group validity. The DIT has been shown to differentiate between groups of individuals that could theoretically be expected to differ regarding moral reasoning. Using a group of doctoral students in moral philosophy and political science as an expert group, Rest has shown a significant difference between their levels of moral reasoning (as measured by the DIT) as opposed to that of ninth-graders (Rest, 1979).

4. Longitudinal validity. Longitudinal studies have shown significant upward trends in moral reasoning over a four-year period and over a six-year period (Rest, 1979). Individual patterns of change also show

an upward trend in that 65% of the subjects show upward movement over a four-year period while only 7% move downward (Rest, 1979).

5. Convergent-Divergent validity. The DIT shows strong correlations to other measures which might be expected to be similar such as Kohlberg's test and the Comprehension of Social-Moral Issues Test with correlations in the .60's and .70's and lesser correlations to other cognitive development measures-- .20's to .50's, averaging .36 (Rest, 1979).

6. Validation through experimental enhancement studies. Intervention studies have shown that the DIT does appear to measure a distinct domain. In particular, Panowitsch and Balkcum (1976) have shown that participation in a logic class facilitated upward movement by subjects in measures of logic but not in DIT scores, while participation in an ethics class facilitated upward movement on DIT scores but not in logic.

7. Validation through experimental manipulation of test-taking sets. Studies have suggested that the DIT does represent subjects' best notions of the highest principles of justice. For example, McGeorge (1975) asked one group of subjects to "fake good" in responding to the DIT and another group to "fake bad." Compared to scores obtained under normal conditions, the fake bad group scores were lower than the normal scores and the fake good group scores were no different.

Rotter's I-E Scale

The I-E Scale (Rotter, 1966) was used as a measure of locus of control. The test consists of 29 A-B choice items and include 6 filler items intended to make the purpose of the test more ambiguous. For each item pair, one response indicates a belief in external control and the

other indicates a belief in internal control. The score is the total number of the external choices.

Rotter (1966) reports Kuder-Richardson consistency estimates ranging from .69 to .73 for a variety of different samples. These would appear to be within the acceptable range as are the test-retest reliability figures. For samples of university students in psychology and reformatory inmates, the instrument has shown test-retest reliability of .72 and .78 respectively over a one-month period.

With respect to the construct validity of the instrument, Rotter (1966) cites a variety of studies which suggest that individuals who are highly internal tend to (a) be more alert to aspects of their environments which provide useful information for future behavior, (b) act in ways which improve their environmental conditions, and (c) place greater value on skill and achievement reinforcements than external subjects. Of particular interest for the present study are results reported by Strickland (1962) and Getter (1962) which suggest that internal individuals are more resistant to subtle suggestion than external individuals. This appears to be further evidence to suggest that internal subjects would be less likely to allow their moral values to be "compromised or preempted" (Rest, 1984, p. 36).

Procedures

Whenever possible the instruments were administered in a group setting, however, serious scheduling difficulties necessitated that most testing sessions involved only one subject. Testing took place either at the office of this author or the home of the subject. The author was present during testing of 71 of the subjects; however, due to the length

of the tests, 29 subjects were allowed to take the test packet home and return it when completed. In these cases, the subjects were cautioned not to discuss the tests with anyone and, if possible, to complete them in one sitting. All testing was completed between September 1985 and October 1986 and the subject's age as reported in this study indicates his/her age as of the testing date. Sex was dummy-coded using 0 for males and 1 for females. The subjects were each given a packet containing all four instruments: the Standard Moral Judgment Interview, the Comprehension of Social-Moral Issues Test, the Defining Issues Test, and Rotter's I-E Scales, and the Informed Consent Form. They were then asked to read the written instructions printed on each test, complete the tests in writing, read and sign the enclosed consent form and return the entire packet to this author.

Scoring of each of the individual instruments was accomplished as follows:

1. Moral Judgment Interview. The written responses were interpreted by this author and scored according to the testing manual (Colby and Kohlberg, in press). At the time of scoring, this author was blind as to age, sex, and all other test scores.
2. Comprehension of Social-Moral Issues Test. This is an objectively scored, multiple-choice test scored by this author.
3. Defining Issues Test. These tests were objectively scored by this author according to procedures provided in the test manual (Rest, 1979).
4. Rotter's I-E Scale. This is an objectively scored, forced-choice test scored by this author.

Statistical Analysis

The data collected in this study were analyzed by means of multiple regression using the subprogram REGRESSION of the Statistical Package for the Social Sciences (SPSSx User's Guide, New York, 1983). This approach would appear to be appropriate for this study in that it "allows the researcher to study the linear relationship between a set of independent variables and a dependent variable while taking into account the interrelationships among the independent variables" (Nie, Hull, Jenkins, Steinbrenner, and Bent, 1975, p. 8). A separate analysis was conducted for each of the three dependent measures (spontaneous use, comprehension, and preference) determining the relationship between each one and a linear combination of the independent variables (age, sex, and locus of control).

In each of the three analyses, the forward (stepwise) inclusion approach was used in which "the order of inclusion of independent variables is determined by the respective contribution of each variable to explained variance" (Nie, et al., 1975, p. 345). This, again, would appear to be appropriate in that there did not appear from research to be any clear indication that any one of the independent variables should be expected to explain the greater part of the variance in the dependent measures. For the Moral Judgment Interview and the Defining Issues Test, there have been conflicting results regarding their relationship to the independent variables, particularly with regard to sex as reported in Chapter Two, and for the Comprehension of Social-Moral Issues Test, the relationships have simply not been widely studied.

Summary

This chapter has considered the design and methodology used in completing this study, discussing particularly the subjects, the instruments used, the testing procedures, and the statistical analysis.

Chapter Four presents the findings of the study, the analysis of the data, and the relationships of this data to the hypotheses stated earlier.

Chapter Five discusses the research findings and relates them to the theoretical framework presented in Chapter Two. Practical significance of the findings as well as implications for future research are included.

CHAPTER IV

RESULTS

Introduction

The results of the study along with the statistical analysis of those results are presented in this chapter. The major emphasis of the study is to determine if any or all of the independent variables, age, sex, and locus of control, or any of the interactions among those variables, can account for a significant portion of the variance in scores on the three measures of moral reasoning for the sample group. Each hypothesis was tested using the REGRESSION sub-program of the Statistical Package for the Social Sciences (SPSS^x User's Guide, New York, 1983).

Intercorrelation of Variables

As an initial step in investigating the relationship between the independent variables and the dependent measures, a Pearson correlation matrix was constructed. The correlation coefficients and their levels of significance are included in Table III. Further discussion of these results is included in Chapter Five.

TABLE III
CORRELATION MATRIX FOR INDEPENDENT AND DEPENDENT VARIABLES

	Comprehension	Preference	Age	Sex	Locus of Control
Spontaneous Use	.46***	.44***	-.22*	-.27**	-.03
Comprehension	--	.45***	-.33***	.11	.03
Preference	--	--	-.29**	-.08	-.01
Age	--	--	--	-.06	-.34***
Sex	--	--	--	--	.18*

N = 100

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

Test of Research Hypotheses

Hypothesis One

This hypothesis states that there is a significant relationship between spontaneous use of moral stage reasoning and the set of variables including age, sex, and locus of control. Spontaneous use was measured by the Standard Moral Judgment Interview. The scoring method used involved combining the subject's responses from all stages to yield a Weighted Average Score (WAS). The WAS was used for this study because it provides a continuous measure rather than discrete stage scores.

A multiple R of .27 was obtained between spontaneous use and the set of independent variables which was significant ($p < .01$). Individually, the most important of the independent variables in terms of accounting for variance in spontaneous use scores was found to be sex with an r of $-.27$ and an F of 7.67 , both of which were significant ($p < .01$). With sex entered first into the regression equation, the addition of age as the next most important variable yielded a multiple R of $.36$. This was a significant increase ($p < .05$) and thus age also appears to account for a significant portion of variance in spontaneous use. The addition of locus of control provided only a small increase in the multiple R which was not significant. However, with all three variables entered into the equation, the overall F value of 4.93 was significant at the $.01$ level. None of the interactions among the independent variables were found to be significant. Hypothesis one was supported by the data. A summary of the regression analysis is provided in Table IV.

TABLE IV
REGRESSION ANALYSIS SUMMARY FOR SPONTANEOUS USE

Independent Variable	R	R ²	% of Variance Accounted For	R ² change	Overall F
Sex	.26935	.07255	7.3	.07255**	7.66579**
Age	.35916	.12899	12.9	.05645*	7.18268**
Locus of Control	.36537	.13349	13.3	.00450	4.92991**
Age × Sex	.37262	.13885	13.9	.00536	3.82938**
Age × Locus of Control	.37652	.14177	14.2	.00292	3.10544*
Sex × Locus of Control	.39517	.15616	15.6	.01439	2.86841*
Age × Sex × Locus of Control	.39539	.15633	15.6	.00017	2.43541*

N = 100

*p ≤ .05

**p ≤ .01

Hypothesis Two

This hypothesis states that there is a significant relationship between comprehension of moral stage reasoning and a set of variables including age, sex, and locus of control. Comprehension was measured by the Comprehension of Social-Moral Issues Test.

A multiple R of .36 was obtained between comprehension and the set of independent variables which was significant ($p \leq .01$). However, only one of the variables, age, was found to account for a significant portion of the variance in comprehension scores on its own. The contributions of sex, locus of control and the interactions were not significant. As a group, though, with all three variables entered into the equation, the overall F of 4.66 was significant at the .01 level. Hypothesis two was supported by the data. A summary of the regression analysis is provided in Table V.

Hypothesis Three

This hypothesis states that there is a significant relationship between preference for moral stage reasoning and a set of variables including age, sex, and locus of control. Preference was measured by the P score on the Defining Issues Test which is simply the percentage of the subject's responses made at the Stage 5 and Stage 6 levels of moral reasoning. As the author of the test suggests (Rest, 1979), results are reported for both purged (invalid scores removed) and unpurged samples.

With all scores included ($N = 100$) a multiple R of .32 was obtained between DIT scores and the set of independent variables which was significant ($p \leq .05$). Again, as with hypothesis two, only age was

TABLE V
REGRESSION ANALYSIS SUMMARY FOR COMPREHENSION

Independent Variable	R	R ²	% Of Variance Accounted For	R ² change	Overall F
Age	.33137	.10981	11.0	.10981***	12.08871***
Locus of Control	.34133	.11650	11.7	.00670	6.39558**
Sex	.35668	.12722	12.7	.01072	4.66458**
Age × Sex	.35673	.12725	12.7	.00003	3.46298*
Age × Locus of Control	.39126	.15308	15.3	.02583	3.39821**
Sex × Locus of Control	.41496	.17219	17.2	.01910	3.22407**
Age × Sex × Locus of Control	.41510	.17231	17.2	.00012	2.73607*

N = 100

* $p \leq .05$

** $p \leq .01$

*** $p \leq .001$

found to explain a significant portion of the variance in DIT scores. The contributions of sex, locus of control and the interactions were not significant. However, with all three variables entered into the regression equation, the overall F of 3.60 was still significant at the .05 level. A summary of the regression analysis is provided in Table VI.

There were twelve subjects whose tests failed to meet either the M score or Consistency Check criteria and thus were invalidated. With those twelve scores removed, a separate regression analysis was performed on the purged sample (N = 88). The results differed only slightly from the complete sample. Again, significance was found for all three variables as a group and for age individually, but not for sex, locus of control or any of the interactions. A summary of this analysis is provided in Table VII. Since the overall F with all three variables entered were found to be significant for both the purged and unpurged samples, hypothesis three was supported by the data.

Summary

The Pearson Correlation matrix indicates that age was significantly related to all three of the measures of moral reasoning while sex was related only to spontaneous use. Locus of control was not related to any of the dependent variables, but was significantly related to both age and sex. All three of the moral reasoning measures were significantly related to each other.

The regression analyses indicated that there were significant relationships between each of the measures of moral reasoning and the set of independent variables. Individually, age and sex were found to account

TABLE VI

SUMMARY OF REGRESSION ANALYSIS FOR PREFERENCE-UNPURGED SAMPLE

Independent Variable	R	R ²	% Of Variance Accounted For	R ² change	Overall F
Age	.28674	.08222	8.2	.08222**	8.77963**
Locus of Control	.30852	.09519	9.5	.01296	5.10219**
Sex	.31795	.10109	10.1	.00590	3.59871*
Age × Sex	.31829	.10131	10.1	.00022	2.67734*
Age × Locus of Control	.33829	.11444	11.4	.01313	2.42956*
Sex × Locus of Control	.35016	.11261	12.3	.00817	2.16612
Age × Sex × Locus of Control	.35202	.12392	12.3	.00131	1.85906

N = 100

*p ≤ .05

**p ≤ .01

TABLE VII

SUMMARY OF REGRESSION ANALYSIS FOR PREFERENCE - PURGED SAMPLE

Independent Variable	R	R ²	% Of Variance Accounted For	R ² change	Overall F
Age	.27114	.07352	7.4	.07352*	6.82434*
Locus of Control	.29078	.08455	8.5	.01104	3.92546*
Sex	.30798	.09485	9.5	.01030	2.93407*
Age × Sex	.32103	.10306	10.3	.00821	2.38428
Age × Locus of Control	.36679	.13453	13.5	.03147	2.54929*
Sex × Locus of Control	.37342	.13944	13.9	.00491	2.18751
Age × Sex × Locus of Control	.37365	.13962	14.0	.00017	1.85453

N = 88

*p < .05

for significant portions of the variance in spontaneous use, while only age accounted for a significant portion of the variance in comprehension and preference. All three hypotheses were supported by the data.

CHAPTER V

DISCUSSION

Introduction

Presented in this chapter is a discussion of the results of this study dealing with both the statistical significance and the practical significance of the findings. This discussion deals, first of all, with each of the independent variables and their relationships to the dependent measures. Also presented are the theoretical implications of the study including the importance of the results to the hierarchy of moral reasoning described in Chapter Two, and the contribution of the results to a general theory of moral motivation. Finally the chapter includes recommendations, both procedural recommendations for similar research and suggestions for further studies.

Age

Of the three independent variables included in this study, age clearly showed the strongest relationship to moral reasoning. This, in itself, is not especially noteworthy, but what is rather surprising is that the relationship is negative, and that it is consistent across all three measures of moral reasoning. Within this group of subjects, the older subjects spontaneously used, comprehended, and preferred lower levels of moral reasoning than the younger subjects. This is contrary

to what would normally be expected. Given the available research (Rest, 1978), (moral reasoning could be expected to increase throughout childhood and adolescence and remain fairly stable throughout adulthood.) Even if some other processes are taking place in adulthood such as increasing cognitive skills (Mischel & Mischel, 1976), or meta-ethical reflection (Gibbs, 1977; Murphy & Gilligan, 1980), or soft stage development (Kohlberg, et al., 1984), none of these would lead one to expect a decrease in levels of moral reasoning. If anything, there should be an increase, and yet the data clearly show the opposite.

This unusual finding is tempered somewhat by the fact that this was a cross-sectional study rather than a longitudinal one. There is, of course, no evidence that the moral reasoning of the older subjects was ever any higher than it is now, or that the moral reasoning of the younger subjects will go down as time passes. Nevertheless, some attempt at explanation is in order. One possibility is suggested by looking at the mean scores on the moral reasoning measures for each of the five age groups as presented in Figures 1 - 3 and Tables VIII - X. On all three of the tests, the highest mean score was in the 33-43 age group, and the lowest was in the 66+ age group. These unexpected peaks in the 33-43 age group suggest that some sort of change in moral reasoning may be taking place at this point in a person's life.

It is possible that something like the cognitive shifts described by Murphy and Gilligan (1980) may account for this change. As a child grows up, his increases in levels of moral reasoning may be due mainly to increases in cognitive ability; he becomes more capable of understanding the complexities involved in moral issues, and thus his moral reasoning takes on a more complex (and higher stage) character. But,

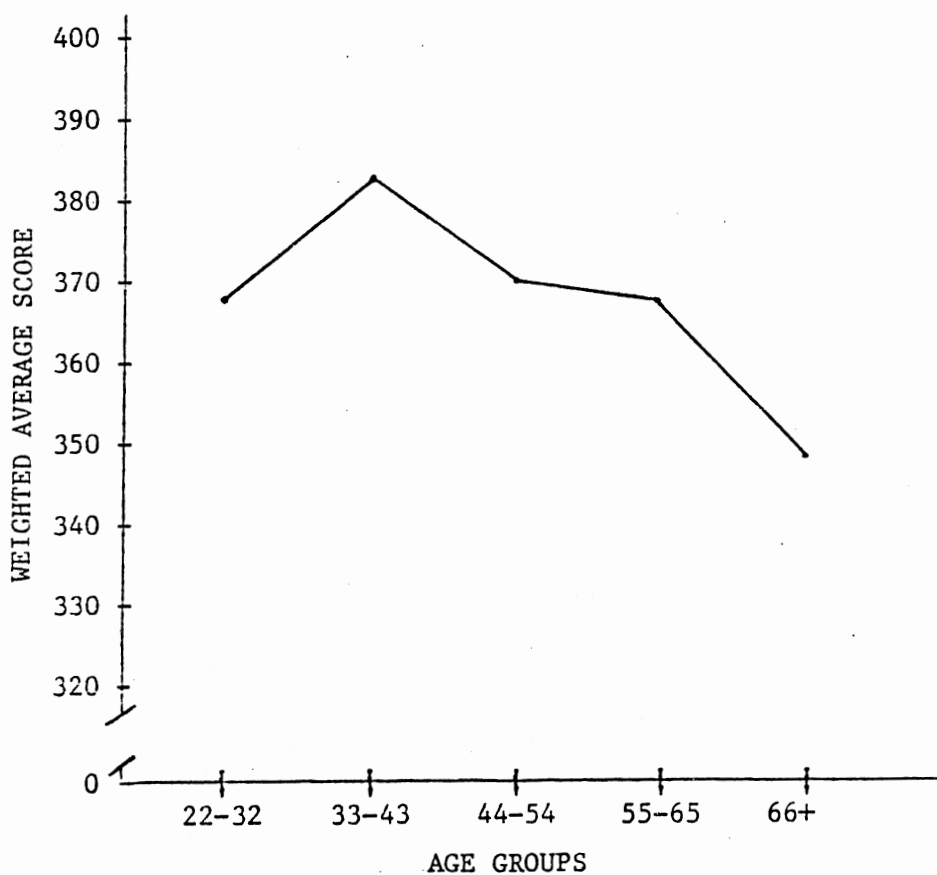


Figure 1. Moral Judgment Interview Mean Scores

TABLE VIII

AGE GROUP MEANS FOR THE MORAL JUDGMENT INTERVIEW

22-32	33-43	44-54	55-65	66+
368.20	382.00	370.05	368.15	349.70
n = 20	n = 20	n = 20	n = 20	n = 20

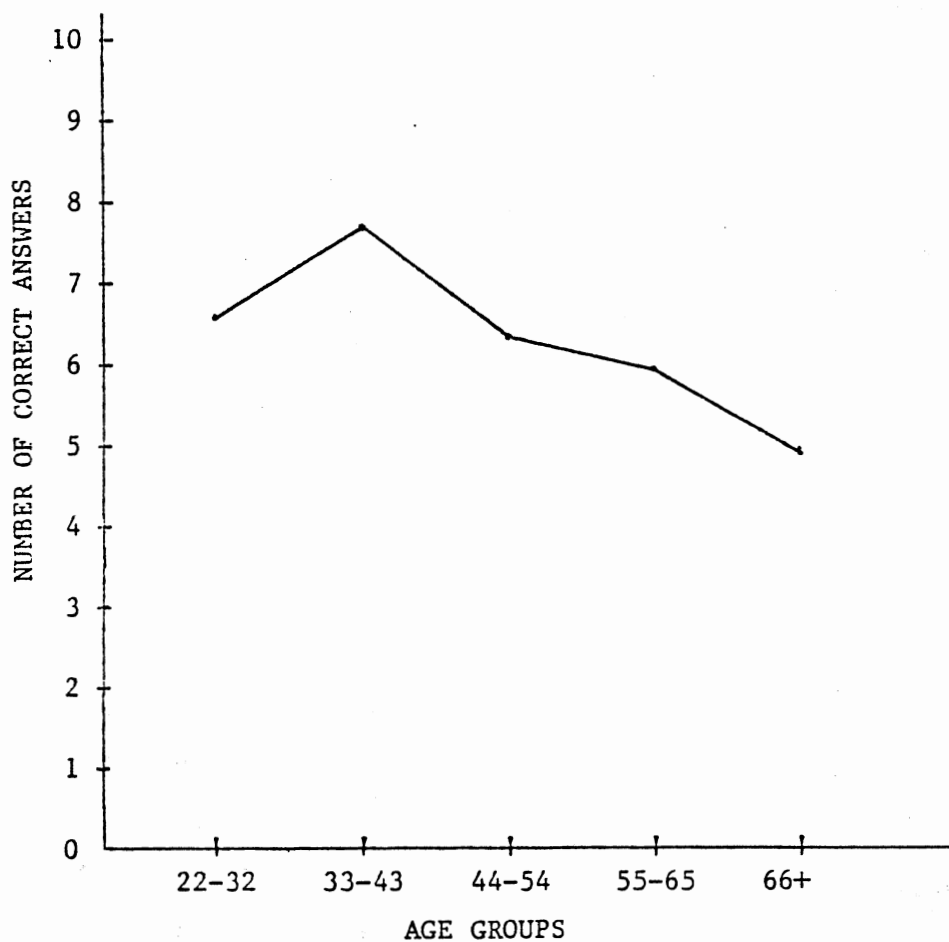


Figure 2. Comprehension Test Mean Scores

TABLE IX

AGE GROUP MEANS FOR THE COMPREHENSION
OF SOCIAL-MORAL ISSUES TEST

22-32	33-43	44-54	55-65	66+
6.55 n = 20	7.60 n = 20	6.25 n = 20	5.90 n = 20	4.95 n = 20

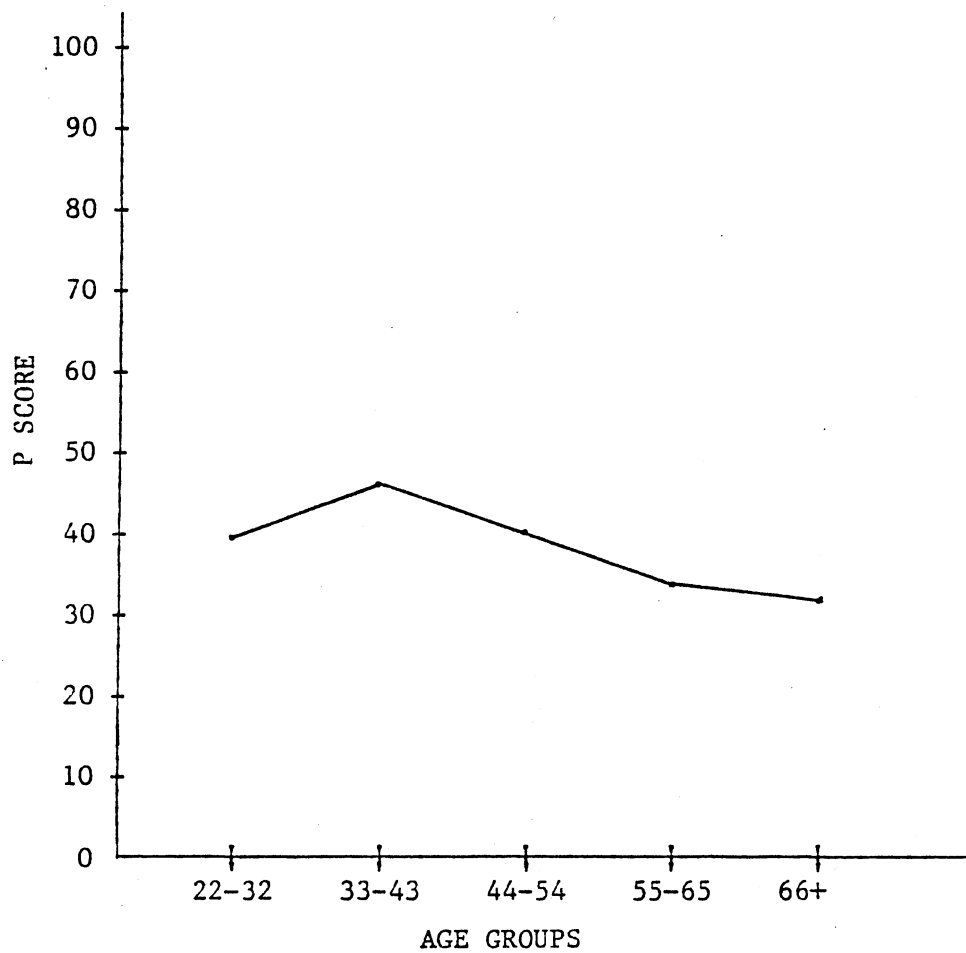


Figure 3. Defining Issues Test Mean Scores

TABLE X

AGE GROUP MEANS FOR THE DEFINING ISSUES TEST

22-32	33-43	44-54	55-65	66+
39.84 n = 20	46.75 n = 20	40.17 n = 20	33.41 n = 20	31.92 n = 20

apparently, this process cannot go on forever. Several researchers (Coder, 1975; Kohlberg and Shulik, in press; Rest, 1973) suggest that adult moral development is more determined by personal experience than by increases in cognitive ability. If that is, in fact, the case, this study would indicate that it may be somewhere between the ages of 33 and 43 that personal experience begins to become more important than cognitive ability in making moral judgments. Moral reasoning in later life, then, may not actually be regressing, but changing--moving outside of the stage structure, including more than just cognitive judgments about justice.

So while all three measures of moral reasoning used in this study show a quantitative change with age (decrease in scores), they may be failing to show a qualitative change that is actually taking place. This change may possibly be due to meta-ethical reflection (Gibbs, 1977) or soft-stage development (Kohlberg, 1984), or an ethic of agape (Kohlberg and Shulik, in press). Whatever the specific process may be, something does appear to be happening in the 33-43 age range that clearly warrants further study.

Sex

The only measure of moral reasoning to show a significant relationship to sex was Kohlberg's Moral Judgment Interview. In this case, given the method of dummy-coding (males = 0 and females = 1), the negative relationship ($r = -.27$, $p = .003$) is indicative of significantly higher scores for men than for women. The mean scores for the age groups as presented in Figure 4 and Table XI show that males' scores exceeded females' scores in every group except the 66+ group and

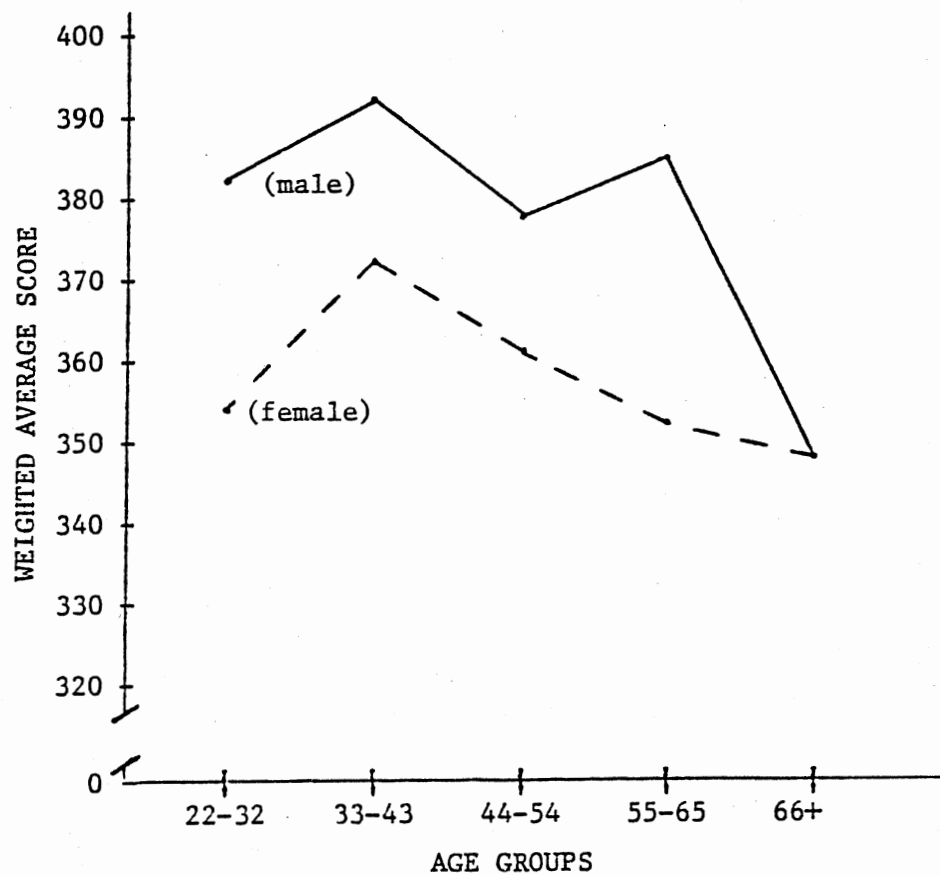


Figure 4. Moral Judgment Interview Mean Scores

TABLE XI

MALE/FEMALE AGE GROUP MEANS FOR THE
MORAL JUDGMENT INTERVIEW

	22-32	33-43	44-54	55-65	66+	Overall
Male	382.2 n = 10	391.1 n = 10	378.9 n = 10	384.1 n = 10	349.6 n = 10	377.18 n = 50
Female	354.2 n = 10	372.9 n = 10	361.2 n = 10	352.2 n = 10	349.8 n = 10	358.06 n = 50

then were only very slightly smaller. Overall, the mean WAS for males was 377.18 while for females it was 358.06.

This finding would appear to lend support to the Gilligan et al. (1982) argument that women are more likely to make moral judgments based on something other than an ethic of justice. Kohlberg's stages as measured by the Moral Judgment Interview are based on justice (Kohlberg, 1984) and with this as a measure of moral reasoning, women clearly did not do as well as men. Although this study does not provide any evidence as to what accounts for this difference in scores between males and females such as an orientation toward care rather than toward justice (Gilligan et al., 1982), it does suggest that there definitely is a difference between the moral reasoning of men and women that bears further investigation.

No significant relationships were found between sex and comprehension or preference. This would seem to be in keeping with the literature (Rest, 1979) that reports that sex differences are not generally found on the DIT. Age group mean scores for comprehension and preference are presented in Figures 5 and 6 and in Tables XII and XIII.

Locus of Control

For practical purposes there does not appear to be any relationship between locus of control and moral reasoning since the correlations reported in Table III range from .03 to -.03. Apparently the degree to which an individual believes the controlling factors in his life to be internal or external has nothing to do with how he or she makes moral judgments. This is in keeping with the Lambert, Dejulio, and Cole (1976) findings. There were, however, significant relationships between

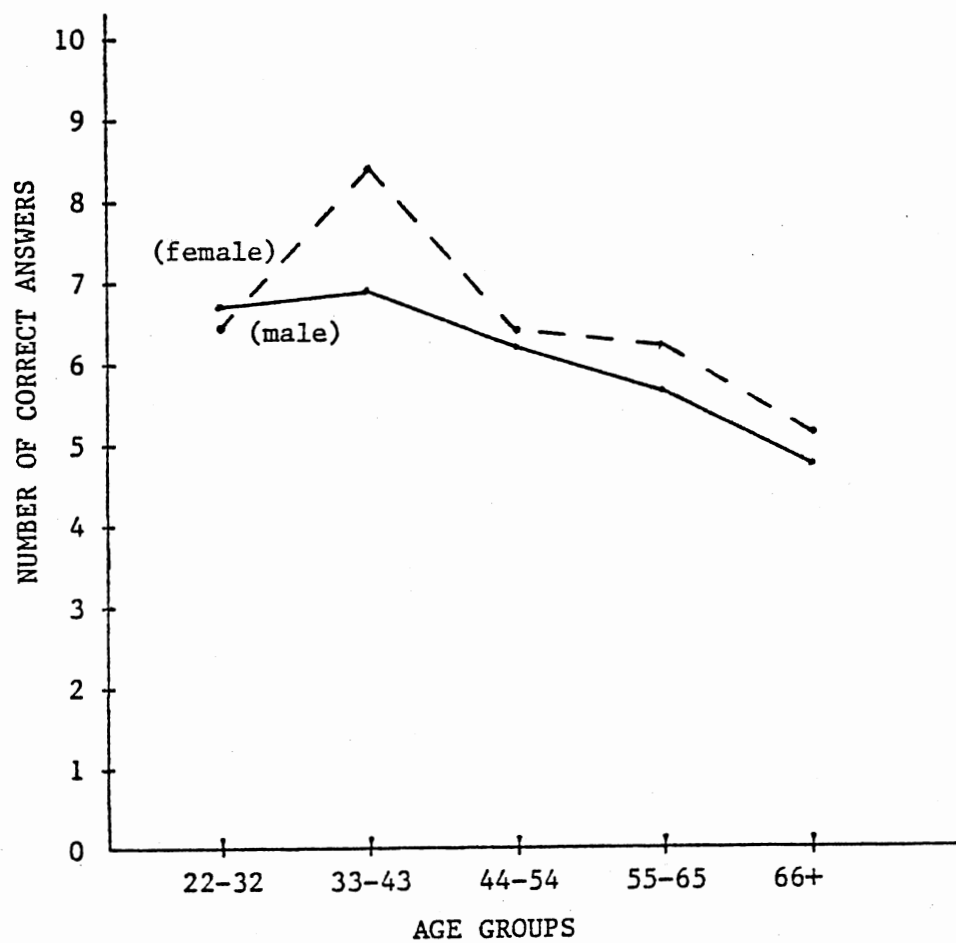


Figure 5. Comprehension Test Mean Scores

TABLE XII

MALE/FEMALE AGE GROUP MEANS FOR THE COMPREHENSION
OF SOCIAL-MORAL ISSUES TEST

	22-32	33-43	44-54	55-65	66+	Overall
Male	6.7 n = 10	6.9 n = 10	6.1 n = 10	5.6 n = 10	4.8 n = 10	6.02 n = 50
Female	6.4 n = 10	8.3 n = 10	6.4 n = 10	6.2 n = 10	5.1 n = 10	6.48 n = 50

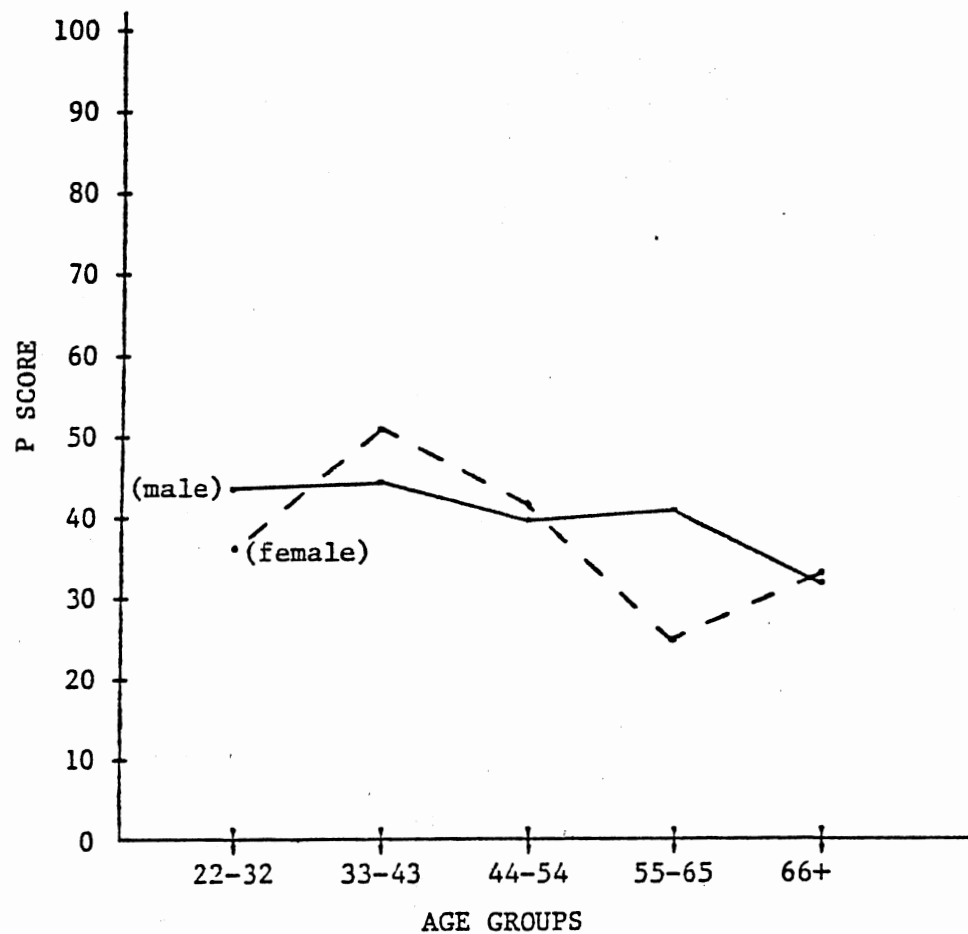


Figure 6. Defining Issues Test Mean Scores

TABLE XIII

MALE/FEMALE AGE GROUP MEANS FOR THE
DEFINING ISSUES TEST

	22-32	33-43	44-54	55-65	66+	Overall
Male	42.82 n = 10	43.33 n = 10	39.18 n = 10	40.99 n = 10	31.17 n = 10	39.50 n = 50
Female	36.85 n = 10	50.17 n = 10	41.16 n = 10	25.82 n = 10	32.67 n = 10	37.33 n = 50

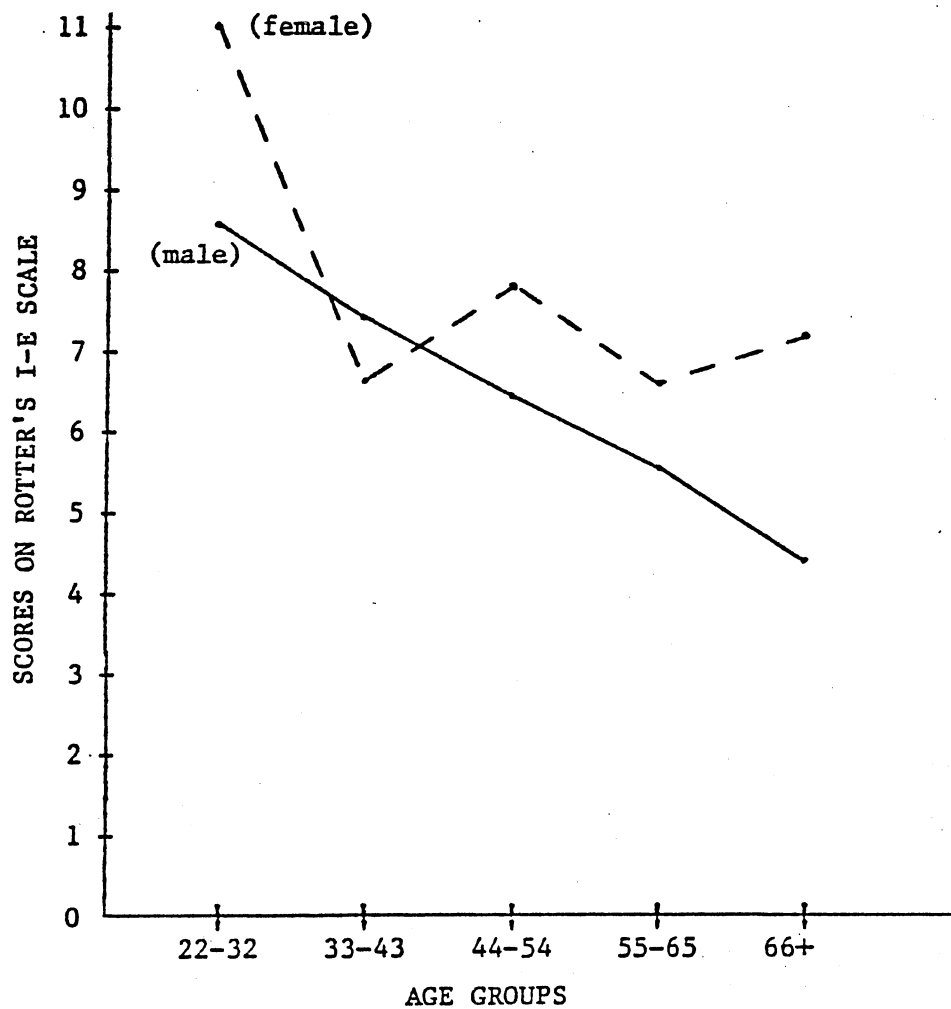


Figure 7. Locus of Control Mean Scores

TABLE XIV

MALE/FEMALE AGE GROUP MEANS FOR
ROTTER'S I-E SCALE

	22-32	33-43	44-54	55-65	66+	Overall
Male	8.6 n = 10	7.4 n = 10	6.4 n = 10	5.6 n = 10	4.5 n = 10	6.50 n = 50
Female	11.0 n = 10	6.7 n = 10	7.9 n = 10	6.7 n = 10	7.3 n = 10	7.92 n = 50

locus of control and both age and sex. The data as presented in Figure 7 and Table XIV indicate that the older subjects tended to be more internal than the younger subjects, and that men tended to be more internal than women. The main reason for including locus of control in this study was the idea that increasing internality with age, which was expected, would be indicative of increasing consistency between moral reasoning measures with age as well. However, as the next section indicates, this does not appear to be the case.

Theoretical Implications

One of the major concerns of this study was to look at the hierarchical nature of spontaneous use, comprehension, and preference, and to examine how that hierarchy changed with age. The expectation, as presented in Chapter Two, was that as age increased, the "gaps" between the three moral reasoning measures would decrease. Even though an individual may always show a difference between levels of spontaneous use and preference, that difference would become smaller as the individual got older. Unfortunately, this study does not provide much support for that theory. Given the previously cited Pratt, Golding, and Hunter (1983) finding, this is somewhat surprising. That study shows a very definite increase in correlations between spontaneous use and preference with age. But as Table XV indicates, that increase is not apparent in this study.

To make a truly definitive statement about the changing relationship between these moral reasoning measures would probably require more than twenty subjects per age group, but these results are not especially

TABLE XV
CORRELATION BETWEEN SPONTANEOUS USE AND
PREFERENCE BY AGE GROUP

22-32	33-43	44-54	55-65	66+
.24	.42	.01	.78	.43
n = 20	n = 20	n = 20	n = 20	n = 20
p = .16	p = .03	p = .40	p = .001	p = .03

promising in terms of establishing an increasing consistency of moral reasoning with age.

The theory of moral motivation presented in Chapter Two centers around the idea that moral feelings (analogous to preference) which tend to be at a higher level than moral reasoning (analogous to spontaneous use) serve as a motivator for progression through stages of moral reasoning. Moral development could be described then as an individual's attempt to bring what he thinks about moral issues in line with what he feels about moral issues. However, the fact that all three moral reasoning measures in this study went down with age does not lend support to this theory. Again the limitations of a cross-sectional rather than a longitudinal study in terms of generalizability are a concern, but the results of this study unfortunately provide not even a hint of support for this moral motivation theory. Just as with the unusual relationship found between age and moral reasoning, it cannot be determined if this is due to some other changes in life experiences or

if the theory is simply wrong. In any case, it seems pointless to speculate on the source of motivation for moral development when, in this study, the expected moral development simply was not evident, at least in a quantitative sense.

Recommendations

The recommendations made here based on this study address two particular areas--procedural concerns for conducting research of this type and suggestions for further studies.

During the process of collecting and analyzing the data for the study, one fact slowly but surely made itself clear. If at all possible, the Standard Moral Judgment Interview should not be used in written form. The scoring manual for the test strongly advocates the oral version (Colby and Kohlberg, in press) as does the staff at the Center for Moral Development and Education. But, the particular shortcomings of the written version were not apparent until the scoring began. The major difficulty involved unclear or incomplete answers to the questions. Though many of the subjects completed the test in a clear and articulate manner, others responded with a great number of short and vague answers that made the scoring very difficult and almost certainly less accurate. Had these subjects been tested with the oral interview, these vague responses could have been probed by the interviewer. The result would have been a much more valid test and probably higher scores as well.

Secondly, it appears that the inclusion of educational level as an independent variable might be useful in future studies. Although research (Rest, 1978) suggests that education is related to moral

reasoning only up to the bachelor's degree level, the results of this study might cause one to be somewhat curious. In an effort to limit the influence of educational level, all subjects were required to have at least a bachelor's degree, but no upper limit was specified. As a result, the sample group turned out to have what could probably be considered an abnormally high education level (25 doctorates and numerous subjects with several years of graduate study). And most of the highly educated subjects, as would be expected, were among the older ones in the sample. It seems very possible that in a group with as widely differing educational backgrounds as this group, some relationship between educational level and moral reasoning might be present. If not, this would certainly be strong support for Rest's contention that education beyond the bachelor's level makes no difference. It is recommended, therefore, that in the future the educational level either be strictly specified (i.e. bachelor's degree and no more), or else educational level be included as a variable.

Probably the most interesting possibility for future study would be to follow up on the unusual findings regarding the relationship between age and moral reasoning. There simply does not appear to be any basis in theory or in prior research for expecting that older adults would have lower levels of moral reasoning than young adults. If the results of this study are not due to sampling error, then some new and unexplained process must be taking place. Attempting to explain this could take a variety of forms, with longitudinal studies probably being the best way. Other methods might include conducting this same study again with a larger sample size, or perhaps focusing on the moral reasoning of senior citizens. It is possible that some sort of decline

in cognitive or intellectual skills may take place in old age that really does account for a decline in levels of moral reasoning. But it is also possible that reflection or experience is accounting for the change. In-depth interviews with older individuals to look for these influences might provide a more complete picture of adult moral reasoning than that which is provided by the tests used in this study.

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APPENDIX A

MORAL JUDGMENT INTERVIEW

The Moral Judgment Interview consists of several stories that we believe present some challenging issues. Some of you might choose one solution to these stories, others of you may choose another. We are primarily interested in the explanations or reasons that you give for your decisions. Try to justify and explain your statements as fully as possible. Very short answers are of no help to us so be sure to elaborate fully. Keep in mind that we are more interested in your answers to "why" questions than to the "what" questions. Even if you give a long description of what you think is right or what you think should be done, it is of no help if you do not explain why you think it is right or why you think it should be done. Thank you very much.

Moral Judgment Interview

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 \$400 for the radium and charged \$4000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money and tried every legal means, but he could only get together about \$2000, 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 having tried every legal means, Heinz gets desperate and considers breaking into the man's store to steal the drug for his wife.

1. Should Heinz steal the drug?
 - 1a. Why or why not?
2. Suppose the person dying is not his wife but a stranger. Should Heinz steal the drug for the stranger?
 - 2a. Why or why not?
3. Is it important for people to do everything they can to save another's life?
 - 3a. Why or why not?
4. It is against the law for Heinz to steal. Does that make it morally wrong?
 - 4a. Why or why not?
5. In general, should people try to do everything they can to obey the law?
 - 5a. Why or why not?
 - 5b. How does this apply to what Heinz should do?

(Continue on to next page)

Heinz did break into the store. He stole the drug and gave it to his wife. In the newspapers the next day there was an account of the robbery. Mr. Brown, a police officer who knew Heinz, read the account. He remembered seeing Heinz running away from the store and realized that it was Heinz who stole the drug. Mr. Brown wonders whether he should report that Heinz was the robber.

1. Should Officer Brown report Heinz for stealing?
 - 1a. Why or why not?
2. Suppose Officer Brown were a close friend of Heinz. Should he then report him?
 - 2a. Why or why not?

Heinz did break into the store. He stole the drug and gave it to his wife. Heinz was arrested and brought to court. A jury was selected. The jury's job is to find whether a person is innocent or guilty of committing a crime. The jury finds Heinz guilty. It is up to the judge to determine the sentence.

3. Should the judge give Heinz some sentence, or should he suspend the sentence and let Heinz go free?
 - 3a. Why is that best?
4. Thinking in terms of society, should people who break the law be punished?
 - 4a. Why or why not?
 - 4b. How does this apply to what the judge should decide?
5. Heinz was doing what his conscience told him when he stole the drug. Should a lawbreaker be punished if he is acting out of conscience?
 - 5a. Why or why not?

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 \$100 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 had saved from the paper route. Joe didn't want to give up going to camp, so he thinks of refusing to give his father the money.

1. Should Joe refuse to give his father the money?
 - 1a. Why or why not?

(Continue on to next page)

2. Is the fact that Joe earned the money himself important in this situation?
 - 2a. Why or why not?
3. The father promised Joe he could go to camp if he earned the money. Is the fact that the father promised the most important thing in the situation?
 - 3a. Why or why not?
4. In general, why should a promise be kept?
5. Is it important to keep a promise to someone you don't know well and probably won't see again?
 - 5a. Why or why not?
6. What do you think is the most important thing a father should be concerned about in his relationship to his son?
 - 6a. Why is that the most important thing?
7. In general, what should be the authority of a father over his son?
 - 7a. Why?
8. What do you think is the most important thing a son should be concerned about in his relationship to his father?
 - 8a. Why is that the most important thing?

APPENDIX B

DEFINING ISSUES TEST

* * * * *

In this questionnaire you will be asked to give your opinions about several stories. Here is a story as an example.

Frank Jones has been thinking about buying a car. He is married, has two small children and earns an average income. The car he buys will be his family's only car. It will be used mostly to get to work and drive around town, but sometimes for vacation trips also. In trying to decide what car to buy, Frank Jones realized that there were a lot of questions to consider. Below there is a list of some of these questions.

If you were Frank Jones, how important would each of these questions be in deciding what car to buy?

Instructions for Part A: (Sample Question)

On the left hand side check one of the spaces by each statement of a consideration. (For instance, if you think that statement #1 is not important in making a decision about buying a car, check the space on the right.)

IMPORTANCE:

Great	Much	Some	Little	No	
				✓	1. Whether the car dealer was in the same block as where Frank lives. (Note that in this sample, the person taking the questionnaire did not think this was important in making a decision.)
✓					2. Would a <u>used</u> car be more economical in the long run than a <u>new</u> car. (Note that a check was put in the far left space to indicate the opinion that this is an important issue in making a decision about buying a car.)
		✓			3. Whether the color was green, Frank's favorite color.
				✓	4. Whether the cubic inch displacement was at least 200. (Note that if you are unsure about what "cubic inch displacement" means, then mark it "no importance.")
✓					5. Would a large, roomy car be better than a compact car.
				✓	6. Whether the front connibilities were differential. (Note that if a statement sounds like gibberish or nonsense to you, mark it "no importance.")

Instructions for Part B: (Sample Question)

From the list of questions above, select the most important one of the whole group. Put the number of the most important question on the top line below. Do likewise for your 2nd, 3rd and 4th most important choices. (Note that the top choices in this case will come from the statements that were checked on the far left-hand side--statements #2 and #5 were thought to be very important. In deciding what is the most important, a person would re-read #2 and #5, and then pick one of them as the most important, then put the other one as "second most important," and so on.)

MOST	SECOND MOST IMPORTANT	THIRD MOST IMPORTANT	FOURTH MOST IMPORTANT
5	2	3	1

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HEINZ AND THE DRUG

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 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 \$1000, 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 began to think about breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug? (Check one)

_____ Should steal it _____ Can't decide _____ Should not steal it

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Whether a community's laws are going to be upheld.
					2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?
					3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
					4. Whether Heinz is a professional wrestler, or has considerable influence with professional wrestlers.
					5. Whether Heinz is stealing for himself or doing this solely to help someone else.
					6. Whether the druggist's rights to his invention have to be respected.
					7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
					8. What values are going to be the basis for governing how people act towards each other.
					9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
					10. Whether the law in this case is getting in the way of the most basic claim of any member of society.
					11. Whether the druggist deserves to be robbed for being so greedy and cruel.
					12. Would stealing in such a case bring about more total good for the whole society or not.

From the list of questions above, select the four most important:

Most important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

(Continue on to next page)

-3-

STUDENT TAKE-OVER

At Harvard University a group of students, called the Students for a Democratic Society (SDS), believe that the University should not have an army ROTC program. SDS students are against the war in Viet Nam, and the army training program helps send men to fight in Viet Nam. The SDS students demanded that Harvard end the army ROTC training program as a university course. This would mean that Harvard students could not get army training as part of their regular course work and not get credit for it towards their degrees.

Agreeing with the SDS students, the Harvard professors voted to end the ROTC program as a university course. But the President of the University stated that he wanted to keep the army program on campus as a course. The SDS students felt that the President was not going to pay attention to the faculty vote or to their demands.

So, one day last April, two hundred SDS students walked into the university's administration building, and told everyone else to get out. They said they were doing this to force Harvard to get rid of the army training program as a course.

Should the students have taken over the administration building? (Check one)

 Yes, they should take it over Can't decide No, they shouldn't take it over

IMPORTANCE:

Great Much Some Little No

Great	Much	Some	Little	No	
					1. Are the students doing this to really help other people or are they doing it just for kicks?
					2. Do the students have any right to take over property that doesn't belong to them?
					3. Do the students realize that they might be arrested and fined, and even expelled from school?
					4. Would taking over the building in the long run benefit more people to a greater extent?
					5. Whether the president stayed within the limits of his authority in ignoring the faculty vote.
					6. Will the takeover anger the public and give all students a bad name?
					7. Is taking over a building consistent with principles of justice?
					8. Would allowing one student take-over encourage many other student take-overs?
					9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative?
					10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.
					11. Are the students following principles which they believe are above the law?
					12. Whether or not university decisions ought to be respected by students.

From the list of questions above, select the four most important:

Most Important _____

Second Most Important _____

Third Most Important _____

Fourth Most Important _____

(Continue on to next page)

ESCAPED PRISONER

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison 8 years before, and whom the police had been looking for.

Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison? (Check one)

_____ Should report him _____ Can't decide _____ Should not report him

IMPORTANCE:

Great Much Some Little No

					1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
					2. Everytime someone escapes punishment for a crime, doesn't that just encourage more crime?
					3. Wouldn't we be better off without prisons and the oppression of our legal svstams?
					4. Has Mr. Thompson really paid his debt to society?
					5. Would society be failing what Mr. Thompson should fairly expect?
					6. What benefits would prisons be apart from society, especially for a charitable man?
					7. How could anyone be so crual and heartless as to send Mr. Thompson to prison?
					8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
					9. Was Mrs. Jones a good friend of Mr. Thompson?
					10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
					11. How would the will of the people and the public good best be served?
					12. Would going to prison do any good for Mr. Thompson or protect anvbody?

From the list of questions above, select the four most important:

Most Important _____
 Second Most Important _____
 Third Most Important _____
 Fourth Most Important _____

(Continue on to next page)

THE DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway.

What should the doctor do? (Check one)

_____ He should give the lady an overdose that will make her die _____ Can't decide _____ Should not give the overdose

IMPORTANCE:

Great Much Some Little No

Great	Much	Some	Little	No	
					1. Whether the woman's family is in favor of giving her the overdose or not.
					2. Is the doctor obligated by the same laws as everybody else if giving her an overdose would be the same as killing her.
					3. Whether people would be much better off without society regimenting their lives and even their deaths.
					4. Whether the doctor could make it appear like an accident.
					5. Does the state have the right to force continued existence on those who don't want to live.
					6. What is the value of death prior to society's perspective on personal values.
					7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.
					8. Is helping to end another's life ever a responsible act of cooperation.
					9. Whether only God should decide when a person's life should end.
					10. What values the doctor has set for himself in his own personal code of behavior.
					11. Can society afford to let everybody end their lives when they want to.
					12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live.

From the list of questions above, select the four most important:

Most Important _____
 Second Most Important _____
 Third Most Important _____
 Fourth Most Important _____

(Continue on to next page)

WEBSTER

Mr. Webster was the owner and manager of a gas station. He wanted to hire another mechanic to help him, but good mechanics were hard to find. The only person he found who seemed to be a good mechanic was Mr. Lee, but he was Chinese. While Mr. Webster himself didn't have anything against Orientals, he was afraid to hire Mr. Lee because many of his customers didn't like Orientals. His customers might take their business elsewhere if Mr. Lee was working in the gas station.

When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster said that he had already hired somebody else. But Mr. Webster really had not hired anybody, because he could not find anybody who was a good mechanic besides Mr. Lee.

What should Mr. Webster have done? (Check one)

_____ Should have hired Mr. Lee _____ Can't decide _____ Should not have hired him

IMPORTANCE:

Great Much Some Little No

Great	Much	Some	Little	No	
					1. Does the owner of a business have the right to make his own business decisions or not?
					2. Whether there is a law that forbids racial discrimination in hiring for jobs.
					3. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.
					4. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.
					5. What individual differences ought to be relevant in deciding how society's roles are filled?
					6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.
					7. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudice?
					8. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.
					9. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?
					10. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?
					11. Whether the Christian commandment to love your fellow man applies in this case.
					12. If someone's in need, shouldn't he be helped regardless of what you get back from him?

From the list of questions above, select the four most important:

- Most Important _____
- Second Most Important _____
- Third Most Important _____
- Fourth Most Important _____

(Continue on to next page)

NEWSPAPER

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the war in Viet Nam and to speak out against some of the school's rules, like the rule forbidding boys to wear long hair.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school.

Should the principal stop the newspaper? (Check one)

_____ Should stop it _____ Can't decide _____ Should not stop it

IMPORTANCE:

Great Much Some Little No

Great	Much	Some	Little	No	
					1. Is the principal more responsible to students or to the parents?
					2. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time?
					3. Would the students start protesting even more if the principal stopped the newspaper?
					4. When the welfare of the school is threatened, does the principal have the right to give orders to students?
					5. Does the principal have the freedom of speech to say "no" in this case?
					6. If the principal stopped the newspaper would he be preventing full discussion of important problems?
					7. Whether the principal's order would make Fred lose faith in the principal.
					8. Whether Fred was really loyal to his school and patriotic to his country.
					9. What effect would stopping the paper have on the student's education in critical thinking and judgments?
					10. Whether Fred was in any way violating the rights of others in publishing his own opinions.
					11. Whether the principal should be influenced by some angry parents when it is the principal that knows best what is going on in the school.
					12. Whether Fred was using the newspaper to stir up hatred and discontent.

From the list of questions above, select the four most important:

- Most Important _____
- Second Most Important _____
- Third Most Important _____
- Fourth Most Important _____

APPENDIX C

COMPREHENSION OF SOCIAL-MORAL ISSUES TEST

This next part has several pages in it. It includes four dilemmas, each of which is followed by several short paragraphs that make an argument about what ought to be done in the story. In this part we are interested not in what you think should be done, but in how you understand these arguments made by someone else.

Under each paragraph there are four shorter statements. Each of these four statements give a slightly different interpretation of what the paragraph means.

Read the paragraph, then read each of the four statements. We would like you to do two things: (1) alongside each statement in the left hand margin, check one of the three spaces "Good", "Fair", or "Poor" corresponding to how well the statement interprets the above paragraph. Put a check in one of these spaces alongside each of the four statements. (2) Then decide which one of the four statements best interprets the paragraph. Indicate this by putting the letter by the number 1 below. Put the letter of the second best interpretation by the number 2 and so on.

Notice that we are not asking you to indicate how you agree with the four statements. We are asking how well the statements agree with the paragraph above.

Even when you are not certain please make a judgment. If you are not sure, guess.

(Continue on to next page)

HEINZ AND THE DRUG

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 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 \$1000, 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 began to think about breaking into the man's store to steal the drug for his wife. Should Heinz steal the drug?

1. It would be wrong to take the drug away from the druggist. He invented it and made it, and in our country, that gives him the right of ownership to it. And so if the druggist has done the things that give him the right, he can do what he wants with the drug, and everyone has to respect the right of ownership.

 a.) If only the druggist knows how to make the drug and he's
Good Fair Poor got it in his store, everybody has to respect his right of ownership.

 b.) The druggist can do whatever he wants with the drug
Good Fair Poor because you can't make anybody do anything if he doesn't want to.

 c.) If the druggist could invent the drug, he probably knows
Good Fair Poor what to do with it, and he has the right of ownership to it.

 d.) If the druggist invents something, by law he is allowed
Good Fair Poor to do whatever he wants with it. Anyone who interferes with the druggist's rights is interfering with the law.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. 2. 3. 4.

(Continue on to next page)

2. If Heinz steals, he is breaking his agreements with other members of society. In most countries men have agreed not to steal because they see that not stealing is better for each one of them. Heinz himself would have to admit that a law against stealing is a good law to have. And so if Heinz wants to have laws that he and other people think are good to have, he should abide by them.

- _____ a.) Men consent to laws because they recognize that in the
Good Fair Poor long run laws benefit each member of society. One's obligation to obey the law comes from this recognition.
- _____ b.) Heinz should not steal because if he does, people will
Good Fair Poor think he has broken agreements with them, and they would regard him as untrustworthy.
- _____ c.) Once the law is set, no one is right in breaking it. No
Good Fair Poor matter what good intentions a person may have, if he breaks the law, he's in the wrong.
- _____ d.) Heinz has a duty to obey the law because he helped to
Good Fair Poor make the law. If he breaks his agreements, he will be setting an example that could lead to everyone's breaking the law.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. ____ 2. ____ 3. ____ 4. ____

3. Obeying the law is not as important as obeying your conscience. A person must decide for himself what he feels is right and good, and hold himself to those ideals, or else he is being untrue to himself. One's conscience often demands more of a person than the law. In Heinz's case, if the law is different from what Heinz thinks is right, he should still live up to the values that he believes in.

- _____ a.) As long as Heinz feels he's right, he can do as he pleases.
Good Fair Poor Your own conscience is more important than the law.
- _____ b.) Heinz should do what he feels is right and breaking the
Good Fair Poor law because he loves his wife is more important than the law.
- _____ c.) A person must act according to the set of standards he
Good Fair Poor has chosen for himself throughout his life even if these standards conflict with the law.
- _____ d.) A person must guide his behavior according to the values
Good Fair Poor he was taught to believe are right. Your conscience tells you whether or not something is right and good.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. ____ 2. ____ 3. ____ 4. ____

(Continue on the next page)

STUDENT TAKE-OVER

At Harvard University a group of students, called the Students for a Democratic Society (SDS), believe that the University should not have an army ROTC program. SDS are against the war in Viet Nam, and the army training program helps send men to fight in Viet Nam. The SDS students demanded that Harvard end the army ROTC training program as a university course. This would mean that Harvard students could not get army training as part of their regular course work and not get credit for it towards their degrees.

Agreeing with the SDS students, the Harvard professors voted to end the ROTC program as a university course. But the President of the University stated that he wanted to keep the army program on campus as a course. The SDS students felt that the President was not going to pay attention to the faculty vote or to their demands.

So, one day last April, two hundred SDS students walked into the university's administration building and told everyone else to get out. They said they were doing this to force Harvard to get rid of the army training program as a course. Should the students have taken over the administration building?

1. The students don't have the right to make University decisions about training programs. Their job is to get an education. The man who is president is given the right to make these decisions, and he is responsible. And so the man who is president is in a different position than anybody else. People have to respect the presidency if they respect the University, and have to accept the president's decision.

 a.) The man who has been president has had experience in these matters, and knows much more about the university, so it's right that he makes the decisions.
Good Fair Poor

 b.) Students who don't respect the university probably don't respect the president either, but that doesn't mean they know how to make decisions about training programs.
Good Fair Poor

 c.) The president is the most important person in a university and nobody should be disrespectful. Students should respect him the most.
Good Fair Poor

 d.) The president's job gives him the authority to make the decisions about the training program. He is responsible for the running of the university.
Good Fair Poor

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. 2. 3. 4.

(Continue on to next page)

2. People within an organization agree to certain rules for making decisions. They agree to go along with decisions made according to these rules even if they personally disagree. If an organization had to wait until everybody agreed with a decision, hardly anything could be done. But in this case the president was refusing to follow the faculty vote. He was not following the agreed rules for decision making. Therefore, he cannot expect others to accept his decisions in this case because they have not agreed to accept his purely personal views.

- _____ a.) In making his decision, the president must consider the
 Good Fair Poor point of view of other people within the organization and not just his own personal opinion. It is unfair to keep the students from having their say. The president should not let his personal views influence decisions that concern people other than himself, and he cannot expect all the people in an organization to accept all his views.
- _____ b.) The president has to follow the established rules of an
 Good Fair Poor organization just like everyone else. Even though he is the president, his position does not give him the right to ignore the rules. In fact, the president should set a good example for the other members of the organization and win their respect that way.
- _____ c.) The students have to respect the president because of his
 Good Fair Poor position, but they do not have to respect his own personal opinions. Whenever the president is acting in his official capacity, his decisions must be accepted, but when he is acting unofficially, they do not have to be accepted.
- _____ d.) The president did not follow proper organizational pro-
 Good Fair Poor cedures. The university needs to have a method for making decisions which does not require total agreement of everyone. If everyone agrees on certain set procedures for making decisions, then everyone must accept decisions made by these procedures regardless of their personal feelings.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. _____ 2. _____ 3. _____ 4. _____

(Continue on to next page)

THE DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway. What should the doctor do?

1. Just being a doctor doesn't permit him to make decisions about life and death. A doctor is supposed to help save life in the best way he can. His job does not allow him to kill anybody. If the doctor gives the lady an overdose, he is acting on his own and people might not stand for it.

- _____ a.) People will not like it if the doctor on his own gives
Good Fair Poor the lady an overdose without consulting any other doctors.
- _____ b.) Doctors sometimes break the law like everybody else. Just
Good Fair Poor because a person is a doctor doesn't make him perfect, or mean that people never get angry at a doctor.
- _____ c.) There are limits to the rights that one has by being a
Good Fair Poor doctor. It is not part of a doctor's job to decide who should live and who should die.
- _____ d.) The doctor's job is to help people in every way he can.
Good Fair Poor He should do what's right, whether people get mad at him or not.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. _____ 2. _____ 3. _____ 4. _____

2. You can't always go along with the law if you have already committed yourself to certain principles. If the doctor believes in helping people even if it means helping them end their lives, then he has to live up to his beliefs. If the doctor's conscience tells him to disobey the law in this case, then it would be right for him to do so.

- _____ a.) Everybody's conscience will not always agree with the
Good Fair Poor law because everybody was brought up differently. The doctor should live up to the values that he was taught were right.
- _____ b.) Obeying the law is not as important as listening to the
Good Fair Poor doctor's own conscience and really doing what he himself decides. If it doesn't seem right to him, why do it?
- _____ c.) A person must decide what is important in life and act
Good Fair Poor according to those values. Being consistent with his own values is an inner law that the doctor must obey.
- _____ d.) A person's conscience comes first because he has to live
Good Fair Poor with it, nobody else. The doctor must stand up for what he believes in and not be pushed around by anyone, not even the law.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. _____ 2. _____ 3. _____ 4. _____

(Continue on to next page)

3. The laws that people have should be ones that the people want to have and agree to have. In most countries people feel that they are better protected by having a law that forbids the deliberate taking of life. And so the doctor would be breaking his agreement with other members of society if he gave the lady an overdose. The doctor probably wants to have laws that are best for most people and so he should support the law in this case too.

 a.) If a person agrees to follow the law then he should keep his promise. Our society would be destroyed if people broke their promises.

 b.) Laws are made by the agreement of the majority. Once a law is passed everyone must abide by it even if they did not vote for it.

 c.) The doctor would be letting everybody else down if he broke the law because he has agreed to keep the laws. People are expecting him to support the law in this case too.

 d.) A person agrees to obey the law because he realizes that the law produces the greatest amount of good for himself and for everybody in society. It is to everybody's advantage to obey the law.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. 2. 3. 4.

WEBSTER

Mr. Webster was the owner and manager of a gas station. He wanted to hire another mechanic to help him, but good mechanics were hard to find. The only person he found who seemed to be a good mechanic was Mr. Lee, but he was Chinese. While Mr. Webster didn't have anything against Orientals, he was afraid to hire Mr. Lee because many of his customers didn't like Orientals. His customers might even take their business elsewhere if Mr. Lee was working in the gas station.

When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster said that he had already hired somebody else. But Mr. Webster really had not hired anybody, because he could not find anybody who was a good mechanic besides Mr. Lee. What should Mr. Webster have done?

1. In some countries, the government or king owns everything and the manager can't make all the decisions about how to run his business. But in our country, when a man has built up a business and owns it, he has the right to manage it. And so nobody has the right to come in and tell him how to run his business, even if he is making bad decisions. Everyone has to respect the right of ownership.

 a.) Mr. Webster has worked a long time to build up his business, and he knows the most about the business, so he has the right to manage it.

 b.) Nobody should try to make Mr. Webster's decisions for him. He must make all decisions himself, even some bad ones, so that he'll be able to make good ones.

 c.) Unless the law is changed, nobody can tell Mr. Webster how to run his business. The law gives him the right to run it the way he wants to.

 d.) Mr. Webster is running his business the way that he thinks is right, and so everybody should respect him for that.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. 2. 3. 4.

(Continue on to next page)

2. There are always bound to be differences of opinion in a large country like ours. But laws can be passed even if everybody doesn't agree. If most people agree that skin color shouldn't affect hiring, and if a law is passed, then people like Mr. Webster and his customers have to accept the law whether they like it or not. Our legal system works so that a majority of people can make decisions which are binding on all the people. By this system most people's interests are best served.

- a.) Laws made by the process of majority rule are made to be obeyed. Even if Mr. Webster is in the minority and disagrees with the law, he still has to obey it. If everybody broke laws that they did not like, then our whole legal system would be destroyed.
- b.) Even though Mr. Webster might not like a particular law, He should realize that majority rule is the best way to make laws. He must follow every law made by this system, even if he disagrees with it, because this procedure for making laws does the most good for most people in the long run.
- c.) If Mr. Webster would understand this law and the reason why it was passed, then he would realize that the law will not hurt him. Laws passed by majority rule are for the good of everybody and therefore, they must be obeyed by everybody.
- d.) Mr. Webster should follow this law because laws are binding on all people whether they like it or not. But actually most everybody benefits from having a legal system, and most every body would suffer without any laws at all.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. 2. 3. 4.

3. Mr. Webster should hire the Chinese mechanic. If minorities are generally denied jobs, then our society is placing them at a disadvantage. We can't expect anyone to support our society who is denied its benefits. Any reasonable man expects certain basic rights in a society the seeks his cooperation. If the Chinese mechanic doesn't have a fair chance to get a job, he doesn't have much of a stake in keeping our system going.

- a.) Society should be more cooperative with minorities by giving them jobs and a stake in our system.
- b.) It is expected in our system that every person will have basic rights and the benefits of society.
- c.) Denying jobs to minorities places them at a disadvantage because it denies them the benefits of living in society.
- d.) Society must protect each individual's basic rights in order to win his cooperation.

Rank the statements from best interpretation of the paragraph (1) to worst (4).

1. 2. 3. 4.

APPENDIX D

ROTTER'S I-E SCALE

For each item pair, circle the item (a or b) that most nearly agrees with your own opinion.

1. a. Children get into trouble because their parents punish them too much.
b. The trouble with most children nowadays is that their parents are too easy with them.
2. a. Many of the unhappy things in people's lives are partly due to bad luck.
b. People's misfortunes result from the mistakes they make.
3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
b. There will always be wars, no matter how hard people try to prevent them.
4. a. In the long run people get the respect they deserve in this world.
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a. Without the right breaks one cannot be an effective leader.
b. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a. No matter how hard you try some people just don't like you.
b. People who can't get others to like them don't understand how to get along with others.
8. a. Heredity plays the major role in determining one's personality.
b. It is one's experiences in life which determine what they're like.
9. a. I have often found that what is going to happen will happen.
b. Trusting to fate has never turned out well for me as making a decision to take a definite course of action.
10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
b. Getting a good job depends mainly on being in the right place at the right time.

(Continue on to next page)

12. a. The average citizen can have an influence in government decisions.
b. This world is run by the few people in power, and there is not much the little guy can do about it.
13. a. When I make plans, I am almost certain that I can make them work.
b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. a. There are certain people who are just no good.
b. There is some good in everybody.
15. a. In my case getting what I want has little or nothing to do with luck.
b. Many times we might just as well decide what to do by flipping a coin.
16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
b. By taking an active part in political and social affairs the people can control world events.
18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
b. There really is no such thing as "luck."
19. a. One should always be willing to admit mistakes.
b. It is usually best to cover up one's mistakes.
20. a. It is hard to know whether or not a person really likes you.
b. How many friends you have depends upon how nice a person you are.
21. a. In the long run the bad things that happen to us are balanced by the good things.
b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. a. Sometimes I can't understand how teachers arrive at the grades they give.
b. There is a direct connection between how hard I study and the grades I get.
23. a. With enough effort we can wipe out political corruption.
b. It is difficult for people to have much control over the things politicians do in office.

(Continue on to next page)

24. a. A good leader expects people to decide for themselves what they should do.
b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.
b. It is impossible for me to believe that chance or luck plays an important role in my life.
26. a. People are lonely because they don't try to be friendly.
b. There's not much use in trying too hard to please people, if they like you, they like you.
27. a. There is too much emphasis on athletics in high school.
b. Team sports are an excellent way to build character.
28. a. What happens to me is my own doing.
b. Sometimes I feel that I don't have enough control over the direction my life is taking.
29. a. Most of the time I can't understand why politicians behave the way they do.
b. In the long run the people are responsible for bad government on a national as well as on a local level.

APPENDIX E

DEMOGRAPHIC INFORMATION FOR SUBJECTS

RECRUITED FROM:	NUMBER
Professional Organizations	19
University Faculty	18
Church Groups	17
Secondary Referrals	15
Alumni Associations	9
Graduate Students	9
Other (includes co-workers, personal acquaintances, etc.)	13

STATE OF RESIDENCE:	NUMBER
Oklahoma	86
Nebraska	4
Kansas	2
Missouri	2
South Dakota	2
Arkansas	1
Texas	1
Illinois	1
Florida	1

Mean years of post-high school education: 6.34

VITA

Stephen Hoyer

Candidate for the Degree of

Doctor of Philosophy

Thesis: MORAL REASONING IN ADULTS: THE RELATION OF AGE, SEX, AND LOCUS OF CONTROL TO THREE MEASURES OF MORAL REASONING

Major Field: Applied Behavioral Studies

Biographical:

Personal Data: Born in Ft. Ord, California, November 20, 1955, the son of Martin O. and Hazel Hoyer. Married to Janet L. Bauman on June 4, 1976; daughters Jai Michal, born February 6, 1981, and Lindsey Erin, born July 21, 1982, and son John Caleb, born February 9, 1986.

Education: Graduated from Plainview High School, Plainview, Nebraska, in May, 1973; received an Associate of Arts Degree with a major in Teacher Training from St. John's College, Winfield, Kansas, in May, 1975; received a Bachelor of Science Degree from Kearney State College with a major in Psychology in August, 1977; received a Master of Science in Education Degree from Kearney State College with a major in Guidance and Counseling in December, 1978; completed the requirements for the Doctor of Philosophy Degree at Oklahoma State University in May, 1987.

Professional Experience: Correctional Counselor, Nebraska State Department of Corrections, May, 1975 to November, 1978; Probation and Parole Officer, Oklahoma State Department of Corrections, June, 1979 to August, 1986; Graduate Teaching Assistant, Department of Applied Behavioral Studies, Oklahoma State University, August, 1981 to December, 1983; Graduate Teaching Assistant, Department of Applied Behavioral Studies, August, 1986 to May, 1987.