AN ASSESSMENT OF HOGAN'S MODEL OF MORAL DEVELOPMENT

by

DOUGLAS RONALD ADAMS

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Department of Educational Psychology

The University of British Columbia
2075 Wesbrook Place
Vancouver, Canada
V6T 1W5

Date July 31, 1978
ABSTRACT

Two studies were carried out to evaluate a model developed by Hogan (1973) which categorizes level of moral maturity by degrees of socialization and empathy. The model appeared to be useful for predictive and prescriptive guidance for education and psychology. The measures used for this purpose were: Gough's (Gough and Peterson, 1952) Socialization scale, Hogan's (1969) Empathy scale, Rest's (1974) Defining Issues Test (DIT), and, in a small subsample of the second study, Hogan's (Hogan and Dickstein, 1972) Measure of Moral Values (MMV).

Study one subjects (N = 186, grades 11, and 12) received a revised edition of the socialization and empathy scales. The specific hypotheses of the study were: (1) that empathy is a stronger predictor of moral judgement (DIT P scores) than is socialization, and (2) that there would be a significant increase in moral judgement scores from the low socialization-low empathy category (delinquent), through high socialization-low empathy (moral realist), to low socialization-high empathy (le chic), and high socialization-high empathy (morally mature). The first hypothesis was significantly upheld. The second hypothesis was not upheld to statistical significance, however. It was decided to replicate the study using the complete socialization and empathy scales in order to obtain a higher internal consistency reliability of these measures.

A higher reliability of the socialization and empathy scales was found in the second study (N = 66, grades 10, 11, and 12). Again the
first hypothesis was upheld while the second was not.

A subsample (n = 23, grades 11, and 12) was given the MMV in order to explore (1) whether the DIT P score and the MMV quantify the same factor, moral judgement, and (2) whether Hogan's model fits equally well with the DIT P score and the MMV. It was found that the DIT P scores and the MMV were essentially unrelated. Socialization was a stronger predictor of the DIT P score while empathy was a stronger predictor of the MMV results. While the DIT P score accounted for more variance of the socialization and empathy scales this was because of a negative correlation between socialization and DIT P scores, contrary to theoretical prediction.

The utility of Hogan's model for education and psychology was questioned since the breakdown of categories hypothesized by Hogan was not significantly evident in these studies.

Suggestions as to possible sources of problems in the studies, methods of correcting these problems, and future directions were made.

Dr. S. F. Foster
Thesis Committee Chairman
TABLE OF CONTENTS

ABSTRACTS i

TABLE OF CONTENTS iii

LIST OF TABLES iv

LIST OF FIGURES v

ACKNOWLEDGEMENTS vi

CHAPTER 1 INTRODUCTION 1

CHAPTER 2 LITERATURE REVIEW 4

(A) Socialization 4

(B) Empathy 11

(C) Moral Development 17

(D) Purpose of this Study 34

CHAPTER 3 METHODOLOGY AND RESULTS 36

(A) Study 1 36

1. Methods 36

2. Procedures 38

3. Results 38

(B) Study 2(A) 40

1. Hypotheses 40

2. Methods 40

3. Procedure 43

4. Results 43

(C) Study 2(B) 47

1. Hypotheses 47

2. Methods 47

3. Procedure 48

4. Results 48

CHAPTER 4 DISCUSSION 54

BIBLIOGRAPHY 60

APPENDICES 65
LIST OF TABLES

TABLE 1  Correlations between Socialization, Empathy, and DIT P Scores.  41

TABLE 2  Means and Standard Deviations of Moral Judgment (P) Scores, Study 1.  42

TABLE 3  Correlations Between Socialization, Empathy, and DIT P Scores, Study 2.  45

TABLE 4  Means and Standard Deviations of Moral Judgment (P) Scores, Study 2.  46

TABLE 5  Correlations Between Socialization, Empathy, DIT P Scores and Hogan's MMV P Scores.  50

TABLE 6A  Beta Values for the Multiple Regression Equation Predicting the Values of the DIT P Scores.  52

TABLE 6B  Beta Values for the Multiple Regression Equation Predicting the Values of the MMV (Rates 2).  52

TABLE 6C  R Values and % of Variance Accounted for ($R^2$) By Socialization and Empathy, Studies 1, 2(A), and 2(B).  53
LIST OF FIGURES

FIGURE 1 Characteristic Combinations Suggested By the Interaction Between Socialization and Empathy 3
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CHAPTER I

INTRODUCTION

The interest of educators and psychologists in the development of moral values has been the source of recent research emphasis (e.g., Turiel, 1973). In education the focus has been toward guiding students to moral maturity. Within this perspective two questions become salient and may be addressed: (1) how can moral development be facilitated, and (2) how can morality be measured?

The theoretical model which best provides an account of the existing data and accurate prediction and measurement will also clarify the components which must be manipulated to effect positive change in individuals. This study was designed as a test of one model which a search of recent literature identified as promising.

Hogan (1973) proposed a five dimension model of moral character. Two of these dimensions, socialization and empathy, were utilized to classify individuals into one of four categories of moral orientation. The culmination of these categories of moral character or moral development is moral maturity. In moral maturity the variables of socialization and empathy are both optimally powerful, that is they are significant yet neither extreme nor obsessive facets of an individual's personality.

Hogan has used the term "socialization" to mean "regarding the rules, values, and prohibitions of ... society as personally mandatory"
(Hogan, 1973, p. 221). "Empathy" refers to "the intellectual or imaginative apprehension of another's condition or state of mind" (Hogan, 1969, p. 307). The description of individuals by level of socialization and level of empathy results in four broad character types (see Figure 1).

These personality types would tend to differ from one another in moral behavior in the following ways:

"Specifically, other things being equal, persons scoring low on both scales (measures of socialization and empathy) tend to be delinquent. Those receiving low scores for empathy but high scores for socialization tend to be rigid rule followers - Piaget's moral realists. Persons with low scores for socialization but high scores for empathy tend to be cavalier about the conventional rules of society; they are 'emancipated', mildly sociopathic members of normal society, that is, persons who double park in parking lots, do not return borrowed books, and smoke marijuana - Piaget refers to them as 'chic types'. Persons with high scores for socialization and empathy tend to be morally mature; their compliance with social rules is effortless but their attitudes are tempered by a sympathy for the moral frailties of others". (Hogan, 1973, p. 223)

This model appears to be well suited to the educators needs; it offers a fairly simple method of detecting both moral character and the directions necessary to facilitate the development of moral maturity. If the model is found to be a valid representation of moral development then programs designed to enhance socialization and empathy could effect movement toward moral maturity.

This study was designed to test this model of moral development.
FIGURE 1

CHARACTERISTIC COMBINATIONS SUGGESTED BY THE INTERACTION BETWEEN SOCIALIZATION AND EMPATHY

<table>
<thead>
<tr>
<th>EMPATHY</th>
<th>SOCIALLY</th>
<th>MORALLY MATURE</th>
<th>HIGH</th>
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<tr>
<td>LOW</td>
<td>&quot;LE CHIC TYPE&quot;</td>
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(reproduced from Hogan, 1973)
CHAPTER II

LITERATURE REVIEW

The published research and psychological theory relevant to the constructs of socialization, empathy, and moral development as they reflect concern for moral education are reviewed below.

SOCIALIZATION

Socialization has been of considerable interest since ancient times (e.g., Aristotle, 1953; Plato, 1952). Theoretical developments within this century have added much greater conceptual depth to the term. The earlier definition was an observational description of socialization as simply compliance to the rules and prohibition of one's culture. The modern expansion of the idea, due in large part to the work of Freud, includes a motivational component which indicates that this submission to rules is, at least in part, of a voluntary nature.

Maintaining obedience without voluntary cooperation requires coercion and constant supervision of each individual. When a person accepts certain rules as right and good, and is positively disposed toward upholding these rules, interpersonal and social threats are no longer necessary. One has, according to Freud (1952), internalized the rules. Otherwise one complies only in fear of the consequences and thus the rules are functional for the individual through external pressures only.
Freud dealt with the issue of internalization in his accounts of the development of the superego (Freud 1952, 1961). The young child is motivated to accept the rule system of his parents by the fear that he may lose their affection and nurturance and by the fear of punishment. The mechanism by which this acceptance of rules evolves is by identification with the parents. In trying to incorporate an image of his parents into himself he becomes able to nurture himself when comparing his behavior to an ego-ideal modelled upon parental behavior and dictums, and to punish himself when falling short of this ideal.

Freud's theory has initiated a large body of research. Among the key findings in this literature have been that a moral orientation based on internalization is best brought about by affectionate parents using inductive discipline techniques emphasizing reasoning and self-corrective behavior, whereas the use of coercive punishment from power-assertive parents creates a moral orientation based upon fear of authority (Berelson and Steiner, 1964; Hoffman, 1968; Sears et al., 1957).

Contrasting viewpoints have questioned the importance and necessity of internalization to the definition of socialization. Reiss (Reiss, 1966; cited in Hoffman, 1970) has argued that social supervision or coercion in the form of legal or social consequences are with us almost constantly. Evidence has been found that when this supervision is absent or weak such as in bystander intervention studies (Brown, 1965) or obedience studies (Milgram, 1963) that adherence to commonly stated social rules is inadequate.
The argument has been advanced that the idea of internalization is not necessary because socialization can be explained by an externally oriented operant conditioning model such as that used by Skinner (1968). The central concept of this model of socialization is that rules are learned and obeyed because they are rewarded or because punishment is withheld. Removal of this contingency will cause extinction of the learning; the rules will be transgressed with increasing frequency as time passes (Skinner, 1968). The power of reward and punishment in manipulating behavior is well established and is the basis of a successful therapeutic technique known as behavior modification (e.g., Tharp & Wetzel, 1969; Ulrich, Stachnik, and Mabry, 1970).

The social learning concept of imitation, which accounts for the learning of complex repertoires of behavior through observation (Mussen, Conger, and Kagan, 1969), resembles the Freudian concept of identification. Some major differences are that imitation is considered to be an ongoing process rather than one which is complete early in life and that imitation can be oriented to specific behaviors of any individual rather than to the overall personality of the parent.

Imitation has been extensively studied (e.g., Bandura, Ross, and Ross, 1961; Bandura & McDonald, 1963; Bandura, 1969) and it has been found that models who are in some way similar or attractive to the observer can profoundly influence that person's behavior.

Internalization has been used in the sense of learning a habit form. In this usage a rule is internalized when an individual habitu-
ally agress with and complies with it. This has been criticized by Wrong (1961) as ignoring the inner conflict between impulse and conscience which renders the outcome as de novo with each new dilemma and as not simply the expression of a well established habitual response.

The investigation of socialization has presented problems to each of the above theories. A brief summary of some of these difficulties follows.

The concepts of psychoanalytic theory have proven to be extremely resistant to translation into observable and manipulable variables in strictly controlled experimental settings. Many psychoanalytic clinicians (e.g., Fine, 1971) have continued to rely upon the case study method as did Freud (1952). As a result of the difficulties of translating conceptual variables into testable form, statistical methodology and controls have often been minimal or absent.

Generalizations from studies using strict controls in laboratory settings can also be criticized however. In many cases there appears to be progressively less relation to real life as experimental controls are exerted. A graphic example of the discontinuity between laboratory behavior and actions in the day to day world is that supplied by the Milgram (1963) study. The majority of his subjects did attempt to shock a confederate of the experimenter and seemed to exhibit cruel (albeit extremely agitated) behavior, however this is likely not related to their normal everyday behavior since such cruelty simply is not in common evidence.
Another concern is that while many operational concepts seem to be valid, they are also restrictive in that they are limited to a very specific experimental paradigm. Because of this these concepts are not amendable to more general testing by which one could assess the validity of the concept and allow comparisons between disparate aspects of theories of socialization.

Social learning theory in part grew out of an effort to render testable the conceptualizations of Freud. In many cases this has been quite successful (e.g., Bandura, Ross, and Ross, 1961; Sears, Maccoby, and Levin, 1957). The measurement of socialization as a whole has not been a priority of social learning theorists, however. Attention has instead been directed to variables believed to be the components or contributors to socialization development according to one or another theoretical position such as guilt, resistance to transgression (e.g., Aronfreed & Reber, 1965) and modelling (e.g., Bandura, Ross, and Ross, 1963).

A measure of socialization which would satisfy the following criteria would be a positive addition to this research field. It should be a general measure of socialization and thus usable in a wide variety of experimental paradigms and allowing the accumulation of validation and reliability data. It should be comparable to an external criterion measure which is directly related to socialization as a construct validity control. For convenience and to encourage wide acceptance and use a prospective measure should be simple to apply and to score.
Such a measure has been in existence for some time. The scale of socialization developed by Gough (Gough, 1948; Gough & Peterson, 1952; Gough, 1960) has its conceptual basis in the social self theory of Mead (1913, 1922, 1934). Mead hypothesized that the major factor in the socialization of the individual was the development of an ability to mentally take the role of another and to regard oneself from that viewpoint. In this way, from many role taking experiences, individuals gradually accumulate a concept of a generalized other which comprises the demands and expectations of society (Mead, 1913, 1922). The quality of these role taking experiences determines the degree to which a person introjects or internalizes social standards (Gough, 1960).

Gough developed a 64 item empirically keyed measure with which he proposed to differentiate between socialized and unsocialized individuals (Gough & Peterson, 1952). He reasoned that delinquent populations would contain a higher proportion (than non-delinquent populations) of people with a low capacity to take the role of another or to benefit from the experience. This became his external criterion and his operational definition of socialization for his measure: that delinquent populations tend to include a higher proportion of unsocialized individuals than do non-delinquent populations. Theoretically the low socialization individual would be typified by a relative inability to regard the self as a social object and would thus exhibit a minimal degree of internalization of social standards.

The Gough measure of socialization has been applied in eight languages in ten countries to over five thousand delinquents and twenty-
one thousand non-delinquents. Every comparison between delinquents and non-delinquents was significant and comparisons between various levels of socialization appear to work equally well (Hogan 1973). The scale seems to be a highly valid empirical measure of socialization.

Gough and Peterson (1952) found four distinct clusters of items within the socialization measure. These were: (1) role taking deficiencies, (2) resentment against family, (3) feelings of despondency and alienation, and (4) poor scholastic adjustment or rebelliousness. Using factor analysis methods (N = 189) Rosén and Schalling (1974) found the following general factors of the scale: (1) a factor of general adjustment or socialization, (2) other aspects of socialization and postulated differences in role taking, (3) a factor of low self regard which was uncorrelated to the overall socialization score and negatively related to the first factor. Thus it appears that the general concept of socialization as measured by the socialization scale may be a complex rather than a unidimensional factor.

Overall it appears that the Gough scale of socialization is a useful addition to research in socialization and should continue to fruitfully add to the accumulation of knowledge on socialization and related concepts. It was decided to use the scale as a measure of socialization in the present study.
EMPATHY

It can be asserted that knowledge of a culture and commitment to its ways is a necessary but not sufficient prerequisite for fully participating in the social fabric of life therein. Additionally there must be a shared respect and awareness of one another's unique being. The study of empathy has been conducted in order to describe and explain this deeper level of communication between people. Several media of human communication exist such as, for example, language, touch (Frank, 1966), bodily expression (Lowen 1975), and personal distance (Hall, 1959, 1966). One component underlying these is a common assumption of mutual understanding which greatly adds to social interactions. This is a sense that one may grasp another's experience such that one can deeply comprehend the other's thoughts, feelings, and motivations. This state can be termed empathy.

An early concept of empathy was introduced by Lipps in 1909 (cited in Deutsch & Madle, 1975) as "einfühlung". Lipps thought empathy to be possible by projection and imitation. Etymologically both empathy and einfühlung mean "in-feeling" and can be more simply stated as "feeling together with". Not long after Lipps' initial work, in 1920, Thorndike (cited in Walker & Foley, 1973) proposed the existence of an aspect of intellectual ability called social intelligence which was composed of two components, the first of which appears to be the cognitive equivalent of empathy. The components are: (1) the ability to understand others, and (2) the ability to act wisely in the social environment.
Piaget (1965) in 1932 described and demonstrated the existence of a cognitive ability that he referred to as decentering. A child was required to indicate the positioning of the objects in a three-dimensional array from a point of view different from his own. Piaget saw this as the ability which allows us to look at the world from the subjective viewpoint of others around us. While he proposed decentering as dependent upon a cognitive ability developing with age he also noted the social factors thought to motivate its use (Piaget, 1968). As the child becomes older interaction with peers increases in comparison to that with parents. The rules learned as a young child and which have an implicit absolute rightness to them are challenged by other children who have learned different rules. The child is motivated to settle these conflicts by communication and in so doing must endeavor to understand the other's point of view. Thus he begins to give up egocentrism. Another cause of this change is the experience by the child of a real or imagined injustice by the parent which causes the absoluteness of the parental admonitions to waver and be questioned by the child. The progressive abandonment of egocentricity is termed decentering. It seems to be a developmental precursor to empathy.

Mead (1934) proposed that communication, socialization, and the very existence of mind are the result of an ability to understand the other's view. He referred to this ability as role taking which he thought of as a facet of general intellectual capacity. The child initially learns to take the other's role in order to anticipate the behavior expected of him, and thus to maintain affection from the parents.
In taking another's role the child begins to understand the various forces impinging upon the other, and how he himself appears through the other's eyes. This conscious awareness of the self and the other profoundly affects the child's reasoning. The individual's awareness, which initially involves only his own needs and desires, now extends to the reality of the other and to his own reality through the other's view so that the motivations and background of both parties and the interaction itself are taken into account.

Bronfenbrenner, et al. (1968) theorized that there are two independent types of empathy: (1) sensitivity to the traits of general groups of people, and (2) sensitivity to individual differences. They cited some evidence for this in a study in which lower predictive accuracy was found after judges met members of a group than before (Gage, 1952). Sensitivity to general groups indicates an ability to predict behavior of members of identifiable groups, this has also be referred to as stereotype perception. Sensitivity to individual differences refers to the ability to predict individual behavior.

The two abilities seem to be substantially independent even though each acts as a source of understanding. Empathy consists of (or requires) taking the role of an individual, while stereotypic understanding requires recalling past knowledge of the characteristics of a particular group. Thus stereotypic understanding ability may be related to factors of intelligence regarding accurate observation and categorization, while empathy is thought to relate more to spatial intelligence or an ability which allows the individual to imaginatively take on the viewpoint of another.
Perhaps the most elaborate conceptualization of empathy has been made by Selman (1973, 1974) in his description of successively more adequate stages of role taking ability corresponding to Kohlberg's stages of moral development. Selman (1971, 1973) has reported some supporting evidence such as the finding of a positive relationship between role taking ability and moral stage level. Initial evidence is positive for his overall model of role taking development.

Taking another's point of view allows the observer to understand the other's thoughts and feelings. Most role taking theories imply that the observer maintains a poignant sense of his self and his actual separateness from the other (Deutsch & Madle, 1975). To fully immerse oneself in the role of another would bring about identity diffusion and an overconcern with the expectations of other's, postulates Hogan (1973). Several theoretical positions exist, however, in which the definition of empathy does not require a clear differentiation between the self and the other. Empathy is considered by some theorists to be the sharing of feelings by which the observer feels the same emotion as the observed (Shantz, 1974).

There is some evidence that indicates that understanding another's feelings does not precipitate the experience of the same feelings in the observer. Mood, Johnson, and Shantz (1973, cited in Shantz, 1974) found with preschoolers that forty per cent indicated accurate understanding of an observed emotion but felt a different emotion themselves. Only seventeen per cent of the children both correctly understood the other's emotions and shared the same emotion. It is possible that under-
standing of others' thoughts and feelings and sharing emotions may be two relatively independent abilities. Thus understanding may be related to cognitive and role taking factors while sharing emotions may be related to imitation, identification, and projection.

During the past fifty years several measures of empathy have appeared in the literature. Piaget's use of a three dimensional array can be criticized as not directly testing understanding of other's social roles. The task is a mechanical one, not a social one, and empathy is defined as a social ability.

Dymond (1949) proposed a scale to measure empathy in clinical settings. This has also been criticized on several grounds (Bronfenbrenner et al., 1968). Among criticisms of Dymond's scale is that it may tap simple projection. The judges may be similar to the observed and attribute their feelings to them. Recently, Smith (1973) has also constructed an empathy measure designed to assess just this factor: judged similarity to the self. Another objection to the Dymond scale of empathy is that the empathy score does not differentiate between stereotype perception (i.e., a large class or social sub-group) and interpersonal sensitivity. Some evidence has been found (Lindgren & Robinson, 1953) that stereotypic perception was a strong component of the empathy scores as measures of the two were highly intercorrelated ($r = .74$). The problem that this finding presents is that: (1) stereotypic perception is likely an independent ability from role taking, and (2) stereotypes are limited by the accuracy of previous information and
familiarity whereas a general empathy or role taking ability should not be.

Flavell et al. (1968) have used the Role Taking Test devised by Feffer (1959). This consists of forming a story involving several pictures, then removing some, and predicting the story that would be formed by an individual who now saw the pictures for the first time. The measure was the lack of inclusion of the missing pictures of the first story in the second story. While this is an ingenious technique it confuses two very likely independent abilities, empathy and a cognitive sorting ability (Hoffman, 1976). As a result the scale suffers from questionable validity.

A promising measure of empathy has been recently developed by Hogan (1969, Grief and Hogan, 1973) and has since begun to come into general use (e.g., Deardorff, et al., 1975; Tracy & Cross, 1973, Weckowicz & Janssen, 1973). Since the measure is not based on responses to a described situation confusion of empathy ability with stereotypic perception or judged similarity to the self was decreased. Further evidence that the measure reflects empathy ability was sought by empirically correlating the measure with an external criterion. The Hogan measure was formed by comparing Q-sort descriptions (Nunnally, 1970) of each individual with a previously devised general Q-sort of characteristics of an empathic person developed by 7 experts. Hogan found an overall correlation of .71 between empathy scale scores and empathy rating in the original samples (N = 211). The resulting 64 item measure had an acceptable reliability of .84.
Greif and Hogan (1973) factor analyzed responses to the scale (N = 359). They found three main factors: (1) tolerance and even temperedness, (2) self-possession, gregariousness, and social ascendency, and (3) a factor indicating that humanism and tolerant socio-political attitudes were related to empathy. These factors suggest that empathy, defined by Hogan (1969, p. 307) as, "the intellectual or imaginative apprehension of another's condition or state of mind", is a complex concept. Theoretically this finding supports Piaget's (1968) notion that role taking tends to precipitate respect for others.

The Hogan measure of empathy appears to be a useful methodological tool for use in a wide range of experimental theoretical paradigms and thus was selected for use in the present study.

MORAL DEVELOPMENT

Studies in the area of moral development are more numerous in recent years than previously. As a result of the increased interest in the field available theories are more sophisticated now than in the past.

The cognitive developmental theory of moral development, introduced by Piaget (1965, 1968) in 1932, utilized a two stage concept of development. A basic feature of this model is that moral reasoning at either stage is qualitatively different from the other stage. Within a stage reasoning forms a consistent wholistic pattern of thought instead of being considered as simply a sum of learned behavior repertoires. Growth between stages is motivated by the child's increasing awareness
of the inadequacy of the underlying principles by which he conducts his moral judgements. This awareness is due to both (1) biological cognitive growth, and (2) social interaction as learning experiences. The process of sorting out values and beliefs creates a major reorganization of the individual's moral values and reasoning which, while incorporating past values and reasoning as experience, is wholly new and independent of previous stage reasoning in that the new stage forms an internally consistent whole.

Piaget suggests that stage growth is irreversible and occurs in an invariant sequence because of the progressively more adequate repertoires afforded by each stage and the dependence of each upon its predecessor for development in the first place.

The first stage of moral development Piaget called the stage of moral realism or heteronomous morality. The child's perception in this stage is egocentric and absolute. He is not aware of the differences of viewpoint between himself and others and assumes that everyone else shares his sense of the world, and that experiences existing only within his mind, such as dreams, have an external reality as well. Because of his position of inferiority and dependence to his parents and the demand by parents for obedience, he feels that their rules have an obligatory component. Transgression of these rules are viewed more in terms of the consequences of these actions than their intent. In line with the sense that obedience is more important than comprehension of rules, the child believes that rules exist with an omniscient punishment component; transgression is followed by punishment on a cause-effect basis as if social behavior followed the laws of physics.
The second stage described by Piaget is the morality of reciprocity or autonomous morality. As the child grows older he develops biologically, cognitively, and socially. Biologically he becomes able to better adapt to change in his environment. Cognitively, the environment becomes more thoroughly and adequately understandable and understood. Socially, he begins to learn to interact more and more with peers. Through the latter factor he gains experience in sharing in making decisions rather than being manipulated by the decisions of others, and in taking the role of others. He learns that others are similar but not equivalent to himself and thus gives up his egocentrism. In addition the child begins to understand that rules are not absolute but are conveniences arrived at by mutual consent for the attainment of common goals and are thus ultimately maleable. By learning to take the role of others he comes to see their viewpoint in moral situations such as dilemmas and to judge their actions to be right or wrong with more regard to intent than to consequences. Role taking generates, as a result, sympathy, mutual respect, and concern for the welfare of others. This is expressed in the growth of such ethics as egalitarianism and reciprocity at the higher stage.

The earmarks of this stage, then, are the awareness of the artificial and negotiable nature of social rules and the growth of the ability to mentally take another's role, accompanied by the decline of egocentrism. While considerable evidence supporting Piaget's theory has been found (for review see Hoffman, 1970) some contradictory and compellingly
negative evidence has also been uncovered. Regarding the issue of irreversibility and invariance of stage sequence, Havighurst and Neugarten (1955) found contrasting evidence to Piaget's model in an extensive study of ten American Indian groups. Piaget (1968) suggests that belief in imminent justice and the unchangeability of rules decreases as the child advances in stage level. In several tribes, however, the investigators found that the children exhibited an increased belief in imminent justice with age and in some tribes the children felt rules to be more rigid and unchangeable with age. This could, however, contrary to the biological growth of abilities, have been attributable to the effects of powerful and ever-present cultural pressure preventing stage growth. Bandura and McDonald (1963) addressed this problem from a social learning experimental mode and successfully manipulated stage growth both upward and downward by the use of a model. Cowan, et al (1969), and Lefurgy and Woloshin (1969) replicated this finding with prolonged after effects of two weeks and three months respectively. The criticism usually levelled at these studies is that the posttest task was very similar to the pretest and what may have occurred was a superficial learning of a response to a stimulus without a great deal of cognitive mediation as in true moral development. Thus any apparent stage movement was simplistic (false accommodation in Piaget's terms) and the resulting behaviors were based not so much on principles of judgement which would be generalizable to new situations as upon a learned pattern of response.
In his research Piaget developed and used a clinical method of inquiry. This involves lengthy interactions using non-predetermined open-ended interview questions directed at examining the reasons for a child's moral judgements in considering a dilemma. This method seems to be a useful exploratory tool but time consuming as an experimental device and extremely difficult to quantify for statistical analysis.

Kohlberg (1963) developed an alternative theory of cognitive development through expanding and altering Piaget's concepts. Kohlberg describes his theory as having three broad levels of moral development: preconventional, conventional, and autonomous morality, with two stages of development composing each level. A brief summary follows (from Kohlberg, 1963, 1971):

1. Pre-conventional level. The child is aware of cultural norms but judges moral actions by reference to their physical or personal consequences, or the power over him of the specific rule giver.
   - Stage One - Punishment and Obedience orientation. Moral actions are judged by their physical results. Rules are seen as externally imposed and are followed to avoid punishment or to curry favour of a powerful person.
   - Stage Two - Instrumental Relativist orientation. Moral actions are seen in hedonistic terms, good if they benefit the self. Reciprocity is of a bartering "market place" nature.

2. Conventional level. The values of one's group are adhered to in spite of some adverse consequences in order to fulfill significant others' expectations. Individuals feel a need to actively uphold and justify the existing norms.
Stage Three - Interpersonal Concordance or "Good Boy-Nice Girl" orientation. Behavioral guides are external in that the approval of others is the guiding principle. Egocentrism recedes and a morality based on intent begins.

Stage Four - "Law and Order" orientation. A sense of duty, submission to authority and maintaining the social order are the most important concepts of this stage. Rules are now fully internalized. The individual takes on the role of persons with legitimate rights and expectations only.

3. Autonomous or Post-conventional level. The individual begins to extract moral principles and to judge behavior by these rather than by specific rules derived from specific authority.

Stage Five - Social-contract Legalistic orientation. Right behavior is that which has been agreed to by a society, usually in terms of its formal pronouncements and laws and usually an expression of utilitarianism. These can be altered by rational criticism and concensus and are relativistic for each social or cultural group.

Stage Six - Universal Ethical Principle orientation. While social rules are taken into account, right moral action according to ethical principles may demand transcending the commonly accepted social norms. These abstract moral principles involve the concepts of justice, the reciprocity and equality of human rights, and the respect for individual human dignity.

Socialization follows a pattern of increment as well as apparent decrease with development. In the early stages rules are learned although
they are seen as externally enforced. By stage four social rules are thoroughly internalized and obedience is seen as a duty. However by stage six behavior contrary to social guidelines is once again acceptable. But this is true only if the behavior is carried out with reference to and because of higher, more abstract moral principles. Thus this can still be described as socialization but the active referents are a step removed from the social rules with which socialization is usually associated.

Empathy plays a significant part in Kohlberg's theory, beginning with an awareness of differences between individual needs and perspectives by stage two to full role taking by stage four. Kohlberg differs from Piaget in that he considers all social interactions fruitful ground for role taking and not just peer interaction. Role taking has been outlined in some detail by one of Kohlberg's colleagues, Selman (1973). Selman's model of role taking development begins with self-other differentiation of an objective sort, that is not including awareness of difference of social perspective. By Kohlberg's stage one, Selman states, the child is aware of differences of social perspective, although this is limited by cognitive immaturity. By moral development stage two the child is able to take the roles of others and is aware of the same activity of role taking in the other. In stage three the individual is aware of the above role taking and the ability to mentally step outside the dyad to observe the interaction as a third person. Stage four sees the awareness that mutual role taking does not lead necessarily to complete understanding.
At this level social conventions are valued as a commonly understood or shared means of communication. As reported above Selman (1973) has found a significant correlation between moral stage and role taking ability.

Turiel (1966) and Rest, Turiel, and Kohlberg (1969) found that children were more attracted to use higher stage reasoning than moral reasoning at a stage lower than their own, contrary to indications from the series of studies initiated by Bandura and McDonald (1963). This finding lends some support to the irreversibility and sequentiality notion of stage growth by explaining the motivation toward development as attraction to an obviously more adequate level of reasoning and rejection of one that is less adequate. However a closer look at the data of the Turiel (1966) study reveals that the mean stage score of the control group decreased between pretest and posttest, artificially creating a significant difference between it and the experimental group in the posttest.

Additional supportive evidence was found by Beck, Sullivan, and Taylor (1972). They did not detect significant stage movement in the posttest immediately after treatment but they did find a significantly greater stage movement in the experimental group in one year. Kohlberg's theory implies that stage movement should occur only after much analytical reasoning, perhaps encouraged by the treatment. This appears to be what has happened in this study.

The measure employed by Kohlberg to detect moral development was an extensive interview or open ended question form using six moral
dilemmas. In the interest of speed, simplification, and quantification, Rest (1974) has successfully adapted these dilemmas into a complex check-list questionnaire. The new measure, the Defining Issues Test (DIT), has been used with some success although several researchers, including Kohlberg, believe that an objective test format is not as useful as the interview in moral development research (Rest, 1975).

Social learning theorists regard moral development and the place of emotions and reasons in moral decision making as an extension of an S-R learning framework. Typically, affective involvement is regarded as reinforcement and cognitive factors are seen as rehearsal mechanisms in the study of moral behaviors. Instead of development of judgement or reasoning it is postulated that a child learns specific stimuli based on modelling, contiguity and positive or negative reinforcement. These may then be generalized somewhat to other situations which are similar to the original learning situation. Moral development then is the gradual accumulation of a learned socially approved repertoire of behavior. The main focus of research, as a result, turns from the individual to the processes by which learning takes place. Proponents of this theory tend to regard moral development in terms of socialization alone. One of the most outstanding spokesmen of this school of thought in the area of moral development is Bandura (e.g., Bandura, Ross, and Ross, 1961, 1963) who has amassed an impressive array of evidence supporting his position in contrast with the positions of others, most notably with those of Piaget and Kohlberg. While the evidence presented by social learning theorists is compelling, its limited conception of
emotion and cognition which appear to be so much apart of human decisions and life has prevented wider acceptance of the theory than now exists.

Adherents of the social learning approach suggest that virtues should be selected and taught by positive and negative reinforcement and modelling (Bandura, 1969). Reinforcement has become the basis of a recognized mode of therapy, as mentioned above. This perspective has been criticized from a variety of viewpoints, however. Among these criticisms is that this approach offers no indications of what should be taught (Kohlberg, 1963) or who should decide on the teachings and what the method of decision should be.

An alternative to both social learning and cognitive developmental viewpoints has been recently proposed. Hogan (1973) has suggested a trait view of moral development and moral orientation. While little research has, as yet, been addressed to this theory it appears worthy of closer investigation.

His model of moral development encompasses five independent traits or personality dimensions. These are: moral knowledge, socialization, empathy, autonomy, and a predisposition to value or to devalue existing rules and conventions.

The first factor is the awareness of rules and social norms which take the forms of injunctions, moral principles, or comparisons to an ideal form of moral conduct. Hogan (1973) postulates that moral knowledge is closely related to intelligence.

Socialization was defined by Hogan as the sense of personal obligation to monitor and restrict one's behavior to that which is
socially acceptable. This is related positively with warmth, nurturance, and consistent restrictiveness from parents as a child (Hogan, 1973). Optimal socialization level in an individual is to be moderately high but not so high as to be neurotic as Freud (1952) has pointed out.

Empathy, the third dimension, is defined by Hogan (1969) as "the intellectual or imaginative apprehension of another's condition or state or mind". Empathy is an ability related to intelligence and its development is encouraged by opportunities and motivations in the environment and positive predispositions to role taking in the individual (Hogan, 1973). As with socialization ideal placement on this dimension is to be moderately high but not extremely high. Hogan states that individuals who are overly empathic are "too concerned with the expectations of others, they excessively inhibit hostility and aggression, and they suffer from identity diffusion". (Hogan, 1973, p. 224).

Autonomy is used by Hogan (1974) to mean the independence of one's moral judgements and behavior from the influence of one's peers and the reliance instead upon commitment to other rules or principles held by the individual as being correct. Hogan (1973) sees the function of autonomy as insulating the individual "from the potential immorality of the community". (Hogan, 1973, p. 226) Again only a moderately high degree of autonomy is desirable. Extreme autonomy may be related to anti-social behavior while low autonomy results in behavior which is commonly accepted but which may contradict one's moral rules or principles.

Hogan's final dimension, predisposition to value or devalue existing rules and conventions has been distilled from two contrasting schools of
philosophy. Utilitarians and social contract theorists, on the one hand, stress the ethical position of 'the greatest good for the greatest number' and regard the laws and conventions as expressions of this principle which may only be changed, if found wanting, by common and rational consent. On the other hand diverse schools of humanistic philosophy have asserted that correct behavior can only be judged with reference to higher principles, which may or may not be formally acknowledged by laws or authorities (Wheelwright, 1959).

While many facets of this model may seem to easily fit into the Piagetian or Kohlbergian schools two major differences between the cognitive developmentalists and Hogan stand out. Firstly Piaget and Kohlberg place great importance in logic and reason, Hogan does not. Hogan disagrees with the cognitive developmentalists' concept that moral judgements are matters of reasoning. Instead, he asserts that "moral conduct is fundamentally 'irrational', that differences in even such obviously cognitive phenomena as moral judgements derive from more basic personological structures". (Hogan, 1973, p. 225).

A second difference in orientation is in reference to the treatment of stages. Looking at each dimension Hogan (1973) postulates that probably socialization would develop first, followed by empathy, and finally by the growth of autonomy and the attainment of moral maturity, defined by optimal placement on the five dimensions. However he states that this is not a necessary order and may differ between individuals. Thus his dimensions do not form sequential, invariant stages. This may
not be in direct contradiction to the cognitive developmentalists since they use the dimensions in a different fashion: they postulate stage growth within, for example, socialization and empathy rather than treating each as a stage.

Hogan describes a model within his larger theory, using two of the five personality dimensions; socialization and empathy. By comparing development on these two independent traits he proposes that it should be possible to categorize individuals into one of four general moral orientations.

The delinquent individual is typified by low scores on scales of both socialization and empathy. Thus he feels no obligation to obey social guidelines and he tends to behave egocentrically, that is without taking into account the views, needs and desires of others. He has a tendency to contravene legal codes of any sort. As a result, incarcerated populations include many of these individuals. Recidivists are even more representative of this type (Hogan, 1973, Deardorff et al., 1975).

Moral realists score high on socialization but low on empathy. Individuals of this sort are rigid rules followers who accept little compromise for individuals or situations since they feel no need to view a problem from the perspective of others. Hogan describes them as "well-socialized rule followers, but somewhat deficient in charitable or benevolent tendencies" (Hogan et al., 1970, p. 62).

"Le chic" type is a person who scores low on socialization while scoring high on empathy. Typically he disregards social rules and
conventions but he also considers the consequences of his behavior for others. This tends to deter the individual from law-breaking behavior which harms others and thus his behavior is more socially acceptable although eccentric.

Morally mature persons should score high on both socialization and empathy scales. While these individuals tend to be rule followers, their judgements and behaviors are more flexible and understanding since they also take into account the perspectives of others. Several specific traits characterize morally mature people: respect for others, adherence to the principles behind legal codes, concern for society as a whole, and the ability to see more than one viewpoint in an issue. How closely is this concept of moral maturity in agreement with that of other theorists such as Kohlberg? Hogan and Dickstein (1972) cite reference for the aspects of moral maturity used in Hogan's model to Kohlberg (1963) among others and, in fact, designed a measure of moral values (reviewed below) to parallel that of Kohlberg.

The scales that Hogan has used in his research on socialization and empathy are: Gough's Socialization scale (1952) of his California Psychological Inventory and Hogan's Empathy scale (Hogan, 1969). Hogan (1969, 1973) stresses that the two scales and the underlying constructs are, for all intents, entirely independent of each other.

Hogan (1969) reported a comparison of low socialization-low empathy scorers with a group of low socialization-high empathy scorers (N = 124) using the California Psychological Inventory (CPI). The groups differed
significantly \((p < .01)\) from each other on 12 of the 17 CPI subscales, the low socialization-low empathy scorers showing a profile of being marginally adjusted and prone to antisocial behavior.

A group of prison inmates \((n = 92)\) was compared by Hogan in the above study to a sample of military officers \((n = 100)\) on the empathy scale of the CPI. The differences between these extreme groups was highly significant \((p < .001)\) with the prison inmates scoring much lower. No measure of socialization was given for this comparison.

Kurtines and Hogan \((1972)\) measured the levels of empathy in a sample of 130 male undergraduates whose scores on the CPI socialization scale were relatively low. They found that the mean sample score on empathy was significantly higher \((p < .01)\) than a sample of delinquents \((n = 119)\) matched for low socialization scores. They postulated that the undergraduate subjects' predisposition to consider the needs and desires of others might tend to counteract the antisocial effects of low socialization.

Deardorff, et al. \((1975)\) compared the socialization and empathy scores of non-offenders, first offenders, and repeat offenders \((N = 45)\) matched for age, education, and race. They found that non-offenders and first offenders did not significantly differ from one another on either scale. Both of these groups differed significantly from repeat offenders on both socialization \((p < .005)\) and empathy \((p < .05)\) scale scores, however. This provides a finer differentiation between "delinquent types" as conceptualized by Hogan (low socialization-low empathy) and his other character types.
In another study, Hogan et al. (1970) found that male undergraduate marijuana use was related to both socialization and empathy (N = 148). Frequent users scored low on socialization but high on empathy, the profile of Hogan's "le chic" type, while non-users who said that they would never smoke marijuana (principled non-users) scored high on socialization and low on empathy, the characteristics of the "moral realists" of Hogan's typology. No group could be said to be "morally mature" from the socialization and empathy results using high scores on both scales as the criteria of maturity. The authors found, using the CPI, that users were sociable, concerned with the feelings of others, and less rigid, as well as being impulsive, pleasure-seeking, and rebellious. Non-users, on the other hand, were responsible, and rule-abiding but inflexible, conventional, and narrow in their interests.

In addition to the prediction of moral maturity by socialization and empathy directly in this study, Gough's measure of Social Maturity was applied to the subjects. This measure yielded social maturity scores ranging from principled non-users as the most socially mature, through non-users, occasional users, and then frequent users as the lowest scorers (difference significance to p < .05). Social maturity as a concept may be considered to be more concerned with socialization than with empathy.

Hogan and Dickstein (1972) developed a measure of moral values or moral maturity (MMV). Referring to the interview technique for measuring moral values developed by Kohlberg, they considered Kohlberg's method to
be too time-consuming and difficult to score. The motivation for designing the new scale was summarized in this statement.

"A briefer and more scorable test which nonetheless elicits a full range of moral responses would be a useful contribution to values research both as an alternative to the Kohlberg procedure and as a parallel technique for estimating method variance". (Hogan and Dickstein, 1972, p. 210).

In comparisons to external criteria the MMV was positively correlated (r = .37, p < .01) with a measure of sensitivity to injustice and with a measure of autonomy (r = .36, p < .01). The correlations between scores on the moral values scale and socialization and empathy were .32 (p < .05, one-tailed) and .48 (p < .01, one-tailed) respectively in a sample of forty-one undergraduates. This offers some support to Hogan's model and indicates that socialization may be a less powerful predictor or component of moral maturity than is empathy.

The definition of moral maturity used to score the subjects' responses to each of the fifteen statements of the MMV was as follows:

"(a) concern for the sanctity of the individual;
(b) judgements based on the spirit rather than the letter of the law;
(c) concern for the welfare of society as a whole; and
(d) capacity to see both sides of an issue".

(Hogan and Dickstein, 1972, p. 211)

A response was given 2 points if any of the above dimensions were explicit, 1 point if any were implicit in the one-sentence response, and 0 points otherwise. The inter-rater reliability of the measure was .88 while the lowest reported reliability was .82 on a sample of 92 undergraduates.
The MMV requires more validation data before it can be accepted into general use. Two factors which may retard acceptance are the difficulty with quantifying written responses and the fact that a person who exhibits only one of the four described criteria of moral maturity would score highly on moral maturity as a whole, a possibility within the context of Hogan's (1973) five dimension model of moral development but contrary to the purpose of this scale.

PURPOSE OF THIS STUDY

The model of moral character and development proposed by Hogan has received some support but the relationship between socialization, empathy, and moral maturation is yet to be directly evaluated. The purpose of this study was to test the efficacy of the model by comparing high and low levels of both socialization and empathy with a measure of moral maturity. The relative influence of each of socialization and empathy upon moral judgement within the context of Hogan's (1973) model was also examined. Specifically, the following predictive hypotheses were made:

1. Between the measures of socialization and empathy, the strongest predictor of moral judgement would be empathy (as indicated by a higher positive correlation between a measure of empathy and moral development than with a measure of socialization and moral development, and as indicated by a multiple regression equation constructed to predict moral development scores by scores on the socialization and empathy measures).
2. There would be significant increases in moral judgement scores respectively across the following types (lowest to highest direction) according to Hogan's model: delinquency, moral realism, le chic, and moral maturity.
CHAPTER III

METHODOLOGY AND RESULTS

Study 1

Methods

Subjects

Two hundred and six students in grades eleven and twelve in an urban high school took part in this study. After deleting subjects who missed more than two item responses for any measure the number remaining was one hundred eighty six (N = 186; 86 males, 100 females, mean age = 16.79, age range = 16 to 20 years, 161 grade elevens, 26 grade twelves).

Measures

1. Socialization. The socialization scale from Gough's California Psychological Inventory (1969) was applied to all subjects. The theoretical conceptualization underlying the socialization scale was based on how much the individual has internalized the values, rules, and conventions of his society. The scale was designed to position individuals or groups on a socialization continuum with a range from social to asocial and is a fifty item true-false questionnaire responded to by marking computer answer forms. Administrative
officials required that items 1, 3, 8, 15, 23, 37, 42 and 49 be deleted from the measure. The reliability coefficient, perhaps as a result, was only of marginal magnitude .61 (Hoyt estimate of reliability).

2. Empathy. The scale of empathy devised by Hogan (1969) was used in this study and scored by computer procedures. The measure consists of sixty four true-false items from the Minnesota Multiphasic Personality Inventory (MMPI) and the California Psychological Inventory (CPI) plus a number of items written specifically for this scale. It is empirically validated to measure variations in empathy - the intellectual or imaginative apprehension of another's condition or state of mind (Hogan, 1969). Local school authorities required that here, as well, several items be omitted. These were: items 19, 21, 42, and 48. The subsequent reliability estimate was disappointingly low, .48 (Hoyt estimate of reliability).

3. Moral Development. The scale used was the Defining Issues Test (DIT) (Rest, 1974) designed to assess the developmental aspects of moral judgements based on Kohlberg's (1963) stage theory. A positive correlation, r = .68, has been reported between the DIT and the Kohlberg measure of moral development (Rest, 1974). Various scoring systems can be applied to this test (e.g., stages of moral development as proposed by Kohlberg) however, this study used the principled (P) score because it was found to be "the most useful and reliable ... This score is interpreted as the relative importance a subject gives to principled moral considerations in making a decision about (six)
moral dilemmas". (Rest, 1974, p. 3, 4) P scores are derived by summing the weighted ranks given to stages 5 and 6, the "principled level" of moral judgement. The shorter version (three dilemmas) was used which consisted of the Heinz, Prisoner, and Newspaper dilemmas. This shorter version is reported to correlate positively, \( r = .93 \), with the longer six story test (Rest, 1974).

Procedure

The measures were administered in one sitting per class, during class time in the following order: (1) Socialization scale, (2) Empathy scale, and (3) Defining Issues Test (DIT). After the students were given the booklets and computer scorable answer forms, they were instructed on the proper use of the answer forms (optical scan "mark sense" cards) until the experimenter was satisfied that everyone understood the correct procedure. The format of the socialization and empathy scales was described and the instructions for the DIT were read verbatim.

Results

As indicated above, the reliability coefficients of .61 for the socialization scale and .48 for the empathy measure were not high enough to be considered satisfactory.

Overall the mean score on the 42 item revised socialization scale was 27.09 and the standard deviation was 4.58. The mean empathy scale
score on the revised 60 item scale was 30.04 with a standard deviation of 5.02. The mean P score on the DIT was 7.10 with a standard deviation of 4.61 (N = 186).

It was found that socialization was correlated significantly with sex (r = .217, p < .05, two-tailed test, d.f. = 185). Thus it appears that females are somewhat more highly socialized in this sample than males. Socialization and empathy, as Hogan (1973) has suggested, were found not to be significantly correlated (r = .047, n.s.). While socialization was correlated only negligibly with P scores on the DIT (r = .013, n.s.), empathy was correlated positively and significantly with DIT scores (r = .189, p < .05, one-tailed, d.f. = 185) supporting the first hypothesis of this study (see table 1).

A 2 x 2 analysis of variance was used to test the second hypothesis of this study. The dependent measure was moral judgement. The independent measures, socialization and empathy, were differentiated into low and high categories by median splits. In testing the 2 x 2 model, hypothesis 2, no significant mean differences were found (see Table 2). Visual inspection of the data (c.f. Appendix E) revealed that a median split is justified based upon no obvious non-linear relationships among the data.

No significant effect was found, F = 2.51, p = .115, d.f. = 185 (F required for significance was 3.84). There were indications that the hypotheses would possibly have been supported if more reliable test measures had been obtained. As predicted the low-socialization-low empathy (delinquent) cell had the lowest P value on the DIT. However
the low socialization-high empathy ("le chic") cell had the highest P score reflecting the greater power of empathy in predicting moral maturity. The order of increment of P scores was: delinquent, moral realist, morally mature, and le chic (Hogan's categories from lowest to highest P score).

A multiple regression equation was calculated predicting moral judgement scores (DIT) by scores on the socialization and empathy scales. The more powerful variable, empathy was found to account for 3.59% of the variance on the dependent variable, moral judgement scores, while socialization did not add appreciably to predictability at all (0.1%) \( (R = .189, \text{ d.f.} = 185) \).

On the basis of these tentative findings it was decided to replicate the study with the full form socialization and empathy scales and the DIT measure.

Study 2(A)

Hypotheses - Same as those for Study 1.

Methods

Subjects

Seventy six students in grades ten, eleven, and twelve in another urban high school were used. After eliminating from analysis data from subjects with two or more responses missing on any measure, sixty-six subjects remained \( (N = 66; \ 26 \text{ males, 40 females, mean age} = 16.97, \text{ age range} = 15 \text{ to } 20 \text{ years, 2 grade tens, 41 grade elevens, 23 grade twelves}) \).
TABLE 1

CORRELATIONS BETWEEN SOCIALIZATION, EMPATHY, AND DIT P SCORE

STUDY 1

<table>
<thead>
<tr>
<th></th>
<th>Socialization</th>
<th>Empathy</th>
<th>DIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>1.00</td>
<td>0.047</td>
<td>.013</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>1.00</td>
<td>.189*</td>
</tr>
<tr>
<td>DIT</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

* Statistically significant to p < .05, one-tailed, d.f. = 185.
TABLE 2

MEANS AND STANDARD DEVIATIONS OF MORAL JUDGEMENT (P) SCORES

STUDY 1

<table>
<thead>
<tr>
<th>Empathy</th>
<th>Socialization</th>
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<th></th>
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</thead>
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<tr>
<td></td>
<td>low</td>
<td>high</td>
<td></td>
</tr>
<tr>
<td>high</td>
<td>7.93</td>
<td>7.36</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.48)</td>
<td>(4.81)</td>
<td></td>
</tr>
<tr>
<td>low</td>
<td>6.18</td>
<td>6.88</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(4.51)</td>
<td>(4.61)</td>
<td></td>
</tr>
</tbody>
</table>

Note: All main effects and interaction effects were non-significant (N = 186).
Measures

The complete full form measures of socialization and empathy were applied in this sample. The same DIT measure was used as in Study 1.

Procedure

The procedure used was the same as in Study 1.

Results

The reliability coefficient computed on data from the socialization scale was found to be .68 (Hoyt estimate) in this study and the corresponding reliability coefficient of the empathy scale was .63, both of which represent improvement over the results of Study 1. Though a desirable lower limit for research purposes might be .70, these were considered to justify further analysis. A reliability index was also computed for the DIT which yielded a reliability coefficient of .63. This is an indicator of the internal consistency of the overall DIT, not merely the P items, and thus can only be used here as a general indicator.

The mean scores and standard deviations for the sample (N = 66) were as follows: socialization 31.12 (5.40), empathy 34.68 (6.03), DIT P score 8.24 (4.46).

Socialization and empathy scores were found to increase with grade in this sample (r = .244, n.s., r = .157, n.s., d.f. = 65) at a level approaching significance on socialization. Females tended to be more socialized than males but, again, this was not a statistically significant relationship. Socialization and empathy were found to be statistically independent (r = .034, n.s., d.f. = 65).
Empathy was significantly correlated with P scores from Rest's DIT ($r = .236$, $p < .05$, one-tailed, d.f. = 65) supporting hypothesis one of this study. Socialization scores were negatively but nonsignificantly correlated with DIT scores (see Table 3).

A 2 x 2 analysis of variance was computed to test hypothesis two of this study using moral judgement (P score) as the dependent measure and socialization and empathy as the independent measures. No significant mean differences were found (see Table 4). However the same general trends as in Study 1 were noted. The low socialization-low empathy (delinquent) cell contained the individuals scoring lowest on the DIT while the low socialization-high empathy ("le chic") cell subjects obtained the highest P scores followed closely by the high socialization-high empathy (Hogan's proposed morally mature) cell. A multiple regression equation revealed that empathy accounted for 5.5% of the variance on moral maturity while socialization accounted for only an additional .02% of the variance ($R = .2359$, d.f. = 65).

These results bring to the fore a question of the comparability of Hogan's model with Kohlberg's (1963) model of moral development used in forming the DIT. Is the DIT P score a misleading measure in this particular paradigm, perhaps masking effects within Hogan's model which might be better revealed by using Hogan's measure of moral values (MMV)? A subsample of the Study 2 subjects (N = 25) were also given Hogan's measure of moral values (Hogan & Dickstein, 1972). The results of comparisons employing data from this scale compromised Study 2(B).
TABLE 3

CORRELATIONS BETWEEN SOCIALIZATION, EMPATHY, AND DIT P SCORES

STUDY 2

<table>
<thead>
<tr>
<th></th>
<th>Socialization</th>
<th>Empathy</th>
<th>DIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>1.00</td>
<td>-.034</td>
<td>-.022</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>1.00</td>
<td>.236*</td>
</tr>
<tr>
<td>DIT</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

* Statistically significant at p < .05, one-tailed, d.f. = 65.
TABLE 4

MEANS AND STANDARD DEVIATIONS OF MORAL JUDGEMENT (P) SCORES

STUDY 2

<table>
<thead>
<tr>
<th>Empathy</th>
<th>Socialization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>low</td>
</tr>
<tr>
<td>high</td>
<td>9.00 (6.80)</td>
</tr>
<tr>
<td>low</td>
<td>7.40 (3.48)</td>
</tr>
</tbody>
</table>

Note: All main effects and interaction effects were non-significant (N = 65).
Study 2(B)

Hypotheses: It was hypothesized that: (1) DIT P scores and MMV scores would be positively and significantly correlated, and (2) that variance on Hogan's model would be equally well accounted for by DIT P scores and MMV scores.

A subsample of twenty-five of the Study 2(A) subjects, members of one randomly selected class, was given Hogan's (Hogan & Dicstein, 1972) measure of moral values in addition to the other measures used. Twenty-three subjects remained after deletion for more than two responses missing on any measure (N = 23; 9 males, 14 females, mean age = 17.56, age range = 16 to 20 years, 5 grade elevens, 18 grade twelves).

Measures

Hogan's measure of moral values is a questionnaire with fifteen items, each of which requests the subject to respond with short answers. These are scored by comparison to the following criteria of moral maturity (Hogan & Dickstein, 1972): (a) concern for the sanctity of the individual, (b) judgement based on the spirit rather than the letter of the law, (c) concern for the welfare of society as a whole, and (d) capacity to see both sides of an issue. If any of these issues was explicit in the response the subject was given 2 points, if the issue was implicit 1 point was given, otherwise no score for that item. Initial validation
has been carried out (Hogan & Dickstein, 1972) indicating that the scale measures moral maturity.

Procedure

The same procedure was used as in Studies 1 and 2(A) for the socialization, empathy, and the DIT scales. The instructions for the Hogan MMV were read verbatim and the scale was placed after the others in presentation.

Results

Two independent raters scored the measure of moral values (MMV) and were substantially in agreement ($r = .92$, $p < .005$, one-tailed, d.f. = 22). Internal reliability coefficients were calculated for each of the ratings and they were .61 and .80 (Hoyt estimate of reliability). The latter rating was used in all subsequent calculations.

The means and standard deviations in this sample ($N = 23$) were: socialization 31.26 (6.00), empathy 36.13 (6.30), DIT 10.04 (5.25), MMV 26.60 (5.82).

Scores on the MMV were related almost to significance to grade in an unexpected direction. The grade eleven students were more morally mature than grade twelves ($r = -.385$, n.s., d.f. = 22, $r$ required for significance $=.404$).

Socialization and scores on the DIT were negatively related in this sample ($r = -.349$, n.s.) barely failing statistical significance. Empathy exhibited the same positive direction of relation to the DIT as in Studies 1 and 2(A) but is nonsignificant ($r = .298$, d.f. = 22). Both socialization and empathy scores showed positive but nonsignificant
relationships to scores on Hogan's MMV (r = .115, d.f. = 22, r = .336, d.f. = 22, respectively). DIT P scores and scores on Hogan's MMV appear, on the basis of this small sample exploratory study to be quite independent (r = -.059, n.s.). This finding contrasts with Hogan's (1972) assertion that this scale (as with Rest's) could be used as a parallel scale to Kohlberg's method (see Table 5). Thus the first hypothesis of this Study 2(B) is not supported. The two scales appear to each measure a concept that is independent and unrelated to the other.

A multiple regression equation was calculated, using the DIT scale P score as the dependent variable. Socialization accounted for 12.2% of the variance on moral judgement while empathy increased the prediction by 5.31% to account for 17.51% of the variance. Adding the two ratings of the Hogan MMV increased the variance accounted for to 23.07% (R = .4804, d.f. = 22). When the Hogan MMV is placed as the dependent variable, empathy is the best predictor, accounting for 10.31% of the variance, while socialization increased the predictability to 10.90% (R = .3301, d.f. = 22). The DIT P score was not powerful enough to enter into the regression equation (see Table 6).

Socialization and empathy account for sixty per cent more variance on the DIT P scores than on the MMV. However the actual difference between the predictability of the DIT P score and the MMV score is R = .0884 or six per cent. The amount of variance of either measure accounted for was thus rather low. In addition, as Hogan and Dickstein (1972) suggested, empathy was the more powerful variable in predicting the MMV scores. This was not true of DIT P scores. The most efficient
TABLE 5

CORRELATIONS BETWEEN SOCIALIZATION, EMPATHY, DIT P SCORES, AND HOGAN'S MMV

STUDY 2(B)

<table>
<thead>
<tr>
<th></th>
<th>Socialization</th>
<th>Empathy</th>
<th>DIT (P)</th>
<th>MMV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>1.000</td>
<td>-0.208</td>
<td>-0.349</td>
<td>0.115</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.000</td>
<td>0.298</td>
<td></td>
<td>0.336</td>
</tr>
<tr>
<td>DIT P SCORE</td>
<td>1.000</td>
<td></td>
<td>-0.059</td>
<td></td>
</tr>
<tr>
<td>MMV</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

No correlation here is statistically different from zero (at d.f. = 22, \( r = 0.344 \), one-tailed, is required for significance to \( p = 0.05 \)).
predictive variable of DIT P scores in this sample was socialization, however this was a negative correlation (see Table 5), contrary to Hogan's (1973) model. Therefore the second hypothesis of this Study 2(B) is not supported: that the DIT P scores and MMV scores would serve equally well as measures to evaluate Hogan's model.

Several problems with this sample were apparent which indicate that it may not be representative of a more general population. First, the negative relationship between socialization and the DIT exists only negligibly in the larger sample. Secondly the mean DIT score (10.04) is considerably higher than that of the larger sample (8.24) or with the Study 1 sample (7.10). Thirdly it was found in this sample that the grade twelve subjects scored less on the MMV than the grade elevens, an unexpected result in the light of most developmental hypotheses. Fourthly this sample may not be directly comparable to the previous two samples since the age level of the present sample was noticeably higher (age means: Study 1 = 16.79, Study 2(A) = 16.93, Study 2(B) = 17.56).

Finally the degree of variance accounted for by both socialization and empathy among the 23 subjects of Study 2(B) on either the DIT P score or the MMV was much larger than that of Studies 1 and 2(A). This was contrary to expectations in view of the smaller sample size (see Table 6(C)).
TABLE 6(A)

BETA VALUES FOR THE MULTIPLE REGRESSION EQUATION
PREDICTING THE VALUES OF THE DIT P SCORES

<table>
<thead>
<tr>
<th>COEFFICIENT</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT $b_0$</td>
<td>4.97567</td>
</tr>
<tr>
<td>SOCIALIZATION $b_1$</td>
<td>-.19393</td>
</tr>
<tr>
<td>EMPATHY $b_2$</td>
<td>.24150</td>
</tr>
<tr>
<td>MMV(1) $b_3$</td>
<td>.63577</td>
</tr>
<tr>
<td>MMV(2) $b_4$</td>
<td>-.54243</td>
</tr>
</tbody>
</table>

TABLE 6(B)

BETA VALUES FOR THE MULTIPLE REGRESSION EQUATION
PREDICTING THE VALUES OF THE MMV (RATER 2)

<table>
<thead>
<tr>
<th>COEFFICIENT</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTANT $b_0$</td>
<td>16.06752</td>
</tr>
<tr>
<td>SOCIALIZATION $b_1$</td>
<td>.02912</td>
</tr>
<tr>
<td>EMPATHY $b_2$</td>
<td>.15293</td>
</tr>
</tbody>
</table>
### TABLE 6(C)

**R VALUES AND % OF VARIANCE ACCOUNTED FOR** ($R^2$)

**BY SOCIALIZATION AND EMPATHY, STUDIES 1, 2(A), & 2(B)**

<table>
<thead>
<tr>
<th>Study</th>
<th>Predicting DIT P score</th>
<th>R</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>Predicting DIT P score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>.1893</td>
<td>3.58</td>
</tr>
<tr>
<td>Socialization</td>
<td></td>
<td>.1894</td>
<td>3.59</td>
</tr>
<tr>
<td>Study 2</td>
<td>Predicting DIT P score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>.2355</td>
<td>5.55</td>
</tr>
<tr>
<td>Socialization</td>
<td></td>
<td>.2359</td>
<td>5.57</td>
</tr>
<tr>
<td>Study 2(A)</td>
<td>Predicting DIT P score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Socialization</td>
<td></td>
<td>.3493</td>
<td>12.20</td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>.4185</td>
<td>17.51</td>
</tr>
<tr>
<td>Study 2(B)</td>
<td>Predicting DIT P score</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td></td>
<td>.3211</td>
<td>10.31</td>
</tr>
<tr>
<td>Socialization</td>
<td></td>
<td>.3301</td>
<td>10.90</td>
</tr>
</tbody>
</table>

**Note:** The total variance accounted for by both variables is the figure on the second line of each comparison.
Evidence (see correlation Tables 1, 3, and 5, see $R^2$ values, Table 6) tends to support the first hypothesis of this study: that empathy accounts for a greater degree of variance on moral maturity than does socialization. This is in accordance with previous investigations (Hogan & Dickstein, 1972; Selman, 1971). The present inquiry found, however, that the amount of variance in no comparison exceeded the Study 2(B) finding of 17.5% ($R = .4185$) for both variables and in Studies 1 and 2(A) was 3.59% ($R = .1894$) and 5.57% ($R = .2359$) respectively. Empathy was more highly positively correlated with moral development than socialization in Studies 1 and 2(A) (Empathy: $r = .189$, $p < .05$, d.f. = 185; $r = .236$, $p < .05$, d.f. = 65. Socialization: $r = .013$, n.s.; $r = -.022$, n.s.). Study 2(B) moral development DIT P scores were more highly correlated with socialization scores than to empathy scores but in a negative direction (Empathy: $r = .298$, n.s., Socialization: $r = -.349$, n.s.). This latter negative correlation might be attributable to non-normal distribution of the small sample used in Study 2(B). Correlations of the Study 2(B) socialization and empathy scores with the Hogan MMV were in the direction hypothesized with empathy as the more strongly related although neither or socialization nor empathy were of significant magnitude (Empathy: $r = .336$, n.s., Socialization: $r = .115$, n.s.).
The data did not support the second hypothesis of this study: that moral judgement scores significantly increase across the four categories of Hogan's model from delinquent, moral realist, le chic, and morally mature. This result is not conclusive, however, as the predicted effects were evidenced, to some degree, as non-significant tendencies (see Table 2 and Table 4). In Study 1 the mean values of the DIT P score increased as follows: delinquent 6.18, moral realist 6.88, le chic type 7.93, and morally mature 7.36. The mean values of the DIT P score found in Study 2(A) were: delinquent 7.40, moral realist 7.39, le chic type 9.00, and morally mature 8.85. Thus the direction of the prediction was generally correct except for the reversal of the chic and morally mature categories.

It is possible that several uncontrolled effects may have been operating in these studies and thus masked differences in the variables measured. These are outlined below.

The reliabilities of the independent measures were more satisfactory in Study 2(A) than in Study 1 but there was still considerable error of testing present in Study 2(A) (internal consistency reliabilities of .68 for socialization and .63 for empathy). A larger sample size might have had some strengthening effect on the measures. One source of problems may lie in the testing situation itself. 9.71% (n = 20) of the original 206 Study 1 subjects and 13.16% (n = 10) of the original 76 Study 2(A) subjects were discarded for 2 or more item responses missing in one or more of the scales. While a stringent requirement for data acceptability was applied the above proportions may indicate difficulties in obtaining full cooperation from the samples, perhaps because of the
number of measures applied in one sitting.

Another aspect of the sample may also contribute to the lack of reliability. Hogan's (1969) empathy measure was developed and has been utilized with university and adult subjects. Perhaps this measure is not as easily understood or responded to by high school age students. Further testing with an older sample or modification of the instrument for use with secondary students might rectify this problem.

Hogan (1973) advances his model of moral development in a developmental framework, but uses only university age and adult subjects when attempting to validate it. The model itself thus may be most applicable to older subjects in providing a personality typology and may not reflect life span developmental patterns of childhood through adulthood as suggested by Hogan.

The almost total lack of correlation between the DIT P scores and Hogan's MMV (r = -.059, n.s.) is puzzling. It casts doubt upon the test results and/or directs attention to the degree of difference between Rest's and Hogan's concepts of moral maturity. One purpose for which both measures were developed was that each might be useful as parallel measures to Kohlberg's lengthy interview technique. Rest (1974) supplies some evidence that his scale is so related; Hogan does not pursue the matter. A further replication study should be undertaken to test the independence of these two measures. The result found with the Study 2(A) subsample, owing to its small size and low reliabilities (N = 23) renders present results inconclusive.
It should be noted that the P scores for the present studies were lower than those of some other samples reported by Rest (1974) (35 to 38.7 for the full six-dilemma questionnaire (21 P items) compared to 7.10 to 10.04 in the samples studied here (9 P items in the three item DIT)). The reason for this is uncertain but may indicate sample differences or testing difficulties in the use of the DIT.

In the light of these possible sources of error variance any conclusions made from this study must be tentative. However, with regard to the specific hypotheses stated, and the overall purpose of this investigation several statements can be made. The first hypothesis was that, of socialization and empathy, the variable more strongly related to moral development and thus the most useful as a predictor of moral development would be empathy. As postulated, empathy was significantly and positively related to moral development while socialization was not in the two overall samples reported (although in a small subsample of the second study this hypothesis was not supported). Thus it may be concluded that empathy is the stronger predictor of moral development.

The second hypothesis was that moral development scores would increase in a linear direction from delinquent, to moral realist, le chic, and morally mature categories of Hogan's model. General tendencies in this direction were noted but no significant trend was found. Therefore it is concluded that moral development scores do not increase in the manner described in the hypothesis.

The overall purpose of this research has been to assess the utility of Hogan's model of moral development, specifically the typology
involving the traits of socialization, empathy, and moral development, for psychology and education. The model is appealing because it offers clear guidelines for both measuring moral development and for enhancing or correcting this development.

However the breakdown of the model described by Hogan (1973) was not found in this inquiry: no significant differences in moral development with different levels of socialization or empathy were detected. The amount of variance on moral development accounted for by the two variables of socialization and empathy ranged from 3.59% to 17.5% of the total, indicating that they account for little difference in moral development. A useful model would necessarily account for much greater variance. Thus it appears, for these samples at least, that the model of moral development proposed by Hogan is not a powerful enough predictor to be useful for education and psychology. The effect of both socialization and empathy on moral development appears to be less than Hogan has suggested.

As indicated above, uncertainty about the intrusion of error variance into these studies causes any conclusion to be qualified or limited. Therefore it is suggested that further studies, including a complete replication, be undertaken with the following suggestions modifications, and directions.

Of the measures used here, the socialization, empathy, and DIT P score scales must be addressed in terms of reliability. The socialization scale may render more acceptable internal consistency estimates
with a larger sample. The empathy scale may have to be modified to be more useful with senior high school age subjects. A reliability estimate of the DIT should be constructed based on using a modified scoring system that includes all of the DIT items, perhaps weighting each by stage, rather than just the P score. The nine P items only comprise too small of a scale to yield a useful internal consistency reliability estimate. An additional criticism of the DIT P score is that it discards much useful information, in the form of the other DIT stage scores, particularly with a sample of school age children whose moral development may not have reached the P or principled level yet.

The Hogan MMV should be used in any replication to test if Hogan's model of moral development is specific to particular measures. Factor analysis of the MMV would be a useful study in itself to determine the major components in the light of Hogan's model of moral development, his definition of moral maturity, and the stages of the Rest DIT measure. A correlation of the DIT to the MMV using a larger sample would be adviseable to determine the relationship of the two measures.

The measures should be applied over several sitting in a replication thus reducing the effects of fatigue, haste, and annoyance at the magnitude of the task presented to the subjects.

Dual replications of high school age and university age subjects could shed light on whether the Hogan model is indeed developmental or a simple four category typology useful only for descriptions of university age and adult subjects. If the latter is the case then thoughts of using the model as a guide to enhance or correct moral growth may be misplaced.
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APPENDICES

APPENDIX A  THE MEASURE OF SOCIALIZATION  66
APPENDIX B  THE MEASURE OF EMPATHY  67
APPENDIX C  THE DEFINING ISSUES TEST  71
APPENDIX D  THE MEASURE OF MORAL VALUES  84
APPENDIX E  RAW DATA FROM STUDIES 1, 2(A), and 2(B)  89
APPENDIX A

THE MEASURE OF SOCIALIZATION

The measure of socialization used in this study is copyrighted and available through the California Psychological Inventory (Gough 1969).
APPENDIX B

THE MEASURE OF EMPATHY (HOGAN 1969) USED IN THIS STUDY

Please mark true (T) or false (F) to the following questions.

T F 1. A person needs to "show off" a little now and then.
T F 2. I liked "Alice in Wonderland" by Lewis Carroll.
T F 3. Clever, sarcastic people make me feel very uncomfortable.
T F 4. I usually take an active part in the entertainment at parties.
T F 5. I feel sure that there is only one true religion.
T F 6. I am afraid of deep water.
T F 7. I must admit I often try to get my own way regardless of what others may want.
T F 8. I have at one time or another in my life tried my hand at writing poetry.
T F 9. Most of the arguments or quarrels I get into are over matters of principle.
T F 10. I would like the job of a foreign correspondent of a newspaper.
T F 11. People today have forgotten how to feel properly ashamed of themselves.
T F 12. I prefer a shower to a bathtub.
T F 13. I always try to consider the other fellow's feelings before I do something.
T F 14. I usually don't like to talk much unless I am with people I know very well.
T F 15. I can remember "playing sick" to get out of something.
T F 16. I like to keep people guessing what I'm going to do next.
T F 17. Before I do something I try to consider how my friends will react to it.
T F 18. I like to talk before groups of people.
T F 19. When a man is with a woman he is usually thinking about things related to her sex.
T F 20. Only a fool would try to change our Canadian way of life.
T F 21. My parents were always very strict and stern with me.
T F 22. Sometimes I rather enjoy going against the rules and doing things I'm not supposed to.
T F 23. I think I would like to belong to a singing club.
T F 24. I think I am usually a leader in my group.
T F 25. I like to have a place for everything and everying in its place.
T F 26. I don't like to work on a problem unless there is the possibility of coming out with a clear-cut and unambiguous answer.
T F 27. It bothers me when something unexpected interrupts my daily routine.
T F 28. I have a natural talent for influencing people.
T F 29. I don't really care whether people like me or dislike me.
T F 30. The trouble with many people is that they don't take things seriously enough.
T F 31. It is hard for me just to sit still and relax.
T F 32. Once in a while I think of things too bad to talk about.
T F 33. I feel that it is certainly best to keep my mouth shut when I'm in trouble.
T F 34. I am a good mixer.
T F 35. I am an important person.
T F 36. I like poetry.
T F 37. My feelings are not easily hurt.
T F 38. I have met problems so full of possibilities that I have been unable to make up my mind about them.
T F 39. Often I can't understand why I have been so cross and grouchy.
T F 40. What others think of me does not bother me.
T F 41. I would like to be a journalist.
T F 42. I like to talk about sex.
T F 43. My way of doing things is apt to be misunderstood by others.
T F 44. Sometimes without any reason or even when things are going wrong I feel excitedly happy, "on top of the world".
T F 45. I like to be with a crowd who play jokes on one another.
T F 46. My mother or father often made me obey even when I thought that it was unreasonable.
T F 47. I easily become impatient with people.
T F 48. Sometimes I enjoy hurting persons I love.
T F 49. I tend to be interested in several different hobbies rather than to stick to one of them for a long time.
I am not easily angered.

People have often misunderstood my intentions when I was trying to put them right and be helpful.

I am usually calm and not easily upset.

I would certainly enjoy beating a crook at his own game.

I am often so annoyed when someone tries to get ahead of me in a line of people that I speak to him about it.

I used to like hopscotch.

I have never been made especially nervous over trouble that any members of my family have gotten into.

As a rule I have little difficulty in "putting myself into other people's shoes".

I have seen some things so sad that I almost felt like crying.

Disobedience to the government is never justified.

It is the duty of a citizen to support his country, right or wrong.

I am usually rather short-tempered with people who come around and bother me with foolish questions.

I have a pretty clear idea of what I would try to impart to my students if I were a teacher.

I enjoy the company of strong-willed people.

I frequently undertake more than I can accomplish.
APPENDIX C

The Defining Issues Test (short form) (Rest 1974).
OPINIONS ABOUT SOCIAL PROBLEMS

This questionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers in the way that there are right answers to match problems. We would like you to tell us what you think about several problem stories. The papers will be fed to a computer to find the average for the whole group, and no one will see your individual answers.

Please give us the following information:

NAME _________________________________ FEMALE

AGE _____ CLASS AND PERIOD ________________ MALE

SCHOOL ________________________________

* * * * * * * * * *

In this questionnaire you will be asked to give your opinions about several stories. Here is a story as an example. Read it, then turn to the next page.

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. On the next page 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?

PART A. (SAMPLE)

On the left hand side of the page check one of the spaces by each question that could be considered.

<table>
<thead>
<tr>
<th>GREAT importance</th>
<th>MUCH importance</th>
<th>SOME importance</th>
<th>LITTLE importance</th>
<th>NO importance</th>
</tr>
</thead>
</table>

1. Whether the car dealer was in the same block as where Frank lives.

2. Would a used car be more economical in the long run than a new car.

3. Whether the color was green, Frank's favorite color.

4. Whether the cubic inch displacement was at least 200.

5. Would a large, roomy car be better than a compact car.

6. Whether the front connibilies were differential.
PART B. (SAMPLE)

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.

Most important  5
Second most important  2
Third most important  3
Fourth most important  1
In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost 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
HEINZ STORY

On the left hand side of the page check one of the spaces by each question to indicate its importance.

<table>
<thead>
<tr>
<th>GREAT importance</th>
<th>MUCH importance</th>
<th>SOME importance</th>
<th>LITTLE importance</th>
<th>NO importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Whether a community's laws are going to be upheld.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Whether Heinz is a professional wrestler, or has considerable influence with professional wrestlers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Whether Heinz is stealing for himself or doing this solely to help someone else.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Whether the druggist's rights to his invention have to be respected.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. What values are going to be the basis for governing how people act towards each other.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
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  ___
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 system?

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 cruel 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 anybody?

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

Most important ___
Second most important ___
Third most important ___
Fourth most important ___
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 was starting 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
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1. Is the principal more responsible to students or to 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 order 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 students' education in critical thinking and judgement?

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 D

The Measure of Moral Values (Hogan and Dickstein, 1972)
HOGAN'S ISSUES SCALE

NAME ____________________________________________________________

AGE ______ GRADE ______ SEX: MALE ______

FEMALE ______

THE FOLLOWING THREE PAGES CONTAIN 15 SENTENCES. READ EACH STATEMENT AND ASSUME THAT IT HAS BEEN MADE BY A PERSON WITH WHOM YOU ARE HAVING A CONVERSATION. THEN, ON THE LINE BELOW EACH STATEMENT, INDICATE WHAT YOUR REACTION WOULD MOST LIKELY BE.
1. (Black speaker) "Even after graduating from high school I can't find work. Yet I know many white drop-outs who have good jobs".

2. "The FBI has its hands tied in many cases because of the unreasonable opposition of some people to wire tapping".

3. "The city is going to repeat what has been done in many other cities by building a super-highway right through the slum district. Many apartments will be torn down and the people will be forced out".

4. "Some boys have it so easy. They go to college and get out of the draft, and we get sent to Viet Nam".

5. "I told Jack my ideas for the new project. He took them to the boss and got the credit".

6. "The new housing law is unfair. Why should I be forced to take in tenants that I find undesirable?"
7. "In many medical laboratories experiments are performed on live animals and very little care is taken to minimize pain".

8. "I read another story today about a girl who was refused an abortion in a hospital. An incompetent doctor gave her an illegal abortion and she died".

9. "I think it is unnecessarily cruel to keep condemned prisoners on death row for so long, and to make the execution such an elaborate ritual".

10. "The police should be encouraged in their efforts to apprehend and prosecute homosexuals. Homosexualism threatens the foundations of our society".

11. "A powerful group representing hunters and gun manufacturers is holding up a gun control law that the majority of the people in this country want".
12. "The government shouldn't have passed the medicare bill. Why should we pay other people's doctor bills?"

13. "Several policemen were called into a slum area to break up a street fight but when they arrived the local residents threw bricks at them from the windows".

14. "During last year's ghetto riots a shopowner saw a boy jump out of the broken window of his store with a television set. The man shot the boy, who is now crippled as a result".

15. "The police were rough when they broke up that crowd of students, even though the students were parading without a permit".
## APPENDIX E

**RAW DATA**

**Study 1 Subjects**

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