

THE RELATIONSHIPS AMONG DILEMMA CONTENT,  
MORAL JUDGMENT AND ACTION CHOICE  
IN INTERACTION WITH POLITICAL  
ATTITUDE AND ETHICAL ATTITUDE

by

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## ABSTRACT

The purpose of the study was to investigate the effect of specified variation in dilemma content on the relationship among ethical attitude, political attitude, moral development and dilemma action choice.

The moral development and action choice scores of individuals who differed in ethical attitude or political attitude were compared for two types of dilemmas, the Defining Issues Test dilemmas and alternate dilemmas, differing in terms of the action supported by authority.

Measures of ethical attitude, political attitude and moral development were administered to 68 high school subjects and 35 university subjects. Results of multivariate analysis of variance repeated measures showed that moral development and action choice scores of subjects who differed in ethical attitude or political attitude did not vary for the two dilemma types. Ethical attitude was found to be related to moral development scores for both the Defining Issues Test and Alternate Dilemmas Test, but only to university subjects' action choice scores on the Defining Issues Test. Political attitude was found to be related to only university subjects' action choice scores on the Defining Issues Test.

Stepwise regression analysis indicated that the D Index was the best predictor of the Defining Issues Test action choice scores for the high school sample and political attitude was the best predictor for the university sample.

Limitations and implications of this research are discussed.

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## CHAPTER I

### INTRODUCTION

#### Background to the Problem

Cognitive developmental accounts of moral development and moral behavior have received widespread attention from psychologists and educators (e.g., Blasi, 1980; Damon, 1980; Lawrence, 1980). One reason for this attention is that they attempt to bring coherence to the study of at least three fundamental problems relating to human morality:

the problem of how morality is acquired in the course of development; the problem of moral consistency within individuals; and the problem of how (and whether) it is appropriate to order different types of human morality on a scale ranging from primitive to advanced. (Damon, 1980, p. 35)

In addition, educators have been attracted to the research because of interest in moral education and their desire to understand their students better.

Cognitive developmental approaches are characterized by an emphasis on the internal construction and reorganization of cognitive structures as the basis for the development of particular types of moral orientations (Wilson & Schochet, 1980). Cognitive developmental research, primarily based upon Piaget's (1965) and Kohlberg's (1964, 1969, 1971, 1976, 1981, 1983) moral development theories, has involved looking for consistencies in the use of moral reasoning structures across different

situations and for the development of progressively more adequate structures of reasoning with age. In these theories, moral structure refers to a logical organization of thinking, that is, the form of moral reasoning rather than the content. Stages of development are proposed which are considered to represent qualitatively different logical systems of thinking. Based upon Piaget's theory that children progress from a heteronomous morality (morality of constraint) to an autonomous morality (morality of cooperation), Kohlberg postulated a six stage theory of moral development.

In contrast to socialization and social learning theories of morality (e.g., Aronfreed, 1976; Bandura, 1971; Hoffman, 1970), basic moral norms and principles are viewed as structures arising through experiences of social interaction, rather than through internalization of rules that exist as external structures (Kohlberg, 1976). With the focus on the ontogenesis of individual reasoning about justice, the situational context of moral reasoning is deemphasized. From the cognitive developmental perspective, environmental factors in moral development are defined by the general quality and extent of cognitive and social stimulation (Kohlberg, 1976).

The structures of moral reasoning are considered to affect action by defining how rights and duties are to be understood in concrete moral situations (Kohlberg, 1976; Rest, 1979a). In opposition to this view, social learning theorists contend that a duality in moral judgment and action exists and the findings of Hartshorne and in his associates are provided as one source of empirical evidence for this contention (see Aronfreed, 1968 and Mischel & Mischel, 1976).

In a series of studies, Hartshorne and his associates (Hartshorne & May, 1928; Hartshorne, May & Maller, 1929; Hartshorne, May & Shuttleworth, 1930) attempted to assess the extent to which moral knowledge was predictive of moral behavior. Moral knowledge was defined as a quantitative dimension determined by the extent that one's attitudes were reflective of adult standards. Low correlations between behavioral measures of deceit and scores on paper and pencil tests of "moral knowledge" were interpreted as indicating that moral responding is situation specific. However, in more recent research reviewed by Blasi (1980), a significant number of studies were reported to have found consistencies between moral judgment and action.

A crucial issue in cognitive development theories is the distinction between structure and content. However, Rest (1979a) points the way to research on the interrelationship of structure and content. He states, "a future goal is to identify the various attributes of test situations that affect the structural organizations of thinking manifested and the extent to which each of these attributes affect them" (pp. 68-69).

Based on the extensive body of research relating to cognitive moral development and particularly to Kohlberg's moral development theory, Rest (1979a) has reformulated Kohlberg's theory and accepted "some complications in the model for the sake of a better empirical fit" (p. 63). Rest no longer considers cognitive structures to occur in an "all-or-nothing" manner. To characterize development, Rest suggests that it is necessary to use both qualitative descriptors to depict different logical organizations of thinking, and quantitative descriptors to show the extent and degree to which different structures are

operating. Rest also acknowledges that cognitive assessment is affected by specific task, content, and response characteristics of a situation, and thus, the manifestation of a particular cognitive structure in one setting gives only a probabilistic indication that it would be manifest in other settings.

In addition, Rest (1979a) replaces Kohlberg's concept of a "simple stage model" with a more complex model of development. Many of the assumptions of the simple stage model are not met by this more complex model. For example, in Rest's model, a subject may advance in several organizations of thinking simultaneously; the ascending and descending slopes of all the stage types may not be symmetrical or evenly spaced; the point of highest usage of a stage type may not be its point of fullest development; and no stage type may have a period of 100% usage and each stage type may not have a period when it predominates. The term "stage type" is used here because "stage" suggests that the subject is exclusively one type of response at a time.

While Rest (1979a) acknowledges that content can influence the structure that is manifest in responses, another concern that has been raised is whether the stages postulated by Kohlberg (e.g., 1969, 1971, 1976) and adopted in overall terms by Rest (1979a) are really cognitive structures representing progressively more adequate organizations of thinking about justice. An alternative view is that the stages as measured consist in different kinds of content that reflect various attitudes or orientation toward moral issues (e.g., Buck-Morss, 1975; Hogan, 1970; Reid & Yanarella, 1980; Sampson, 1978; Simpson, 1974; Sullivan, 1977).

Kohlberg's moral development stages are grouped into three major levels: preconventional (Stages 1 and 2), conventional (Stages 3 and 4), and postconventional (Stages 5 and 6). The following characterization of the six moral stages is presented by Kohlberg (1971):

#### I. Preconventional Level

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

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

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

#### II. Conventional Level

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

Stage 3: The interpersonal concordance or "good boy-nice girl" orientation. Good behavior is that which pleases or helps others and is approved by them. There is much conformity to stereotypical images or what is majority or "natural" behavior. Behavior is frequently



judged by intention--"he means well" becomes important for the first time. One earns approval by being "nice."

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

### III. Postconventional, Autonomous, or Principled Level

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

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

Stage 6: The universal ethical principle orientation. Right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency. These principles are abstract and ethical (the Golden Rule, the categorical imperative); they are not concrete moral rules like the Ten Commandments. At heart, these are universal principles of justice, of the reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons. (pp. 164-165)

Two structure-content issues are relevant to Kohlberg's stage descriptions (Levine, 1979a). First, the form-content distinction is used to classify and explain the impact of the social environment on

moral reasoning. The issue raised is whether cultural content can elicit or inhibit the generalization of conventional and postconventional moral thought. Second, the form-content distinction is used to explain what is meant by stage of moral reasoning, that is, stages are forms or structures of cognitive processes which are independent of internalized cultural content. The second relevant issue is whether stages, as described by Kohlberg, represent forms of reasoning or different cultural contents.

In regard to the interrelationship of structure and content in both Kohlberg's moral theory and his measurement of moral development, Emler (1983) points out that,

The moral dilemmas, employed to elicit styles of moral thought, make core issues out of liberal values such as civil rights and freedoms, property, the value of human life and individual conscience, and each dilemma betrays the central liberal concern--the conflict between individual conscience and authority. (p. 61)

One of the implications of Emler's discussion of liberal dilemma content is that such content affects the moral reasoning that will be manifested. Concerning the structure-content distinction in Kohlberg's theory, Emler (1983) states,

Stages four, five, and six, therefore, take the theory directly into the arena of political authority. Each of these stages represents a distinct position regarding the basis for and limits of political legitimacy, though stages five and six tend both to converge on a liberal position. (p. 60)

Thus, the difference between the structures of conventional and principled reasoning is viewed by Emler as a difference in ideological content between conservatism and liberalism.

The distinction between conventional and postconventional moral reasoning has been described by Kohlberg (1971) as a law-maintaining perspective versus a law-making perspective. Conventional moral

reasoning is characterized by the maintenance of the rules, expectations and conventions of society or authority just because they are society's rules, expectations or conventions. The self is viewed to be immanently within society and, consequently, the status quo is seldom challenged. However, the postconventional individual is seen to base acceptance of society's rules on general moral principles of justice that underlie these rules. The principles of justice are seen to place a focus on the rights of humanity independent of civil society and to imply the primacy of liberty or civil rights, equality of opportunity and contract (Kohlberg, 1971).

Emler and Hogan (1981) suggested that the "limitations" of Stage 4 thinking outlined by Kohlberg (1971), that is, "(a) it defines no clear obligations to persons outside the order (for example, the nation-state) or to persons who do not recognize the rules of one's own order; and (b) it provides no rational guides to social change, to the creation of new norms or laws" (p. 200), are simple values that distinguish liberals from conservatives. According to Emler and Hogan (1981), conservatives are less likely to believe that they have obligations to persons who are outside the system or opposed to its rules, less likely to believe in the possibility of a rational basis for legal reform, and less interested in individual rights than in collective security. Liberals, on the other hand, are considered to be more inclined to see the law as an instrument for social reform and to believe that it should be used to secure social justice to protect individual rights.

Hogan (1970) proposed an alternative conceptualization of moral judgment and moral behavior to Kohlberg's moral theory. Hogan claimed that the differences in moral judgment are not to be understood in terms

of cognitive development but rather in terms of personality differences closely tied to political ideology. Principled reasoning style is represented as a continuum from an ethics of personal conscience, defined by a preference for making decisions on the basis of personal and intuitive moral feelings, to an ethics of social responsibility, characterized by a preference for relying on conventions, contracts and formal agreements as a means for regulating social affairs (Hogan, 1970). According to Hogan (1970), the ethics of personal conscience relates to a higher law morality, a liberal to radical position; whereas, the ethics of social responsibility is equivalent to the positive law tradition, a conservative position. Both ethical attitudes are considered to be equally defensible on moral grounds.

Whereas both the critics and proponents of Kohlberg's moral development theory acknowledge that there is a relationship between moral stages and political ideology, they are not in agreement on the interpretation of this relationship. The critics of Kohlberg's theory interpret evidence of a relationship between political ideology and Kohlberg's moral stages as confirmation of the political bias of Kohlberg's theory and an indication of the confounding of structure and content (e.g., Emler, 1983; Emler & Hogan, 1981; Hogan & Emler, 1978; Rothman & Lichter, 1978). On the other hand, the proponents of Kohlberg's theory interpret the relationship between political ideology and moral reasoning as support for the construct validity of the theory (e.g., Fishkin, Keniston & MacKinnon, 1973; Fontana & Noel, 1973; Haan, Smith & Block, 1968; Rest, Cooper, Coder, Masanz & Anderson, 1974).

From the viewpoint of Kohlberg's moral theory, moral reasoning is tied to political ideology in that it partly determines the terms in which politics is understood. Rest (1979a) states,

Studies of political ideology have long recognized the important distinction between a maintenance-of-society view and a human-rights-and-equalitarian view. Discussion of "left" versus "right" politics (Tomkins 1963), Liberalism-Conservatism (Keniston 1968) and Authoritarianism (Adorno et al. 1950) have all noted this dimension of political ideology. The claim of moral judgment research is that such differences in political ideology in part reflect a developmental difference. (p. 164)

The emphasis from the cognitive developmental perspective is on the overall construal of the situation and the limitations of what is perceived to be relevant. The postconventional subject is seen to bring a more complex and sophisticated theoretical viewpoint to the issues and to comprehend the wider social and political implications of what is going on in the situation (Weinreich-Haste, 1983).

In exploring the relationship of moral stages and the content of moral judgments, consideration needs to be given to the way in which moral stages are assessed. With Kohlberg's measure, the subject's stage of moral development is inferred from responses made to hypothetical moral dilemmas. The scoring procedures for the interview protocols have been revised by Kohlberg a number of times since his original 1958 scoring system. A substantial revision was prompted by a stage-regression problem. Initially, Kohlberg interpreted the apparent regression of some college subjects from Stage 4 or 5 to the relativistic egoism of Stage 2 as a transitional phase, a "Stage 4 1/2" between conventional and postconventional morality (Kohlberg & Kramer, 1969). Kohlberg (1973a) later redefined stages to include A and B substages: Type A, a normative order and utilitarian orientation at each stage, and Type B, a

justice and ideal-self orientation. Stage 4 1/2 became Stage 4B in the new issue scoring system. Kohlberg's modifications of his scoring procedure represent successive attempts to clarify the difference between "structure" and content in assessing the moral criteria used (see Rest, 1979a).

Rest developed the Defining Issues Test (1974, 1979b) as a paper and pencil, objectively scored alternative to Kohlberg's interview measure of moral development. In contrast to Kohlberg, Rest (1979a) maintained that the focus of his measure is not on assessing structure independent of content, but on the interrelationships of structure and content.

Hypothetical moral dilemmas are used in the Defining Issues Test (Rest, 1974, 1979b): three of Kohlberg's dilemmas are used and the other three dilemmas are similar in content (see Table 1). Instead of answering open-ended questions about the dilemmas, the subject indicates a preference from several stage prototypic statements based on Kohlberg's stage topology by rating and ranking these statements.

Different indices of moral development can be derived from the Defining Issues Test, that is, stage scores, P Index and D Index. Twelve statements follow each dilemma and the subject rates and ranks these statements in terms of their importance in making a decision in the dilemma. A stage score is calculated by summing the weighted ranks of those statements which are considered to be characteristic of the stage. The P Index represents the sum of the weighted ranks given to "principled" items, i.e., Stages 5A, 5B and 6. More recently, Rest (1979a) has recommended the use of the D Index, a reliable overall index of moral development which uses information from all six stages. The D

Table 1

A Summary of Defining Issues Test Dilemmas


---

Heinz and the Drug - Heinz must decide whether or not to steal a drug to save the life of his wife who is dying of cancer. Should Heinz steal the drug?

Student Take-over - The SDS (Students for a Democratic Society) take over the university's administration building to protest the university president's decision to retain an army training program on campus. Should the students have taken over the administration building?

Escaped Prisoner - Mrs. Jones must decide whether to report a man to the police who she recognized as an escaped prisoner. For eight years after escaping, the man has lived an exemplary life in the community. Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison?

The Doctor's Dilemma - A doctor has been asked by a terminally ill patient for enough morphine to kill her. What should the doctor do?

Webster - Mr. Webster, the owner and manager of a gas station, did not hire an Oriental mechanic because he was concerned about his customers who did not like Orientals. What should Mr. Webster have done?

Newspaper - The principal stopped the publishing of a school newspaper that spoke out against the Vietnam War and school rules. Should the principal stop the newspaper?

---

Index represents an empirically weighted sum of the rating data for all the statements.

Certain consistencies in the content of the dilemmas used in the Defining Issues Test (Rest, 1974, 1979b) are evident. All of the dilemmas involve a conflict between obligation to individual conscience and obligations to society. Another similarity is that the claims by individuals or minority groups for certain rights are not supported by legal or established authority (see Table 1). An example of a dilemma in which individual rights are protected in an individual rights-maintenance of society conflict would be the situation where laws protecting the individual's right to due process has the impact of

limiting the powers of the police and the protection given to society as a whole.

This point can be made clearer by illustrating how the six dilemmas in the Defining Issues Test could be changed so that the emphasis is on the interest of social welfare rather than on the interest of an individual or minority group. The Heinz dilemma could be rewritten so that the issue is whether to violate the individual druggist's property rights in the interest of social welfare as a whole. In the Student Take-over dilemma, the issue could be whether a group representing a majority of students should take over the administration building. The Escaped Prisoner dilemma could be changed so that the concern is the protection of the community rather than the prisoner's welfare. The Doctor's dilemma could be changed to a question of the protection of the doctor's rights at the expense of the patient and other sick people. The Webster dilemma could be a case of reverse discrimination rather than discrimination. Finally, the Newspaper dilemma could be changed so that a majority group publishes the school paper. Even with these changes, the dilemmas represent moral conflicts between individual rights and social welfare as a whole. It is the focus of the issue in the dilemma that has been changed.

The "political position" in the individual rights-maintenance of society dilemma that is supported by the law or an authority figure may affect the moral reasoning that is manifested. The politically conservative subject's responses to the dilemmas in the Defining Issues Test may reflect the fact that the law is not perceived to be in conflict with particular political biases. If the dilemma involves a situation in which the law or persons in authority supports individual



rights at the expense of social welfare, the conservative subject may be more ambiguous in the responses made to the moral dilemmas. In this circumstance, there may be more of an inclination to prefer reasoning that is not Stage 4 "Law and Order." Conversely, the politically liberal subject may tend to use higher level moral reasoning in the Defining Issues Test dilemmas than in the dilemmas where individual rights are protected by legal or established authority.

Dilemma content may also influence the action choices made by politically liberal and conservative subjects. Conservative subjects might be expected to choose more actions in compliance with authority in the Defining Issues Test dilemmas than liberal subjects. In dilemmas where individual rights are protected by legal or established authority, liberal subjects might be expected to choose more actions in compliance with authority than conservative subjects. The investigation of action choices in the two types of dilemmas may increase our understanding of the aspects of a situation that may affect the relationship of a subject's political attitude and/or moral reasoning with the choice of actions in compliance with authority.

The effect of dilemma content on the relationships among moral reasoning, political attitude and action choice has been discussed. Relevant to this discussion is the effect of dilemma content on the relationship between Hogan's (1970) moral judgment dimension and moral reasoning (Rest, 1979a). Hogan's moral judgment dimension is considered to be tied to political attitude. The relationship of Hogan's (1970) ethical attitudes with political attitude is explained in two ways: (a) there is no clear way functionally to distinguish between moral and political attitude domains, and (b) moral and political judgment are

both reflections of a person's personality (Emler & Hogan, 1981). Therefore, it would be expected that subjects with an ethics of social responsibility or an ethics of personal conscience would respond to the two types of dilemmas in a manner similar to politically conservative or liberal subjects, respectively.

Hogan (1970) developed the Survey of Ethical Attitudes to measure the disposition to adopt either the ethics of personal conscience or the ethics of social responsibility. The items in this scale are concerned with attitude toward legal or social compliance, with responses advocating compliance being scored as ethics of social responsibility. This would suggest that ethical attitudes as operationalized by Hogan (1970) would also be related to dilemma action choice.

The interrelationship of structure and content in the assessment of moral development may affect moral development scores and the relationship of these scores with political attitude and ethical attitude. In exploring the question of dilemma content effects on the relationship among moral reasoning, political attitude, ethical attitude, and dilemma action choice, research using the Defining Issues Test can only directly confirm or disconfirm hypotheses about Rest's (1979a) reformulation of Kohlberg's theory. However, it is presumed that such research will ultimately reflect on questions about Kohlberg's theory, if only indirectly.

#### Purposes of the Study

It is possible to alter dilemma content such as to specify whether it is compliance with authority or protection by authority of individual

rights that is at issue. Such specified variation can be related to scores on instruments designed to measure the constructs discussed above in ways that should illuminate the controversies noted. The purposes of this study are to determine the effect of specified variation in dilemma content on:

- a) moral development scores,
- b) dilemma action choice scores,
- c) the relationship between ethical attitude and moral development scores,
- d) the relationship between ethical attitude and dilemma action choice scores,
- e) the relationship between political attitude and moral development scores,
- f) the relationship between political attitude and dilemma action choice scores, and
- g) the relationship between moral development scores and dilemma action choice scores.

### The Problem

Rest's (1979a) and Hogan's (1970) approaches to the study of moral reasoning represent two different perspectives concerning morality, i.e., cognitive developmental and trait approach, respectively. Hogan (1970), critical of Kohlberg's moral stage theory, has developed an alternative conceptualization. Claiming Kohlberg's developmental theory

is politically biased, Hogan (1970) suggested that the orientation to particular moral principles is related to political ideology.

Rest (1979a), departing from Kohlberg's views concerning the structure-content distinction, acknowledged that various task characteristics may affect the moral structures that are manifested. This raises the question of whether varying the content of the dilemmas used to assess moral development in terms of this political dimension will affect the moral development scores obtained.

The emphasis in the Defining Issues Test dilemmas is on individual rights versus social welfare concerns. In addition, legal or established authority is in opposition to individual rights in the dilemmas. Would individuals who are conservative in political-social orientation or have an ethics of social responsibility orientation be less inclined to prefer Stage 4 "law and order" reasoning when individual rights are supported by legal or established authority at the expense of social welfare as a whole? Conversely, would politically liberal or ethics of personal conscience individuals be more likely to prefer Stage 4 "law and order" reasoning when individual rights are supported by authority? Further, would the choice of dilemma actions that were supported by authority vary as a result of dilemma content, political attitude or ethical attitude?

One way to study this problem is to compare moral development scores on the Defining Issues Test dilemmas and scores on dilemmas in which the individual rights concerns are supported by legal or established authority. The moral development scores of individuals who differ in political attitude or ethical attitude can be compared for the two types of dilemmas. By considering both "person" variables, that is,

political attitude or ethical attitude, and "situation" variables, that is, dilemma content, it is possible to investigate the interaction effect of political attitude or ethical attitude and dilemma content on moral development level and dilemma action choice.

### Definition of Terms

Throughout the study various terms will be used as defined below.

Action Choice - Action choice refers to the action in the dilemma that the subject chooses to support.

Compliance with Authority - From a cognitive-developmental perspective, action choices cannot always be predicted by the individual's stage of reasoning since, in any one situation, a moral stage may be compatible with contrasting action alternatives (Rest, 1979a). However, Hogan (1970) defined ethical attitudes as the degree to which people perceive rules as having instrumental value and based the measurement of ethical attitudes on items dealing with attitude to legal or social compliance.

For the purposes of this study, dilemma action choices which are supported by the law or a person generally considered to be in a position of authority, i.e., school principal, university administrator, and boss, are characterized as actions in compliance with authority.

The actions in the Defining Issues Test that are considered to be in compliance with authority are: should not steal for the Heinz and the Drug dilemma, should report for the Escaped Prisoner dilemma, should not give overdose for the Doctor's dilemma, should not take over for Student Protest dilemma, should not hire for the Webster dilemma, and

should stop printing for the Newspaper dilemma. The compliance with authority actions in the alternate dilemmas are: should not steal for the Henry and the Drug dilemma, should not take over for the Student Revolt dilemma, should report for the Bully dilemma, should not perform surgery for Doctor's dilemma, should hire for the Winston dilemma, and should stop paper for the Paper dilemma.

Conservatism - Two different definitions of "conservatism" are used in this study. The term "conservatism" is used in the broader sense of reported tendency to resist change and to prefer safe, traditional and conventional forms of institutions and behavior. It is also used to refer to politico-economic conservatism, characterized by views in support of an ideological system including the following trends: general support of the status quo and for the importance of business enterprise, support of values generally regarded (in Anglo-America) to be conservative, desire to maintain a balance of power in which business is dominant, labor subordinate, and the economic regulatory functions of government minimized; and general resistance to social change. The operational definition of conservatism in the broader sense of the term is scores at or above the median on The Conservatism Scale (Wilson & Patterson, 1970). Politico-economic conservatism is operationalized as scores at or above the median on the Politico-Economic Conservatism Scale (Levinson, 1950). Conservatism is referred to in the text as a high conservatism score.

Ethical Attitude - An ethical attitude is considered to be the disposition to employ a particular category of principled moral reasoning in making moral judgments. The two ethical attitudes involved in

making moral judgments are the ethics of social responsibility and the ethics of personal conscience. For the purposes of this study, the ethics of social responsibility will be operationally defined as a score at or above the median and the ethics of personal conscience as a score below the median on the Survey of Ethical Attitudes (Hogan, 1970).

Ethics of Personal Conscience - The ethics of personal conscience is a viewpoint which deemphasizes the utility of legal procedures and is variously known as "legal naturalism, the ethics of aspiration, or higher law morality" (Hogan & Dickstein, 1972b, p. 409), and "moral intuitionism" (Hogan, 1975a, p. 159). The operational definition of an ethics of personal conscience is a score below the median on the Survey of Ethical Attitudes (Hogan, 1970), and is referred to in the text as a low ethics of social responsibility score.

Ethics of Social Responsibility - The ethics of social responsibility refers to the belief in the instrumental value of the law and is related to "legal positivism, ethics of duty, or positive law morality" (Hogan & Dickstein, 1972b, p. 409), and "moral positivism" (Hogan, 1975a, p. 159). The operational definition of an ethics of social responsibility is a score at or above the median on the Survey of Ethical Attitudes (Hogan, 1970), and is referred to in the text as a high ethics of social responsibility score.

Liberalism - Two different definitions of "liberalism" are used in this study. The term "liberalism" is used in the broader sense of not resistant to change and the tendency not to prefer safe, traditional and conventional forms of institutions and behavior. It is also used to refer to politico-economic liberalism, characterized by an ideological system containing the following trends: opposition to the status quo,

tendency to think in sociological rather than moral-hereditarian terms, a tendency to identify with labor and the "common man" and to oppose the power of business, and support for the extension of the political and economic functions of government. The operational definition of liberalism, in the broader sense of the term, is a score below the median on the Conservatism Scale (Wilson & Patterson, 1970). The operational definition of politico-economic liberalism is a score below the median on the Politico-Economic Conservatism Scale (Levinson, 1950). Liberalism is referred to in the text as a low conservatism score.

Moral Development - Rest's moral development model represents a reformulation of Kohlberg's six-stage scheme. Although "stages" still represent qualitatively different logical systems of thinking, subjects are seen to manifest various organizations of thinking, in varying degrees under different conditions. Consequently, moral development is defined as "an upward shift in the subject's distribution of responses, where 'upward' is defined as increases in higher stages or types at the expense of lower types" (Rest, 1979a, p. 73).

Moral Judgment - Moral judgment is defined in two different ways, representing two different psychological approaches to the study of morality, that is, in terms of developmental stages by Rest (1979a), and in terms of ethical attitudes by Hogan (1970). From Rest's cognitive development perspective, the individual's interpretation of moral dilemma depends on the specific criteria that are used in making moral judgments. Moral judgment is defined as "the fundamental structure by which people perceive and make decisions about their rights and responsibilities" (Rest, 1979a, p. 76). On the other hand, from Hogan's trait perspective, the moral judgment used is essentially an irrational



process and is a function of various personality traits. The moral meaning of the dilemma is external to the individual, rather than a function of the moral judgment used. Both authors use the term "moral judgment" to refer to either the act of judging or the result of judging.

Moral Reasoning - The term "moral reasoning" is used either to refer to the process of thinking about moral problems or the organization of ideas that are employed in or result from this process. Both Rest and Hogan use moral reasoning and moral judgment interchangeably as roughly equivalent terms.

Moral Stages - The six moral stages in Kohlberg's and Rest's stage scheme represent qualitatively different logical systems of thinking.

Moral Structure - Moral structure refers to a logical organization of thinking. The development of moral structures proceed through a series of six stages which, due to their logical interrelationships, form an invariant and culturally universal sequence.

Political Attitude - Political attitude refers to ideological trends which appear to characterize conservatism and liberalism as contrasting approaches to political or politico-economic matters. For the purposes of this study, conservatism is operationally defined as a score at or above the median and liberalism as a score below the median on the Conservatism Scale (Wilson & Patterson, 1970), or the Politico-Economic Conservatism Scale (Levinson, 1950).

A number of research hypotheses follow from this analysis and are set forth below. These are grouped according to main effects and interactions for each variable.

### Research Hypotheses

#### Main Effects - Ethical Attitude

1. Subjects with high ethics of social responsibility scores will have significantly lower moral development levels as assessed by the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores.
2. Subjects with high ethics of social responsibility scores will choose significantly more actions in compliance with authority on the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores.
3. Subjects with high ethics of social responsibility scores will have significantly higher moral development level as assessed by the alternate dilemmas than subjects with low ethics of social responsibility scores.
4. Subjects with high ethics of social responsibility scores will choose significantly fewer actions in compliance with authority on the alternate dilemmas than subjects with low ethics of social responsibility scores.

#### Main Effects - Political Attitude

5. Subjects with high conservatism scores will have significantly lower moral development level as assessed by the Defining Issues Test dilemmas than subjects with low conservatism scores.
6. Subjects with high conservatism scores will choose significantly more actions in compliance with authority on the Defining Issues Test dilemmas than subjects with low conservatism scores.

7. Subjects with high conservatism scores will have significantly higher moral development level as assessed by the alternate dilemmas than subjects with low conservatism scores.
8. Subjects with high conservatism scores will choose significantly fewer actions in compliance with authority on the alternate dilemmas than subjects with low conservatism scores.

#### Interaction Effects - Dilemma Type x Ethical Attitude

9. There will be a significant difference in the relationship of moral development level and ethical attitude for the two types of dilemmas, that is, subjects with high social responsibility scores will have lower moral development level on the Defining Issues Test dilemmas and higher moral development level on the alternate dilemmas than subjects with low social responsibility scores.
10. There will be a significant difference in the relationship of subject's choices of action in compliance with authority and ethical attitude for the two types of dilemmas, that is, subjects with high social responsibility scores will choose more actions in compliance with authority on the Defining Issues Test dilemmas and will choose fewer actions in compliance with authority on the alternate dilemmas than subjects with low social responsibility scores.

#### Interaction Effects - Dilemma Type x Political Attitude

11. There will be a significant difference in the relationship of moral development level and political attitude for the two types of dilemmas, that is, subjects with high conservatism scores will have

lower moral development level on the Defining Issues Test dilemmas and higher moral development level on the alternate dilemmas than subjects with low conservatism scores.

12. There will be a significant difference in the relationship of subjects' choices of action in compliance with authority and political attitude for the two types of dilemmas, that is, subjects with high conservatism scores will choose more actions in compliance with authority on the Defining Issues Test and will choose fewer actions in compliance with authority on the alternate dilemmas than subjects with low conservatism scores.

#### Moral Development - Action Choice

- 13a. The following variables will individually and/or jointly significantly predict Defining Issues Test Action Choice Scores: Defining Issues Test moral development level, ethical attitude, political attitude, Alternate Dilemmas Test moral development level, sex and age.
- 13b. The Defining Issues Test moral development level will account for a significantly greater proportion of the variance of Defining Issues Test action choice scores than ethical attitude, political attitude, Alternate Dilemmas Test moral development level, sex or age.
- 14a. The following variables will individually and/or jointly significantly predict Alternate Dilemmas Test action choice scores: Alternate Dilemmas Test moral development level, ethical attitude, political attitude, Defining Issues Test moral development level, age and sex.

14b. The Alternative Dilemmas Test moral development level will account for a significantly greater proportion of the variance of Alternate Dilemmas Test action choice scores than ethical attitude, political attitude, Defining Issues Test moral development level, sex or age.

### Organization of the Dissertation

This chapter includes a general background of the problem, a statement of the problem, purpose of the study, definitions of terms, and research hypotheses. Chapter two consists of a review of the related literature and the justification for the study. The third chapter provides a description of the general design and specific research methods of the study. Chapter four presents the results of the study and an analysis of the data. The fifth chapter is a summary of the findings with discussion including conclusions and implications for education and further research.

## CHAPTER II

### REVIEW OF THE LITERATURE

The six stages of moral development in Kohlberg's (1964, 1969, 1971, 1976, 1981, 1983) cognitive developmental theory are assumed to represent qualitatively different organizations of thinking. The assessment of Kohlberg's moral stages involves inferring the underlying organization of thinking from subjects' responses to moral dilemmas. In the assessment of cognitive stage structure, Rest (1979a) suggested that it is important to take into account various attributes of test situations that affect the structural organization of thinking manifested.

If the content of moral problems influences the subject's organization of thinking, particular similarities or differences in the dilemmas used in the assessment of moral development may be critical. By investigating the effect of specified variation of dilemma content on moral development scores, action choices, and the relationship of political attitude and ethical attitude with these variables, it may be possible to gain a better understanding of the interrelationship of moral structure and content.

A review of literature which is pertinent to an investigation of the relationship of moral judgment, dilemma content, dilemma action

choice, political attitude, and ethical attitude follows. This literature consists of (a) studies of the relationship between moral reasoning and political attitude, (b) studies of the relationship between Hogan's and Kohlberg's moral judgment dimensions, (c) studies of the relationship between moral reasoning and dilemma content, and (d) studies of the relationship between moral reasoning and dilemma action choice.

### Moral Reasoning and Political Attitude

Contradictory interpretations of the relationship found between moral reasoning and political attitude have been given (e.g., Rest, Cooper, Coder, Masanz & Anderson, 1974; Emler & Hogan, 1981). From a cognitive developmental viewpoint, differences in political attitude in part reflect differences in moral development. Critics (e.g., Emler, 1983; Emler & Hogan, 1981) of Kohlberg's theory, however, view the relationship found between moral stages and political attitudes as evidence that stages represent orientations toward politico-social values rather than moral reasoning.

Prior to reviewing the moral reasoning-political attitude research, a discussion is presented of methodological issues concerning the moral reasoning and political attitude measures employed in the reviewed studies. In addition, a brief overview of different characterizations of political attitudes, and, in particular, the liberalism-conservatism dimension, used in the studies is presented.

In the studies reviewed, Kohlberg's, Rest's, and Hogan's measures of moral reasoning typically are employed. Therefore, the research

review is organized in terms of the moral judgment measure used. In addition, studies of the test characteristics of Rest's and Hogan's measures in relation to political attitudes are reviewed. Finally, a summary of the findings of these studies is presented.

### Methodological Issues

A discussion of several methodological issues concerning the studies reviewed will help to make clearer the implications of the findings regarding the relationship between moral reasoning and political attitude.

The studies of the relationship of moral reasoning and political attitude that are reviewed cover a span of fifteen years. During this time, both Kohlberg (1969, 1971, 1976, 1981, 1983) and Rest (1974, 1979b) have modified their conceptions of moral reasoning. Kohlberg has made several changes in the original 1958 Moral Judgment Interview scoring system over the years. Kohlberg, Colby, and Damon (cited in Rest, 1979a) report that data scored by Kohlberg's 1958 system and by the 1978 system correlated only .39.

Three different scoring procedures used with Kohlberg's Moral Judgment Interview are aspect scoring, intuitive issue scoring, and standardized issue scoring. Each of these procedures involves a different unit of analysis. The aspect scoring method defines moral stages in terms of twenty-five aspects, grouped under major sets, for example, rules, conscience, and welfare of others. Sentence scoring and story rating are two methods of scoring by aspect. With sentence scoring, the subject's statements are scored by aspect and stage based on stage prototypic statements included in the manual. A profile of



stage usage is calculated from the percentage of statements at each stage. The story rating method involves assigning the subject's total story response to a stage.

With the intuitive issue scoring procedure, the unit of analysis are issues representing types of content, for example, laws and rules, conscience, and authority. A subject's ideas on each issue are intuitively assigned a stage based on the definition of stage thinking for each issue.

In the standardized issue scoring procedure, criterion concepts, representing the reasoning pattern that is most distinctive of a given stage, are the unit of analysis. Criterion concepts are defined for each stage on each issue for each story in a standardized interview. The standardized interview probes only two issues for each of three stories.

Several different indices of moral development have been used with the various scoring procedures. Stage typing involves assigning a subject to a single stage. However, since stage usage by a subject is generally not limited to only one stage, subjects have been stage typed by predominant usage of a stage or in terms of the highest stage of substantial use. Another method of handling stage mixture has been to intuitively weight a dominant and a minor stage of response. One difficulty with stage typing is that information is often thrown away. Reporting the percent-moral-reasoning-by-stage, that is, percentage of usage of each stage, avoids this problem. Another index used by Kohlberg which preserves information about subjects' use of other stages is the Moral Maturity Score (MMS). The Moral Maturity Score is a weighted average of stage usage ranging from 100 to 600. This score is

calculated by multiplying the percent usage of each stage by its number, that is, the Stage 1 percent is multiplied by 1, the Stage 2 by 2, and so on, then adding the products.

In the eight moral judgment-political attitude studies reviewed using Kohlberg's measure, six different scoring methods are used: (a) "pure" stage only, (b) percent-moral-reasoning-by-stage, (c) "pure" stage and "mixtures," (d) stage at which 25% of responses are given, (e) stage of predominant use, and (f) mean Moral Maturity Score. Based on the divergence in methodology of the studies using Kohlberg's measure, a strict comparability of the findings is not possible.

Rest's Defining Issues Test (1974, 1979b) is used in five of the studies reviewed. Both stage scores and the P Index are used in these studies. A stage score is calculated by summing the weighted ranks given to statements assumed to be representative of a particular stage. The four ranks for each dilemma are weighted by assigning four points to the statement ranked as first in importance in each dilemma; three points to the statement ranked as second; two points to the statement ranked third; and one point to the statement ranked fourth. Points are totaled across the six stories for each stage, and thus, scores are derived for each of the stages. The P Index is calculated by summing the scores of Stages 5A, 5B and 6. The P Index is interpreted as the relative importance given to principled moral considerations in making a moral decision. Studies of the reliability and validity of the Defining Issues Test indices are discussed in Chapter 3. Rest (1979a) reported that while the reliability of the P Index is generally in the .70's and .80's, the reliability of the stage scores seldom are above the .50's and .60's.

Another Defining Issues Test index that has been recommended by Rest (1979a) is the D Index, an overall index of moral development which uses information from all six stages. The D Index represents an empirically weighted sum of the rating data for all the dilemma statements. The reliability of the D Index is reported as generally in the .70's and .80's.

The studies of Hogan's (1970) moral judgment dimension and political attitude are more consistent because only one scoring method is possible for the Survey of Ethical Attitudes. Hogan reported the parallel form reliability of the Survey of Ethical Attitudes to be .97 and .88 for two samples.

In addition to the shortcomings of the measures of moral judgment used, the measurement of political attitude in the studies reviewed is problematic. The limitations of studying political attitudes using the survey method has been discussed by Weissberg (1976). His major contention is that the research strategies and statistics used lead the researcher away from highly consensual attitudes toward issues over which people disagree. Such highly consensual issues--as keeping the constitution and private property--are very important to most people, but they would have a low salience if these issues are largely settled in a society.

Controversial issues are required in a measure of political attitudes for a number of reasons (Weissberg, 1976). The very idea of "ideological" theme implies political conflict. Furthermore, a methodological requirement of a "good" scale is that it must discriminate between different categories of people. If there is agreement on an issue, that question is usually dropped from the scale. In addition,

there must be variance to explain or the common statistical procedures are meaningless.

The definition and measurement of the political attitude construct is difficult for a number of other reasons. The meaning of the terms "liberal" and "conservative" often shift, depending upon the researcher's attitude and the political climate in which an issue is raised. The particular issues which are the subject of controversy will vary over time and for different groups of people. Most public issues are highly complex and can be construed as complexes of different value issues.

Eleven of the 21 studies reviewed use unpublished measures of political orientation. The only published measure used in more than one study was the Rokeach (1960) D Scale (Alker & Poppen, 1973; Hogan, 1970; Lorr & Zea, 1977), a measure of the personality trait of dogmatism. Forty-eight different scales of political orientation are used and 81% of these are unpublished. One item self-report scales of liberalism-conservatism of dubious reliability and validity are used in nine studies.

### Political Attitude

A problem in studying political attitude is that it is a very loosely defined construct, definitions tending to vary from one study to another. Although several researchers have investigated the relationship of political attitude and moral reasoning, few of them have used the same measure of political attitude (e.g., Candee, 1976; Fontana & Noel, 1973; Snodgrass, 1975). In many cases, unpublished measures designed by the researcher were used. Therefore, a description of

various characterizations of political attitude, specifically the liberal-conservative dimension, will be presented and discussed briefly below.

Huntington (1957) outlines three conflicting conceptions of conservatism, i.e., aristocratic, autonomous, and situational. Conservatism is defined by the aristocratic theory as the ideology of a specific historical movement; arising as a reaction to the French Revolution, liberalism, and the rise of the bourgeoisie. The autonomous theory holds that conservatism is an autonomous system of ideas defined in terms of universal values such as justice, order, balance, and moderation which is independent of any particular group or specific historical forces. The situational theory views conservatism as a system of ideas employed to justify any established social order.

Huntington (1957) argues that the situational theory provides the most adequate conception of the nature of conservatism. Huntington (1957) states,

The characteristic elements of conservative thought--the "divine tactic" in history; prescription and tradition; the dislike of abstraction and metaphysics; the distrust of individual human reason; the organic conception of society; the stress on the evil in man [sic]; the acceptance of social differentiation--all serve the overriding purpose of justifying the established order. The essence of conservatism is the rationalization of existing institutions in terms of history, God, nature and man [sic]. (p. 457)

Conservatism is considered to appear only when fundamental challenges are made to the existing society. From this viewpoint, Huntington (1957) maintained that the defense of existing liberal institutions will require American liberals to lay aside liberal ideology and to accept the values of conservatism.

A distinction between positional and inherent ideologies is also discussed by Huntington (1957). Conservatism, as a positional ideology, is assumed to reflect the external environment of a group rather than its permanent internal character. Conservatism, used to justify any existing order, does not promote a particular utopia or ideal society. On the other hand, Huntington (1957) defined inherent ideology as the "theoretical expression of the interests of a continuing social group" (p. 467). Liberalism, as an ideational ideology, is seen to evolve from one generation to the next, and thus, to represent an inherent ideology.

Opposed to the situational view of conservatism, Harbour (1982) contended that conservatism cannot be defined solely in terms of opposition to fundamental changes in the social system. He rejected the idea that individuals who wish to preserve liberal, communist and semifascist institutions could all be labeled conservative. Harbour (1982) suggested that conservatism can be better understood in terms of its critique of modernity, with its trends toward secularization, rationalization, industrialization, centralization of power, and the decline of traditional religious, moral, cultural, and political values. Further, Harbour (1982) claimed that modern conservatives must attack what is now traditional in the name of older traditions. However, modern American conservatism is seen to have borrowed much from various dimensions of liberal thinking, particularly classical liberal notions of economic freedom.

Classical liberalism has been described as a middle-class movement that sought to free business enterprise from the restraints of government (Laski, 1962; Rossiter, 1968). It appealed for constitutional guarantees, individual rights, and the sanctity of private property,

primarily for people of means. In the late nineteenth and early twentieth century, classical liberalism's methods and policies were progressively modified. Modern liberalism came to advocate collectivist means, invoking the state in aid of individuals and disadvantaged groups (Rossiter, 1968).

Modern liberalism, in this transformation from earlier laissez-faire "individualism" to a socialistic "collectivism," attempts to reconcile the pursuit of individuality with sociality and membership in a community (Gaus, 1983). Modern liberalism is described by Gaus (1983) in terms of the form that this reconciliation takes and the way in which the theory of human nature is used to justify liberal-democratic institutions. Gaus (1983) suggests that modern liberalism involves the reconception of notions to give them an important developmental dimension. The reasons for repressing "anti-social" capacities are based on the grounds of the promotion of one's wider development. Further, modern liberals are seen to uphold liberty for all on the grounds of promoting human development.

Spitz (1982) raised the question of whether political labels are meaningful since an individual can be conservative in some things and liberal in others, conservative and liberal positions change, political parties change, and the meaning of political labels differ across national boundaries. He attempted to summarize a common core of meaning that transcends the diversity of contemporary liberal and conservative doctrines. He stated,

In sum, then, what distinguishes liberalism from conservatism is that, politically, liberalism stands for democracy and the equality of man, while conservatism inclines toward oligarchy based on certain alleged inequalities of men [sic]; economically, liberalism represents the interests of the lower classes and defends vested property rights; intellectually, liberalism

is committed to individual liberty and the freedoms of inquiry and expression, while conservatism is far more concerned with the applications of an already existing objective Truth and the consequent curbing of erroneous and pernicious doctrines. (Spitz, 1982, p. 39)

Political labels, as categories of analysis, are considered by Spitz (1982) to serve as a guide to rather than a specific description of political realities.

The English-Canadian context is illustrative of the problem of defining the meaning of political labels. Horowitz (1966) averred that the liberalism of Canada's Liberal party cannot be identified with the liberalism of the American Democratic party because of significant difference in the political situation in the two countries. He identified five un-American characteristics of English-Canada: (a) the presence of Tory ideology in the founding of English Canada by the Loyalists, and its continuing influence; (b) the power of Whiggery, or right-wing liberalism in Canada versus liberal democracy in the United States; (c) the ambivalent centrist character of left-wing liberalism in Canada versus the leftist position of left-wing liberalism in the United States; (d) the presence of an influential socialist movement in English-Canada; (e) the failure of left-wing liberalism in Canada to develop into a "nationalist cult" to the exclusion of either Toryism or Socialism.

The three components of English-Canada political culture--conservatism, socialism, and liberalism--are considered to be interdependent on each other. The uniqueness of English-Canada, according to Horowitz (1966), arises from the fact that Canadian socialism has been strong enough to evoke a centrist response from liberalism, but, unlike European socialism, has not been strong enough to match or overshadow



liberalism. Horowitz (1966) described the language of the Liberal party of Canada as:

ambiguous and ambivalent, presenting first its radical face and then its conservative face, urging reform and warning against hasty, ill-considered change, calling for increased state responsibility but stopping short of socialism openly, speaking for the common people but preaching the solidarity of classes. (p. 165)

The political process is seen to involve the center party moving to the right to deal with the conservative challenge when the left is weak, and moving to the left when the left is strengthened to deal with that challenge. Horowitz (1966) pointed out that the Canadian Liberal party, unlike the Democratic party in the United States, does not claim to represent the opposition of society to domination by organized business but, rather, to be based on the reconciliation of all, the solidarity of the nation as against divisive "class parties" of right and left.

Several studies of political attitude have related conservatism and liberalism to underlying personality dynamics (for example, Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950; McClosky, 1958; Wilson, 1973). Typically in these studies, conservatism has been associated with negative personality characteristics, e.g., authoritarianism, facism, racism, dogmatism, and rigidity. The methodology of these studies usually involved placing subjects along a scale from extreme conservatism to extreme liberalism based on their responses to questions concerning controversial social and personal problems.

Critical of the studies by Adorno and his associates (1950), Shils (1954) questioned their conceptualization of the liberalism-conservatism dimension. He argued that representing political attitudes as a unidimensional scheme is more appropriate for the nineteenth rather than the twentieth century. Shils (1954) pointed out that the researchers

failed to discriminate different types of outlook that are in disagreement with the views of the extreme right, e.g., liberal, liberal collectivist, radical, Marxist, et cetera. While the researchers have demonstrated a relationship between general disposition and particular political attitudes, they failed to observe the existence of an authoritarianism at the Left pole of the continuum like the authoritarianism of the Right.

In a review of research on the relationships of liberalism and conservatism, Ziegler and Atkinson (1973) reported varied results. Six different positions regarding this relationship were discussed: (a) no systematic relationship between aspects of liberalism and conservatism (Converse, 1964); (b) a unidimensional ideological dimension described as liberalism-conservatism (or radicalism-conservatism) (Comrey & Newmeyer, 1965); (c) a strong relationship in the political sphere, but not the expected ones (Kerlinger, 1967; Axelrod, 1967); (d) a relationship only between narrowly defined topics (Kerr, 1952); (e) a strong relationship only for subjects who are informed and highly involved (Converse, 1964; McClosky, Hoffman, & O'Hara, 1960); and (f) relationships that are highly ideosyncratic, reflecting personal factors and situations (Converse, 1964). Ziegler and Atkinson (1973) offered an integrating description to reconcile these alternative viewpoints. They proposed that some groups do act in terms of political ideology, and others do not. That is, the more sophisticated persons tend to be the ones who find ideological considerations relevant and whose behavior is, to some extent, guided by ideology.

Disagreement also exists concerning the relationship of liberalism and radicalism (Kerlinger, 1984). Radicalism has been assumed to be a

phenomenon of the extreme left and the polar opposite of conservatism. However, radicalism, centered in the opposition to existing institutions, is also viewed as opposed to both liberalism and conservatism (Kerlinger, 1984).

Summary. A brief overview of several viewpoints concerning political liberalism and conservatism has been presented. Much controversy exists over the meaning and nature of this political attitude dimension. Various positions concerning the relationship of conservatism and liberalism to the historical process and to each other were discussed. Although it is recognized that variation in the meaning of the political labels varies from one issue to another, from one time period to another, and from one place to another, there appears to be some agreement as to the basic premises of contemporary liberalism and conservatism.

#### Kohlberg's Moral Judgment Measure and Political Attitude

Twelve studies are reviewed which use Kohlberg's Moral Judgment Interview in the investigation of the relationship of moral judgment, political attitude, and/or political activism.

A study by Haan, Smith, and Block (1968) of political activism, centering on the Free Speech Movement (FSM) at Berkeley in 1964, has been widely cited to support the relationship between principled reasoning and political activism. The results of this study showed "strong associations between political protest, social action, and principled reasoning--qualified by the finding that premoral men also protest--and that young people of conventional moral reasoning are inactive" (Haan, Smith & Block, 1968, p. 198). Differences between

principled subjects and other subjects were reported in terms of family-social background and personality characteristics. In general, principled subjects tended to come from politically liberal families and to have positive personality characteristics.

However, there are a number of methodological problems in the Haan et al. (1968) study that render such conclusions problematic. A large part of the data collected were not used. The original analysis involved 54% of the total sample, including only those subjects who could be assigned to one of five "pure" types of moral reasoning based on Kohlberg's stage scoring method. A written form of Kohlberg's Moral Judgment Interview was used and the subject's skill in written expression may have affected the responses given.

In addition, very simple data analysis was used, consisting of the comparison of means and percentages of the moral reasoning groups. The data for the University of California FSM sit-in arrestees is reported in terms of the proportion of the total sample. The fact that 75% of Stage 6 males and 86% of Stage 6 females of the total Stage 6 sample were arrested, as compared to 6% Stage 4 males and 12% Stage 4 females of the total Stage 4 sample, is impressive. However, it may also be misleading in suggesting that the majority of the University of California students arrested were at the Stage 6 level. Actually, when the total group arrested is considered, only 7% of the arrested students were Stage 6, 19% were Stage 5, 43% were Stage 4, 25% were Stage 3, and 6% were Stage 2. Although the researchers explained the participation of non-principled students by reporting that most of the subjects at each stage level used different reasoning to support their participation in the FSM sit-in, no data were reported.

Subjects' self-descriptions formed the basis of the generalization about the differences in moral reasoning groups' personality characteristics and family background. Based on the mean differences in group responses on a biographical questionnaire and two Q-sorts, the researchers (Haan, Smith, & Block, 1968) concluded that the principled groups "are concerned with their interpersonal obligations while they reject traditional values implicit in the Protestant Ethic" (p. 193). In contrast, conventional moral groups have "modeled themselves after their parents and have accepted the traditional values of American society" (p. 194). The premorals' "families" did not seem to encourage their children to evolve a sense of responsibility and autonomy" (p. 196). As suggested by Rothman and Lichter (1978), the self-descriptions may tap only the student's rationalization. Given the liberal ideology of the parents of student activists, the student may be responding to items by giving appropriate ideological responses.

In a related article, Block, Haan, and Smith (1968) proposed that "activism be defined independently of political ideology in order to extricate the correlates of activism from those of liberalism per se" (p. 208). However, the evidence suggests that activism and ideology are confounded in the FSM sit-in study (Haan, Smith, & Block, 1968). The subjects were asked to rate themselves on an 8-point Radical-Conservative scale and on a 5-point Pro FSM scale. The findings were that the Premoral and Principled groups rated themselves politically more radical and were strongly in support of the FSM. Conventional groups were more conservative and least in support of the FSM. Furthermore, principled subjects more often reported their families to be politically liberal.

In summarizing the characteristics of student activists, Block et al. (1968) indicated that the "origins of student activists are in the economically, educationally, and socially privileged strata of American society" (p. 214) and that the "parents of activist students themselves tended to be politically liberal" (p. 215). The political activism of a high proportion of principled subjects was interpreted to mean that these students are more autonomous and are not guided by conventional wisdom. However, Simpson (1974) provided another interpretation. She stated,

At the post-conventional level the principles displayed may simply be the learned values of a different and smaller reference group so well internalized that its members believe themselves to be functioning autonomously. (p. 94)

The thinking or behavior of principled activists may be a function of their membership in a particular social group rather than a consequence of acting autonomously.

In addition to the FSM activist, Haan et al. (1968) sample included Peace Corp trainees, conservatives active in such organizations as California Conservatives for Political Action, members of nonpolitical organizations and random groups of university students. Subjects completed a questionnaire on involvement in political-social activities. Although the conventional moral group is reported to be "inactive," their participation in social service activities was not significantly different from other groups. The difference in activity level is based primarily on the premoral and principled groups' greater involvement in political protest and radical social action (Rothman & Lichter, 1978).

Measurement issues aside, the finding that a large proportion of pre-moral subjects also participated in the FSM sit-in and in other political activities is difficult to explain by Kohlberg's theory.

Initially, Kohlberg (1969) considered the university Stage 2 subject to have functionally regressed. He later changed his mind and eliminated the apparent regression through certain revisions in the stage definitions, i.e. Stage 4 1/2 (Kohlberg, 1973a). A discussion of Kohlberg and Candee's (1984) reanalysis of the Haan et al. (1968) data using the revised scoring system is presented later. In transition from conventional to postconventional morality, these subjects are considered to resemble in content young Stage 2 subjects, but their level of discourse is more abstract and philosophical. Rothman and Lichter (1978) criticised the use of the "regression" explanation, suggesting that it gives the impression the researchers want it both ways. If radical students score at the postconventional level, it is because they adhere to higher standards; if they score at preconventional level, it is because they regressed.

In summary, the results of the Haan et al. (1968) study show that Principled and Premoral groups differ from the Conventional moral group in characterizing themselves as more radical, more in support of the FSM, and more active in political protest. A larger proportion of the Premoral and Principled groups were arrested in the FSM sit-in than were Conventional subjects. The Premoral and Principled groups also described their families to be liberal more often than the Conventional Moral group. Various differences in personality profiles were reported for the three groups.

Consistent with the findings of the Haan et al. (1968) study, Fishkin, Keniston, and MacKinnon (1973) found that Stage 4 is significantly positively related to conservative ideology ( $r=.635$ ,  $p<.01$ ) and negatively related to both violent radicalism ( $r=-.484$ ,  $p<.01$ ) and

peaceful radicalism ( $r = -.40$ ,  $p < .01$ ). Postconventional reasoning was significantly negatively correlated with disagreement with conservative slogans (Stage 5,  $r = -.35$ ,  $p < .01$ ; Stage 6,  $r = -.40$ ,  $p < .01$ ), but not with agreement with radical slogans. Preconventional reasoning was significantly correlated only with violent radicalism ( $r = .34$ ,  $p < .01$ ).

Both the measurement of political ideology and moral reasoning was different from the Haan et al. (1968) study. Fishkin et al. (1973) measured political ideology by asking subjects to respond to a list of 31 political slogans by indicating on a 5-point scale their extent of liking or disliking for each slogan, for example, "Make Love Not War," "Better Dead Than Red." Based on a principal-component analysis of slogan responses, three basic ideology scales and three derived scales were developed: Violent Radicalism, Peaceful Radicalism, Conservatism, General Radicalism, Radicalism versus Conservatism, and Agree Response Set.

Instead of classifying students for "pure" stage level, Fishkin et al. (1973) scored subjects' dilemma responses using Kohlberg's issue-scoring system. Percent-moral-reasoning-by-stage scores were calculated to permit correlational analysis. On the basis of these scores, subjects were classified as preconventional, conventional, or postconventional.

The researchers (Fishkin, Keniston, & MacKinnon, 1973) concluded that their results were remarkably similar to those of the Haan et al. (1968) study. In both cases, preconventional and postconventional subjects tended to espouse a more radical ideology or action; and conventional moral subjects were associated with the least radical ideological or behavioral position.



Political attitude was one of the psychological correlates of moral reasoning types considered by Sullivan and Quarter (1972). The subjects in their study were first-year male volunteers at the University of Toronto. The subjects were classified into five moral types based on their responses to Kohlberg's dilemmas. In addition to three types described in Kohlberg's stage scoring system, the researchers developed two hybrid type classifications, Principled Absolutists and Instrumental Relativists. Although the Principled Absolutists and Instrumental Relativists are usually classified as Kohlberg's Stage 4 and Stage 2, respectively, these two hybrid types were considered to have important differences from others classified as Stage 4 and Stage 2 in Kohlberg's scoring system.

Political attitude was measured by a specially constructed Issues Scale (Quarter, 1970) which focused on the subject's orientation toward political issues at the University of Toronto. Sullivan and Quarter (1972) concluded that Postconventional subjects tend to have the most radical political attitudes, with Principled Absolutists and Instrumental Relativist closest to Postconventionals in their political attitudes. The five moral types also differ on personality traits, measured by the Omnibus Personality Inventory (Heist & Yonge, 1968).

Sullivan and Quarter (1972) only reported the political attitude percentile ranks on the Issue Scale (Quarter, 1970) for the five moral types. The percentiles were calculated for the sample of 248 subjects employed by Quarter (1970). No tests of significance were reported. The Principled Absolutist, Instrumental Relativist and Postconventionals have political ideology percentile ranks of 70, 69, 68, respectively,

compared to Transitionals at the 56 percentile and Conventionals at the 40th percentile.

The Principled Absolutist is described as superficially resembling Stage 4 subjects because they base their choice on categorical obligation to save life, but the value of life is not "rule bound." Instrumental Relativists are similar to Stage 2 subjects, but are "clearly committed to postconventional forms of action" (p. 154).

The political ideology percentile scores suggest that Instrumental Relativists (Kohlberg's Stage 2) are closer to Postconventionals than to Conventionals in their political ideology. This finding is consistent with that of Haan et al. (1968) and Fishkin et al. (1973). However, it is not known whether these differences represent random error or real differences because no significance tests are reported.

Further evidence of a relationship between Kohlberg's moral stages and political ideology was provided by Fontana and Noel (1973), employing a different measure of political ideology. The political ideology measure consisted of 10 Likert-type items, five items from the New Left Scale (Christie, Friedman, & Ross, 1969) and five conservatism items written by the researchers, and the ideology scores were used to divide the subjects into three groups, Left, Middle, and Right. Political activism was measured by the subjects' indicating their frequency of participation in seven activities during the preceding year. Moral development was assessed in terms of percent-moral-reasoning-by-stage.

The analysis of variance indicated that individuals on the Right were highest and those on the Left were lowest in Stage 4 reasoning. The correlation of ideology and Stage 4 reasoning was significantly

different than zero ( $r = -.35$ ,  $p < .05$ ). Although analysis of variance failed to yield an ideology difference for either Stage 2 or 6, the correlational analysis produced a significant relationship for Stage 2 ( $r = .23$ ,  $p < .05$ ). The results suggested that Leftist are higher than Rightist in their use of Stage 2 reasoning. No substantial relationship was found between ideology and Stage 6 reasoning. Only minimal differences were found in moral reasoning between student activists and students who were not activist.

Fontana and Noel (1973) also investigated the moral reasoning among three university role groups, that is, students, faculty, and administrators. The researchers hypothesized that administrators would be highest in Stage 4 because of their role in preserving the organization and facilitating its smooth operation. Faculty were expected to be highest in Stage 5 and 6, and students to be highest in Stage 2. Whereas administrators were found to be higher in Stage 4 than faculty or students, there was no difference found in faculty and student moral reasoning. Faculty activists were higher in their use of Stage 5 and lower in Stage 2 than inactivists. In addition, faculty in the natural sciences were found to use more Stage 4 and less Stage 5 reasoning than faculty in the humanities and social sciences.

Kohlberg's moral stages were related to measures of personality structure and ideological preference by Alker and Poppen (1973). Tomkin's (1964) Polarity Scale was used to measure ideology. This scale consists of pairings of humanistic and normative views on a given topic. The subject may select one or the other alternative, or endorse both or reject both. The humanistic ideology is characterized by a point of view in which human experience and human emotions are considered the

ultimate source for the discovery and justification of values; whereas, a normative ideology emphasizes that value resides in external authorities or standards (Tomkin, 1964). Other measures employed were: the written version of Kohlberg's Moral Judgment measure (predominate stage was scored as actual stage), D Scale (Rokeach, 1960), Locus of Control Scale (Rotter, 1966), and the Machiavellianism Scale (Christie & Geis, 1970).

To analyze the data, a nonmetric representational procedure was employed. A similarity was found in two-dimensional space between humanism or left ideology and a choice of principled moral versus premoral orientation and a grouping between dogmatism and right ideology. In three-dimensional space, principled morality was grouped with Machiavellianism at one end of the bipolar axis while both dogmatism and humanism were at the other end.

The correlational analysis indicated that the overall measure of moral maturity was uncorrelated with any of the measures. However, principled versus premoral was significantly correlated with Tomkin's Right ( $r = -.43$ ,  $p < .05$ ), with Machiavellian Tactics Scale ( $r = -.35$ ,  $p < .05$ ) and with personal externality locus of control ( $r = -.45$ ,  $p < .05$ ).

Alker and Poppen (1973) suggested that the principled moralist and the Machiavellian have in common choices which are free from constraints of conventional morality and both have authentic inclination. In contrast, humanism and normativism which are grouped along with dogmatism are "ready-made solutions to life's dilemmas" (p. 665). They defined this axis of contrast as a locus of existential responsibility. The sweeping generalizations by Alker and Poppen (1973) do not appear to

be entirely supported by their data, particularly since the overall moral maturity score did not significantly correlate with any measure.

Most of the studies of political activism and moral reasoning have involved university students. Leming (1974), however, used a high school sample to investigate moral reasoning, sense of control, and social-political activism. The written form of Kohlberg's Moral Judgment Interview was used, which the researcher conceded may have caused many subjects to abbreviate their responses. A Moral Maturity Score (MMS) was calculated by first issue-scoring the responses, multiplying the percentage usage of a particular stage by the actual stage itself, and then summing the product of this multiplication. Subjects were also classified by stage used a majority of the time.

Three groups were compared, that is, Cambodian demonstrators (CAM), students involved in the Community Issues Program (CIP), and a random sample of students (RAN). No significant difference in MMS was found for the three groups. The Cambodian demonstrators group consisted of students who were suspended for demonstrating inside the school against the war in Vietnam in May, 1970. Leming (1974) noted that the CAM group, whose activism involved breaking the rules, had only 4% at Stage 4, whereas CIP had 22%. There were no significant differences in the groups in internal locus of control, political efficacy, or sense of competence. These three concepts relate to the subject's feelings about whether efforts to affect change are worthwhile. The lack of significance could be partially due to the fact that 65% of the subjects were at Stage 3.

In addition to investigating the relationship of subjects' moral development scores and political ideology, Candee (1976) explored the

relationship of these variables to the subject's responses to a questionnaire concerning two political events, the Watergate and Lt. Calley situations. The answers to the questionnaire were scored as either consistent with human rights or with maintenance of conventions and institutions. Examples of items on the Watergate-Calley Questionnaire (Candee, 1976), with the choices considered to be consistent with rights indicated, are:

Do you approve or disapprove of Lt. Calley having been brought to trial? (Approve) (p. 1297)

Do you consider Calley guilty or innocent of murder? (Guilty) (p. 1297)

Daniel Ellsberg stole top secret papers that belonged to the Pentagon because they contained information about the Vietnam War that he felt the public should know. Was Ellsberg right to steal the Pentagon Papers? (Yes) (p. 1297)

The Rights Index, representing the percentage of choices consistent with rights, was considered to be nonpartisan.

In Candee's (1976) study, moral stage was defined as the highest stage at which the subject gave 25% of his/her responses on Kohlberg's moral judgment dilemmas. The measure of political ideology consisted of the subject rating themselves on a 9-point scale from highly conservative to radical, relative to others their own age. Six judges, three conservatives and three liberals, were asked to complete the Watergate-Calley questionnaire. The judges agreed 100 percent on the choices that were consistent with the concept of rights for 11 of the 20 items, and 5 of the 6 judges agreed for 6 items.

Candee (1976) found that persons at each higher stage of moral reasoning more often made choices that were consistent with human rights and less often chose alternatives that were designed to maintain

conventions or institutions; means for stages 2-5 were .48, .57, .70, and .86, respectively,  $F(3,356)=59.37$ ,  $p<.001$ , linear trend  $p<.001$ .

When the results were compared on the basis of candidate preference the pattern of choice by moral stage was the same within each camp. Candidate preference was measured by subjects indicating whether they favored Richard Nixon or George McGovern in the 1972 election. Candee (1976) noted that there was an interaction effect of moral reasoning and candidate preference on political choice. In comparing results on the basis of candidate choice, the greatest difference involved the following issues: impeachment of Nixon, whether Kalmbach was responsible for collecting hush money when he was told by a superior to do so, whether Ellsberg was right to steal the Pentagon Papers, and whether the crimes of Ellsberg's taking the Pentagon Papers and Hunt and Liddy taking papers from Ellsberg's psychiatrist were basically the same. Candee (1976) suggested that where "the facts are most ambiguous, individuals are most influenced by their general political orientations in interaction with their moral reasoning" (p. 1300).

Candee (1976) reported low correlations between moral stage and political ideology,  $r(370)=.29$ , and between moral stage and Candidate Preference,  $r(370)=.27$ . The political ideology scores were obtained by asking subjects to rate themselves, relative to others their own age. The Rights Index was found to correlate much higher with moral stage, political ideology, and Candidate Preference,  $r(370)=.57$ ,  $r(370)=.45$ , and  $r(370)=.53$ , respectively. In a multiple regression analysis, the addition of moral stage significantly increased the multiple correlation. Candee (1976) concluded that persons at each higher stage of moral reasoning more often made choices that were consistent with human

rights and less often chose alternatives that were designed to maintain conventions or institutions.

Further support for the relationship between Kohlberg's moral stages and political attitude was provided by Holstein (1976). Using a sample of upper-class adolescents and their parents, Holstein (1976) reported a significant difference in political attitude for groups differing in moral judgment scores based on Kohlberg's measure. Attitudes toward the following six sociopolitical issues were assessed: wiretapping, fair housing, gun control, capital punishment, medicare and abortion. Classification into moral judgment groups was based on Kohlberg's global issue scoring. The results indicated that all principled Stage 5 subjects had higher liberalism scores than conventional Stage 3 or 4 subjects. All Stage 4 subjects were relatively conservative. In addition, a sex difference in Stage 3 subjects' political attitude was reported. Stage 3 females were found to be more liberal than Stage 3 males. Stage 3 males were more conservative than either Stage 4 or 5 males.

Several follow-up studies of Haan, Smith, and Block's (1968) study of political activism and moral judgment have been conducted (Abramowitz & Nassi, 1981; Kohlberg & Candee, 1984; Nassi & Abramowitz, 1979; Nassi, Abramowitz, & Youmans, 1983). Although the results of these studies differ in some respects from the original Haan et al. (1968) study, the researchers considered their findings to provide support for the relationship among political activism, political ideology, and moral judgment.

In three studies, either those who had participated in the Haan et al. (1968) study or cohorts of these subjects were contacted over a



decade later (Abramowitz & Nassi, 1981; Nassi & Abramowitz, 1979; Nassi, Abramovich & Youmans, 1983). Based on the subjects' responses to a similar questionnaire as the one used in the 1968 study, level of sociopolitical activity, political ideology, moral development, and other personality variables were investigated. Different measures of sociopolitical activity and political ideology were included in the questionnaire, for example, a 14-item measure of subjects' perceptions of the severity of world and national problems, consisting of three factors (Urban-Fiscal Threats, International Human Rights, and Public Interest); Kerpelman's (1972) revised version of the Politico-Economic Conservatism Scale (Levinson, 1950); and a Political Activity Scale (Kerpelman, 1972). Subjects were assigned to moral stages based on predominant stage of usage. Percent-moral-reasoning-by-stage scores were also employed in the Nassi et al. (1983) study.

Pretest measures from the Haan et al. (1968) study were accessible for comparison with posttest measures for only 11 subjects in Nassi and Abramowitz's (1979) study. The major conclusions of this study were that the former FSM activist showed a reduction in their level of political activity and were characterized by a less radical ideology, between radicalism and liberalism. In terms of pretest and posttest moral reasoning level for the 11 subjects, no shift in moral reasoning occurred in three cases, a downward shift occurred in six cases, and an upward shift in two. The researchers point out a number of limitations of their study, for example, small sample size, absence of a control group, and regression artifacts.

The Abramowitz and Nassi (1981) study focused on psychosocial correlates of activism persisters and nonpersisters for a sample of 30

former Berkeley FSM activists with a mean age of 34.4 years. No difference was found in moral development between currently more and less involved arrestees. Persisters were less likely to endorse conservative philosophy, tended to characterize themselves as more radical, and registered stronger approval of the FSM Movement than nonpersisters.

Nassi, Abramowitz, and Youmans (1983) mailed questionnaires to former Berkeley students who had been enrolled during the 1964 Free Speech Movement. Percent-moral-reasoning-by-stage scores were calculated based on subjects' written responses to Kohlberg's dilemmas. Although the same scoring system as used by Fishkin et al. (1973) was employed, no subject was found to be at the preconventional level.

Four of the six political ideology and activism dimensions were found to differentiate postconventional from conventional moral reasoners, that is, Political-Economic Conservatism, Radicalism Self-rating, Political Activity, and Concern for Urban-Fiscal Threats. No significant difference was found for concern about International Human Rights or Public Interests. Using the percentage-of-moral reasoning by stage, Stage 3 was found to be significantly correlated with Conservatism ( $r=.24$ ,  $p<.05$ ); Stage 4 with Conservatism ( $r=.39$ ,  $p<.001$ ), Radicalism ( $r=-.31$ ,  $p<.01$ ) and Concern for Urban-Fiscal Threats ( $r=.38$ ,  $p<.001$ ); Stage 5 with Conservatism ( $r=-.44$ ,  $p<.01$ ), Radicalism ( $r=.33$ ,  $p<.01$ ) and Urban-Fiscal Threats ( $r=-.42$ ,  $p<.001$ ); and Stage 6 with Conservatism ( $r=-.32$ ,  $p<.01$ ) and Political Activity ( $r=.32$ ,  $p<.01$ ). Nassi et al. (1983) view these results as cross-validating the relationship between the moral and political domains across developmental periods and political eras.

Some of the same criticism of the original Haan et al. (1968) study would also apply to these follow-up studies. In addition, the generalizability of the findings are limited by the low response rate (30 out of 104 questionnaires were returned in the 1983 Abramowitz and Nassi study, and 76 out of 320 in the 1983 Nassi et al. study), small sample size (N=15 in the 1979 Nassi and Abramowitz study), and unrepresentativeness of the samples used.

In contrast to the other follow-up studies, Kohlberg and Candee (1984) reanalyzed the data collected by Haan et al. (1968) using a revised stage scoring system. In rescoreing the written dilemma responses of Haan et al. (1968) subjects, Kohlberg and Candee (1984) found that there were no subjects who scored at Stages 2, 5, or 6. The absence of Stage 2 subjects is explained in terms of scoring revision that distinguishes "sophomoritis" relativism from Stage 2. Similarly, the absence of Stage 6 subjects is due to a scoring revision that eliminates Stage 6 from the scoring system although it still exists as a theoretical stage. Stage 4/5 and Stage 5 subjects could not be distinguished on the written form of the interview.

In the reanalysis of the 1968 data, Kohlberg and Candee (1984) tested two hypotheses concerning the relationship of moral judgment and action. The first hypothesis was that a monotonic relationship exists between moral judgment and action. In support of this hypothesis, they found that at each higher stage of moral reasoning a greater proportion of subjects sat in: Stage 3, 10%; Stage 3/4, 31%; Stage 4, 44%; and Stage 4/5, 73%. This is in contrast to the Haan et al. (1968) finding of a bimodal relationship with a greater proportion of subjects at the preconventional and principled stages involved in the sit-in.

The second hypothesis tested by Kohlberg and Candee (1984) was that a greater consistency between deontic judgment, that is, judgment of what is morally right, and action exists at higher stages of moral reasoning. They claimed that,

persons at each higher stage of moral reasoning are more likely to act responsibly [sic], that is, to act in accord with choices about situations that they judged to be right when they were somewhat removed from the situation itself.  
(p. 56)

Furthermore, the claim was made that the content of an action can be defined as being moral, and not just the form of the judgment accompanying the action. The principles of justice are considered to have the function of leading to agreement in deontic judgment given agreement on the facts. For example, in the Free Speech Movement situation, the decision to sit-in by Stage 5 subjects is considered to be right in both form and content. Support for this claim is provided by the finding that the relationship between deontic choice and moral stage for the 1968 sample was also monotonic, that is, Stage 3, 36% thought it was clearly right to sit-in; Stage 3/4, 50%; Stage 4, 62%; and Stage 4/5, 83%.

To test the hypothesis of consistency, the subjects were grouped according to their deontic choice. No subject who judged it deontically wrong sat in. However, among the subjects who thought it was right to sit-in, a greater proportion at each higher stage of moral reasoning did so, that is, Stage 3, 23%; Stage 3/4, 54%; Stage 4, 63%; and Stage 4/5, 75%. Thus, the second hypothesis was also supported.

To account for the act of sitting-in when it occurred among lower-stage subjects, Kohlberg and Candee (1984) examined the effect of substage. In the revised scoring system, a Type A and B substage is

defined for each stage based on a level-of-discourse distinction. Two features distinguish a Type B substage from a Type A substage: (a) that it is prescriptive (a judgment of duty governing what one says one would do), and (b) that the duty is universal or universalizeable. They hypothesized that Type B subjects at every stage would sit-in more often than would their Type A counterparts. This is based on the proposition that Type B subjects intuitively make moral judgments that have many of the formal and content characteristics of judgments made by Stage 5 subjects. The results show that at each higher stage and at each type closer to B, a greater proportion of subjects sat-in, for example, Stage 4A, 21% sat-in; Stage 4-ambiguous B, 53%; and Stage 4B, 67%.

Kohlberg and Candee's (1984) proposition that moral stage influences moral action (1) through differences in deontic choice, and (2) through judgments of responsibility appear to be supported by the reanalysis of the Haan et al. (1968) data. Although the stage scoring revision appears to have solved the stage regression problem of the original analysis of the Haan et al. (1968) study, other problems arise from the new scoring system. For example, the relative rarity of the principled stages because of the new stringency in defining these stages (Gibbs, 1979).

The researchers (Kohlberg & Candee, 1984) pointed out that the 1968 data were collected two months after the sit-in took place. Consequently the deontic choices (judgments of what is morally right) and supporting justifications may have been influenced by whether or not the subjects did sit-in. Another limitation discussed was the similarity in content of the dilemmas involving civil disobedience used to assess stages and the actual situation of civil disobedience. Consequently,

the question could be raised as to whether the consistency found between moral reasoning and action is due to content consistency only.

As an answer to this argument, the researchers maintain that not all the subjects who chose the "civilly disobedient" alternative on the dilemmas were scored as Type B or consistently performed the moral action in real-life situations. However, this contention appears to be counter to their finding that a larger proportion at each stage level who chose the "civilly disobedient" option did participate in the sit-in.

Summary. In the studies reviewed, the relationship of moral stages, measured by Kohlberg's scale, and various indices of political activism and political attitude has been investigated. A number of researchers (Abramowitz & Nassi, 1981; Block, Haan, & Smith, 1968; Haan, Smith, & Block, 1968; Kohlberg & Candee, 1984; Nassi & Abramowitz, 1979; Nassi, Abramowitz, & Youmans, 1983) focused on the moral reasoning of the Berkeley Free Speech Movement activists. These activists had illegally occupied a university administration building in 1964 to protest the banned use of university grounds for the distribution of political literature and recruitment for political causes. Leming's (1974) student activists were high school students who had protested the Vietnam War by a school sit-in in May, 1970.

Political attitude was measured as a conservatism-radicalism dimension (Candee, 1976; Fiskin, Keniston, & MacKinnon, 1973; Haan, Smith, & Block, 1968; Sullivan & Quarter, 1972), as a conservatism-liberalism dimension (Holstein, 1976; Nassi, Abramowitz, & Youmans, 1983), as a Right-Left dimension (Fontana & Noel, 1973), and as Humanistic versus Normative Ideology (Alken & Poppen, 1973). Moral stages

were also related to a Rights Index based on responses to a Watergate-Calley Questionnaire (Candee, 1976). In general, the findings indicate a low to moderate relationship between moral stages and political activism and political attitudes. However, a number of methodological and conceptual problems in these studies warrant a cautious interpretation of the results.

#### Rest's Moral Judgment Measure and Political Attitude

The Defining Issues Test (Rest, 1974, 1979b) was used in four of the studies reviewed that investigated the relationship of moral judgment and political attitude.

Rest and his associates (1974) investigated the relationship of moral reasoning, as measured by the Defining Issues Test P Index, and political attitude. The two scales of political attitude used, a Law and Order Test devised by the researchers and Patrick's 1971 Libertarian Democracy Test (cited in Rest, Cooper, Coder, Masanz & Anderson, 1974) were chosen because the items in these scales were believed to reflect the theoretical division between Stage 4's law and order orientation and Stage 5 and 6's principled morality. Specifically, "law and order" political attitude was defined by the number of responses made by the subject which "advocated excessive powers to authorities or support of the existing social system at the disproportionate expense of civil rights or individual welfare" (Rest, Cooper, Coder, Masanz & Anderson, 1974, p. 494).

The Law and Order Test (Rest, Cooper, Coder, Masanz & Anderson, 1974) consisted of 15 public policy issues, such as "Under present laws it is possible for someone to escape punishment on the grounds of legal

technicalities even though the person may have confessed to performing the crime. Are you in favor of a tougher policy for treating criminals?" (p. 494). Patrick's Libertarian Democracy Test designed to measure democratic political orientation, was comprised of five statements, for example, "People should not be allowed to march on public streets in support of better rights and opportunities for Negroes" (cited in Rest, Cooper, Coder, Masanz, & Anderson, 1974, p. 495). For both measures, subjects were asked to indicate degree of agreement or disagreement to the statements on a 5-point scale.

In this study, data were collected from student samples ranging in educational level from ninth grade to graduate school. The significant correlations between the P Index and the Law and Order Test for three samples were  $-.60$  ( $N=193$ ),  $-.48$  ( $N=51$ ), and  $-.46$  ( $N=85$ ). The correlation of P Index and Libertarianism using one sample was also significant,  $r(191)=-.63$ . The correlations of P Index with attitude measures for ninth-grade students were lower than correlations obtained for the total sample, but were still significantly different than zero, that is, P Index with Law and Order,  $r=-.23$ ,  $p<.05$  and with Libertarianism,  $r=.37$ ,  $p<.01$ .

In an investigation of candidate preference and moral judgment, G. Rest (cited in Rest, 1979a) developed two indices of candidate preference. The Overall Issue Orientation was based on the subjects' indication of preference for either U.S. President Ford's or Carter's stand on nine issues, for example, defense spending, and a rating of importance of the issues. The Total Personality Preference Score was based on responses to 43 items concerning the candidates' personalities, for example, "Ford is not very intelligent for a President," "Carter would



spend too much of the taxpayer's money if elected President" (Rest, 1979a, p. 193). Subjects were also asked to indicate party affiliation and liberalism-conservatism, however, information about these indices was not given. The Defining Issues Test (Rest, 1979b) was used as a measure of moral judgment.

A significant relationship was found between the Defining Issues Test moral judgment scores and candidate preference for a sample of 120 university students and adults. Subjects with higher Stage 4 scores preferred Ford's issue stands over Carter's,  $r(120) = .22$ ,  $p < .01$ , and also regarded themselves as more conservative,  $r(120) = .25$ ,  $p < .01$ . A significant curvilinear relationship indicated that subjects in the middle range of the Defining Issues Test tended to favor Ford's stand on the issues and his personality, whereas subjects in the upper and lower ranges of the Defining Issues Test favored Carter. The actual vote of the subjects was also curvilinearly related to the Defining Issues Test scores, with subjects in lower and higher ranges of the Defining Issues Test voting for Carter and those in the middle, voting for Ford,  $\text{Chi-square}(4) = 10.90$ ,  $p < .028$ .

In predicting Issue Orientation and Candidate preference, multiple regression analyses indicated that party affiliation was the most powerful single variable; demographics and liberalism-conservatism did not lower the  $R^2$  significantly, if dropped from the regression. However, dropping moral judgment from the equation was significant both in predicting Issue Orientation and Candidate preference,  $F = 2.56$ ,  $p < .025$ , and  $F = 3.24$ ,  $p < .025$ , respectively.

Rest (1979a) pointed out that Democrats may not always draw from people in the high and low ranges of moral judgment, and Republicans

from the middle range. He states, "the type of election, the candidates, and the issues are likely to vary the way in which moral judgment relates to attitudes and voting" (p. 194).

In a study in South Africa with male university students (Fincham & Barling, 1979), Wilson and Patterson's (1970) Conservatism Scale was found to be significantly correlated with the P Index of the Defining Issues Test, but not with the conventional moral score.

In another study of moral reasoning and political orientation, using a British university sample, Emler, Renwick, and Malone (1983) found the Defining Issues Test to correlate significantly with several subscales of the New Left Scale (Gold, Christie, & Friedman, 1976). The New Left Scale was designed to differentiate the political active student from other students. The "Traditional Moralism" subscale, one of five included in the scale, purportedly taps a "conservative, status quo view of society, emphasizing traditional values about the worth of hard work, antipathy to new ideas, and the necessity of maintaining order-by the use of police force if necessary" (Gold, Christie, & Friedman, 1976, p. 25). A typical statement for each subscale in the Gold et al. (1976) New Left Scale is: (a) Traditional Moralism - "Police should not hesitate to use force to maintain order" (p. 17); (b) Machiavellian Tactics - "The best way to handle people is to tell them what they want to hear" (p. 18); (c) Machiavellian Cynicism - "Most people in government are not really interested in the problems of the average man [sic]" (p. 19); (d) New Left Philosophy - "The United States needs a complete restructuring of its basic institutions" (p. 21); and (e) Revolutionary Tactics - "Extensive reform in society only serves to perpetuate the evils; it will never solve problems" (p. 22).

Emler et al. (1983) found that the P Index correlated negatively with Traditional Moralism ( $r = -.49$ ,  $p < .001$ ), and Machiavellian Tactics ( $r = -.42$ ,  $p < .001$ ), but positively with New Left Philosophy ( $r = .39$ ,  $p < .001$ ); and Stage 4 correlated positively with Traditional Moralism ( $r = .60$ ,  $p < .001$ ) and Machiavellian Tactics ( $r = .37$ ,  $p < .001$ ), but negatively with New Left Philosophy ( $r = -.52$ ,  $p < .001$ ) and Revolutionary Tactics ( $r = -.36$ ,  $p < .001$ ). Subjects were also divided into three groups on the basis of responses to a 5-point rating scale ranging from very right wing to very left wing. One-way analysis of variance revealed that the three groups differed significantly for both Stage 4 and P Index scores. Other findings of the Emler et al. (1983) study are discussed later in this chapter.

Summary. The findings of the studies of moral stages, measured by Rest's (1974, 1979b) Defining Issues Test, and political attitude appear to indicate that moral stages are related to political attitude. Rest et al. (1974) found the P Index of the Defining Issues Test to be significantly correlated with scores on the Law and Order Test (Rest, Cooper, Coder, Masanz, & Anderson, 1974) and Patrick's 1971 Libertarian Democracy Test (cited in Rest, Cooper, Coder, Masanz & Anderson, 1974). P Index scores were also reported to be significantly correlated with scores on Wilson and Patterson's (1970) Conservatism Scale (Fincham & Barling, 1979) and Gold et al.'s (1968) New Left Scale (Emler, Renwick, & Malone, 1983). Evidence of a curvilinear relationship between moral stages and both candidate preference (Carter versus Ford) and voting behavior was also reported by Rest (1979a).

### Hogan's Moral Judgment Measure and Political Attitude

The relationship of Hogan's (1970) Survey of Ethical Attitudes, a measure of moral judgment, and political attitude was investigated in five of the studies reviewed.

To ascertain the construct validity of the Survey of Ethical Attitudes, Hogan compared the responses of groups known to differ in their attitudes toward the law. He found that his test discriminated very strongly between policemen and political activist (Hogan, 1970), between ROTC seniors and student activists (Hogan, 1970), and between conservative, moderate, and radical fraternities (Hogan & Dickstein, 1972a). He considered these groups to use different criteria in justifying their moral decisions. Correlation of the scores on the Survey and those on the California Psychological Inventory (Gough, 1964) and the Myers-Briggs Type Indicator (Myers, 1962) indicated certain personality differences between endorsers of the two viewpoints. Persons scoring high on the ethics of social responsibility were characterized as helpful, dependable, conventional, and resistant to change. Persons scoring low on the Survey were found to be independent, innovative, rebellious, and unconventional. The two forms of the Survey were also found by Hogan (1970) to correlate .45,  $p < .01$ , and .35,  $p < .01$ , with the California F Scale (Adorno, Frenkel-Brunswick, Levinson & Sanford, 1950), a measure of antidemocratic tendencies and conservatism.

Evidence supporting the relationship of political ideology and Hogan's two ethical orientations was provided by Snodgrass (1975). Significant positive correlations were reported for the ethics of social responsibility (high scores on the Survey of Ethical Attitudes) and three features of ideology: liberalism-conservatism ( $r = .55$ ,  $p < .001$ ),

law and order ideology ( $r=.59$ ,  $p<.001$ ) and sentencing severity ( $r=.33$ ,  $p<.001$ ). Snodgrass (1975) concluded, "These results indicate that in accordance with an ethics of responsibility, conservatives have a greater respect for the utility of rules in regulating human conduct and a greater tendency to attribute blame to the individual rather than the societal environment" (p. 195).

Lorr and Zea (1977) raised the question of whether the Survey of Ethical Attitudes (Hogan, 1970) is a measure of moral judgment or a measure of liberal-conservative attitude. These researchers administered several measures to American college students and American bank employees and blue collar workers. These measures included the Survey of Ethical Attitudes, two measures of liberal-conservatism, that is, the Social Attitude Scale (Suziedelis & Lorr, 1973) and the Interpersonal Style Inventory (Lorr & Youniss, 1973), as well as the Rokeach Dogmatism Scale (Rokeach, 1960), a 10-item dogmatism scale and a scale of open-mindedness. On the basis of principal components analysis of the data, they concluded that the Survey of Ethical Attitudes measures the same construct as a good scale of liberalism-conservatism.

Woll and Cozby (1976) investigated whether the Survey of Ethical Attitudes was primarily a measure of political and social preference or a scale of moral judgment. Scores on the Survey of Ethical Attitudes were correlated with responses on the following two items:

What is your opinion regarding President Ford's pardon of Richard Nixon? (p. 185)

Complete and unconditional amnesty should be extended to all draft evaders. (p. 185)

They hypothesized that if the Survey is actually measuring styles of moral judgment, the ethics of social responsibility would be associated

with negative attitudes toward both the Nixon pardon and amnesty. However, if it is measuring political preferences, the ethics of social responsibility would be associated with a positive attitude toward the pardon of Nixon and a negative attitude toward amnesty. Based on their finding that correlations between the Survey of Ethical Attitudes (high scores associated with the ethics of social responsibility) and the pardon and amnesty items were  $-.32$ ,  $p < .01$ , and  $+.36$ ,  $p < .001$ , respectively, Woll and Cozby (1976) concluded that subjects were responding to the political content rather than the moral import of the issues. However, these authors did not go far enough, because it is still not known what justifications underlie the responses made to the two items.

Summary. In addition to studies (Hogan, 1970; Hogan & Dickstein, 1972a) to establish the construct validity of the Survey of Ethical Attitudes as a measure of both ethical attitude and political attitude, two other studies (Lorr & Zea, 1977; Woll & Cozby, 1976) attempted to determine whether the Survey of Ethical Attitudes was a measure of political attitude or a measure of moral judgment. The Survey of Ethical Attitudes was found to distinguish between groups, such as policemen and political activist, and to be significantly correlated with various measures of political attitude.

#### Test Characteristics of Moral Judgment and Political Attitude Measures

In studying the psychometric properties of the Defining Issues Test and the Survey of Ethical Attitudes, researchers (Emler, Renwick, & Malone, 1983; McGeorge, 1975; Meehan, Woll, & Abbott, 1979) have found that subjects' scores will vary on these measures if they are given instructions to respond from alternate political orientations or to give

an unfavorable impression. These findings raise questions concerning the validity of the measures.

Meehan, et al. (1979) suggested that the Survey of Ethical Attitude is a measure of political attitude rather than moral judgment. They found a significant difference in the Survey of Ethical Attitude scores between standard instructions and both conservative role-playing and liberal role-playing. The mean score for conservative role play was 26.48, for liberal role play, 8.88, and for the two standard instruction groups, 16.96 and 16.78. Although instructions to give a favorable impression did not affect scores, the unfavorable impression group had a significant effect. The mean scores of the group for standard instruction was 17.16 and 16.52, with instruction to give favorable impression was 17.56, and with instruction to give unfavorable impression was 21.16. Meehan et al. (1979) hypothesized that the reason the scores did not change significantly with instructions to give a favorable impression is because, under standard instructions, subjects may attempt to create a favorable impression of themselves.

Evidence that subjects were able to modify their moral judgment responses on the Defining Issues Test when instructed to respond as extreme conservative or extreme radical was presented by Emler et al. (1983). In this study, subjects were grouped as Left-Wing, Moderate, and Right-Wing on the basis of self-descriptions of political orientation, that is, rating on a 5-point scale. These self-descriptions were validated with scores on the revised New Left Scale (Gold, Christie & Friedman, 1976). The subjects completed the Defining Issues Test twice, once from their own perspective and once from the perspective of an extreme conservative or an extreme radical. Both right-wing and

moderate students significantly increased their P scores and decreased their Stage 4 scores when they responded as a radical.

Emler et al. (1983) contended that the fact that right-wingers were able to reproduce the higher P scores more characteristic of left-wingers supported their interpretation that Stage 4 and 5 moral reasoning reflects individual differences in sociopolitical ideology. They argued that the results are not a result of subjects choosing responses different from their own because there was no evidence of higher variances. In addition, moderates were able to modify their responses in the required ideological direction.

The ability of subjects to "fake good" or "fake bad" on the Defining Issues Test was investigated by McGeorge (1975). Similar to the results for the Survey of Ethical Attitudes, subjects were able to significantly lower their scores when asked to fake bad, but were unable to fake upward. This finding was viewed as support for the general theory of a sequence of cognitive stages of development.

In defense of the Survey of Ethical Attitudes, Johnson and Hogan (1981) claimed that all tests are forms of self-presentation. Although Meehan et al.'s (1979) results point out the confounding of liberalism-conservatism and moral judgment, Johnson and Hogan (1981) argued that all measures of moral judgment will be confounded with political attitude. It is their view that the validity of the Survey of Ethical Attitudes is not disconfirmed because all political judgments are moral judgments. On the other hand, Thorton and Thornton (1983) presented another interpretation of Emler et al.'s (1983) results. They argued that the fact right-wingers can fake good as left-wingers on the Defining Issues Test does not necessarily indicate that they understand



the arguments endorsed by left wingers. They suggested that right wingers "may think of left wingers as given to fancy sounding, but rather vague justifications of anti-authority views" (Thorton & Thorton, 1983, p. 78).

Summary. Two studies (Emler, Renwick, & Malone, 1983; Meehan, Woll, & Abbott, 1979) have demonstrated that subjects are able to alter their scores on moral judgment measures when instructed to respond as a liberal or a conservative. However, the question about how this result is to be interpreted remains unresolved.

#### Summary of Moral Reasoning and Political Attitude Studies

The conceptual and methodological shortcomings of many of the studies reviewed require that their findings be viewed primarily as exploratory in nature. In general, a low to moderate association was found between conventional moral reasoning and conservatism. A larger proportion of Stage 2 and principled subjects was found to be associated with political activism and with a liberal or radical ideology. Hogan's (1970) ethics of social responsibility was also found to have a low to moderate association with conservatism.

Both the Defining Issues Test and the Survey of Ethical Attitudes were found to be susceptible to conservative or liberal role-playing, that is, when the subjects were instructed to respond to these measures as a conservative or liberal their scores changed in the expected direction. Instructions to give an unfavorable response were also found to affect scores, although instructions to give a favorable response were not.

The correlations of moral judgment and political ideology in the studies reviewed ranged from .22 to .68. Although correlations as low as .22 may be statistically significant within a definable limit, they may not have practical significance. For example, a correlation of .22 indicates less than 5% of the variance in the measures is common to both. A correlation this low may be a function of random covariation due to the poor reliability of the measures used. Measurement error may also attenuate the correlation, and a stronger relationship may be present than is indicated.

Few researchers included information concerning the reliabilities of the measures used. Measurement error due to the poor reliability of the political attitude measures, the moral judgment measures, or both, may have obscured or attenuated the relationship of moral judgment and political attitude. In addition, the subjects in these studies were typically university students. Such age homogeneous samples may also have attenuated the correlations. The amount of variance in the scores will affect the correlation because it is directly related to the standard deviations of the variable being estimated. Whenever the dispersion of scores varies, the correlation changes.

Another problem with the use of correlational analysis is that correlations may not reflect attitudinal consistency (Weissberg, 1976). A statistical association between two variables usually means that one variable can be predicted from the other with better than random probability. A high correlation is possible when liberals on one item are conservative on the second item. Conversely, a low correlation may exist when there is high attitudinal consistency. For example, subjects may be in a liberal category on one item and in a liberal category for

the second, but the relative orderings of the subjects are not parallel for the two items. In addition, a modal distribution may indicate high attitudinal consistency, but the Pearson  $r$  becomes misleading as the variance remaining to be explained shrinks.

Another methodological issue may account for the relationship between moral judgment and political attitude measures. If the items in Rest's (1979b) and Hogan's (1970) moral judgment measures and the various measures of political attitude are examined, an overlap in the content of the statements is evident. Most of the measures have some statements concerning attitude toward authority and/or the law. Although in Kohlberg's measure, the statements are made by the student and scored by the examiner, the scoring system distinguishes stages of development according to the criteria used for either opposing or supporting the law or authority.

In the studies of political activism, the difference between conventional moral subjects and those at Stage 2 and Stage 6 is also in terms of whether or not they were willing to break the law. There was no significant difference found between moral reasoning groups in terms of social service activities. In the moral judgment measures and the political activism behavior, there is also an overlap in content.

Nicholls, Licht, and Pearl (1982) indicated that when there is content overlap between two scales or between a scale and nontest behavior, the scale can be used to predict performance. The problem occurs when a scale is used to establish whether an aspect of a construct is related to that construct when that aspect is already a part of the scale. For example, the conventionalism of Stage 4 is an aspect

of conservatism. Similarly, the nonconventionalism of the other stages is related to the civil disobedience of the 1960's.

Although theoretically it is possible for an individual to oppose authority and use Stage 4 reasoning to justify action choice, the dilemma choice is more likely to be influenced by one's conventional or nonconventional beliefs in a situation where opposition to authority is central to the dilemma. For example, a greater proportion of subjects who used Stage 2 or principled criteria in the moral judgment measure were involved in civil disobedience (Haan, Smith & Block, 1968). Their decision to oppose authority could be a function of their moral reasoning, their nonconventionality or both. This is difficult to test because conventionality is taken to be a developmental aspect of moral judgment (Rest, 1979a).

A research design which focuses on the association of these two constructs does not permit disconfirmation of the hypotheses. If the content of the conservatism scale that it has in common with Stage 4 conventionalism is removed, then the construct validity of the conservatism scale is in question. Nicholls et al. (1982) state: "If a research design does not permit disconfirmation of a thesis, it cannot enable support of that thesis" (p. 576).

Although conventionality is an aspect of both the political attitude and moral judgment constructs, moral judgment may be more or less influenced by political attitude in particular situations. Candee (1976) observed that in ambiguous situations individuals are more influenced by their political orientations. An implication for further research is to investigate the interaction of the moral judgment and political attitude variables in different contexts.

### Studies of Hogan's and Kohlberg's Moral Judgment Dimensions

The relationship of political attitude and moral judgment has been discussed. Ethical attitudes, representing politically liberal and conservative viewpoints, are conceptualized by Hogan (1970) to be moral judgment styles having equal moral adequacy. Their assumed association with Kohlberg's Stage 5 and Stage 6 is thought to indicate that Kohlberg's Moral Judgment Scale measures personality rather than cognitive differences and that Kohlberg's stage scheme reflects a liberal political bias. A review is presented of the studies investigating Hogan's claims that (a) the Survey of Ethical Attitudes is a measure of moral judgment, and (b) Kohlberg's Moral Judgment Scale is confounded with political attitude. An introduction to these studies is followed by a research review and summary.

#### Introduction

Hogan's (1970, 1973, 1975a, 1975b) conceptualization of moral judgment is relevant to this study because of the focus he places on legal and social compliance in defining moral judgments and on the relationship he postulates between moral judgment and political attitude. According to Hogan (1975b), moral judgment style "has to do with the degree to which people regard rules as a useful means for ordering and regulating their lives, i.e., the degree to which people perceive rules as having instrumental values" (p. 6). Both the Survey of Ethical Attitudes and Kohlberg's measure of moral judgment are considered to be confounded with political attitude (Johnson & Hogan, 1981). Johnson and Hogan (1981) state:

Rather, we regard morality and politics as inevitably if ambiguously intertwined. All political judgments are moral judgments because they ultimately rest on choices about human values. Not all moral judgments are political judgments, but many are. (p. 61)

Another reason given by Johnson and Hogan (1981) for the close relationship of moral and political judgments is that both are reflections of a person's personality.

Hogan (1970) initially devised the Survey of Ethical Attitudes to verify his hypotheses that Kohlberg's Moral Judgment Interview was biased towards a liberal political philosophy; and that it was a projective measure of personality rather than cognitive development (Johnson & Hogan, 1981). Hogan (1970) considers Kohlberg's Stage 5 and Stage 6 to reflect, in part, the ethics of social responsibility, a conservative perspective, and the ethics of personal conscience, a liberal to radical perspective. Hogan (1970) developed the Survey of Ethical Attitudes as a more reliable measure of the ethical attitudes reflected in Kohlberg's Stage 5 and Stage 6.

In constructing the Survey of Ethical Attitudes, Hogan (1970) used statements quoted from historical adherents of two categories of moral judgments, for example, Rousseau, Burke, and John Stuart Mill. Hogan considers the use of such statements as support for the validity of the Survey of Ethical Attitudes as a measure of moral judgment. Agreement with these statements is seen as indicating affinity with a particular viewpoint. The following are representative weighted-continuum attitude items, with scoring for the ethics of social responsibility indicated:

Items from Form A

1. Rebellion may be a sign of maturity. Score +1 for Disagree or Disagree Strongly.

2. A man's (sic) conscience is a better guide to conduct than whatever the law might say. Score +1 for Disagree or Disagree Strongly.
3. Right and wrong can be meaningfully defined only by the law. Score +1 for Disagree, Uncertain, Agree or Agree Strongly.
4. There are times when any man (sic) should decide to break the rules. Score +1 for Agree, Uncertain, Disagree, Disagree Strongly. (Hogan, 1970, p. 207)

Two assumptions that appear to underlie Hogan's (1970) measure are that all individuals who endorse a statement are doing so for the same reasons and that these reasons will be consistent with the point of view of a particular philosopher. However, individuals may endorse such statements as "An unjust law should not be obeyed" (Hogan, 1970, p. 207) for various reasons, for example, self interest or the good of society.

In the Defining Issues Test (Rest, 1979b), subjects are asked to choose among different statements in terms of their importance in making a moral decision in a dilemma. The choice of statements, representing different moral stage judgments, is used to discriminate among individuals who are using different criteria in making a decision. Whether or not the individual chooses to comply with legal or established authority is not included in the assessment of moral judgment because, from Rest's (1979a) perspective, the same moral choice may be justified by different criteria and different moral actions may be compatible with the same moral judgment.

Another assumption that appears to underlie both the Survey of Ethical Attitudes and the Defining Issues Test is that everyone who endorses a statement interprets that statement in the same manner. Based on extensive interviewing of subjects on the dilemma, Rest (1979a) considered the statements used to be representative of the issues raised

by subjects and the way the issues are discussed. However, Kohlberg's Moral Judgment Interview involves probing the subject for elaboration and clarification of their statements before they are scored.

The assessment of moral judgment by Hogan (1970) and Rest (1979a) reflects their different perspectives of morality. From Rest's (1979a) cognitive developmental approach, "Without judgment, an action, no matter how beneficial, would not be moral" (Blasi, 1980, p. 4). On the other hand, Hogan (1973), representing a trait approach, considers moralities to be systems of rules external to people. Moral action is viewed as essentially irrational and different from nonmoral action only in content and the social function served. According to Blasi (1980), such an approach fails to recognize the function of cognition in the creation of meaning and determination of truth. He states:

The moral meaning, in fact, is considered to be already present in the action tendencies and to be objectively determined either by their function for the individual and for the species or by arbitrary conventions. The question of truth is regarded as irrelevant in this context. (p. 3)

For Hogan (1970), the practical endpoint of moral development is social conformity.

The way in which "moral maturity" is defined also relates to one's conception of morality. According to Hogan's model (1973),

the ideal endpoint of moral development is moral maturity, defined in terms of optimal placement on the five dimensions; the practical endpoint is social conformance, which can be explained in terms of these dimensions. The relationship between the two endpoints is seen in the fact that while the morally mature typically conform to rules of conduct, all those who conform are not necessarily mature.) (p. 230)

The five dimensions in Hogan's (1973) model are: moral knowledge, moral judgment, socialization, empathy, and autonomy.



The moral judgment dimension measured by the Survey of Ethical Attitudes (Hogan, 1970) is assumed to reflect two cognitive styles which are neutral with regard to their ethical import. However, Hogan (1974) indicated there is considerable evidence that persons at either end of this dimension are less than morally mature. Hogan (1974) states:

Extreme intuitionists have insufficient regard for the rights and privileges of others. Extreme advocates of the instrumental value of law tend doggedly to defend the status quo. And the two positions reflect one of the great dialectical antinomies in the history of legal and social philosophy. (p. 114)

Hogan (1973) concluded that the most morally mature individuals cluster in the center of the dimension. The moral adequacy of the ethical attitudes is evaluated in terms of behavior rather than in terms of the formal characteristics of the principles used.

Kohlberg (1971) made the philosophical claim that a later stage is "objectively" preferable or more adequate by certain moral criteria. The endpoint of development according to Kohlberg's moral theory is the making of moral decisions that are in accord with ethical principles appealing to logical comprehensiveness, universality, and consistency.

Hogan (1970) contended that the two ethical attitudes in his moral judgment dimension, social responsibility and personal conscience, appear to form a part of the distinction between Kohlberg's Stage 5 and 6, respectively. On this basis, he raised questions concerning Kohlberg's theory in terms of whether the stages represent content rather than structure and whether the later stages are more adequate than earlier ones. Further, the question of whether Kohlberg's theory is politically biased is raised because of the suggested relationship between ethical attitude and political attitude (Hogan, 1970).

Representing different theoretical perspectives, Hogan's and Kohlberg's conceptualization of the principled stages differ substantially. The ethics of social responsibility is considered by Hogan (1970) to reflect principles of social contract and the view that "the most defensible criteria for evaluating social action are the existing legal system and the general welfare of society" (p. 206). Commenting on the ethics of personal conscience, Hogan (1975a) states, "Moral intuitionism emphasizes what the person perceives as the right thing for him or her personally to do, without great regard for established norms and conventions" (p. 159). Implied in these statements is a view of morality as representing a dichotomy between conformity and nonconformity.

This is contrasted with the conventional-principled stage distinction made by Rest (1975b):

The basis of moral obligation and rights according to conventional thinking is the maintenance of one's social system and loyalty to established institutions and social relationships. In contrast, principled thinking appreciates the need for social structure and stabilized expectations among people but also appreciates that societies and social relationships can be arranged in many possible ways and that each way, in effect, maximizes certain values and minimizes certain others. (p. 88)

Moral principles are viewed in Kohlberg's moral theory as providing a perspective to take in judging what to do. By promoting the kinds of claims which are universalizable, Boyd (1979) states:

The moral point of view is not determined by my interests; nor is it determined by the other's interests. It is, rather, seen as above both our particular interests--in the sense of our shared point of view on both. (p. 122)

An important distinction is made in Kohlberg's theory between values having universal prescriptive applicability, and values specific to a given society.

When the opposite pole of the moral judgment continuum is the ethics of personal conscience, representing individuals who are "above the law," the emphasis in the ethics of social responsibility appears to be toward duty to obey the existing law, rather than the "law-making" aspect of social contract. One difficulty with this apparent conformity-nonconformity dichotomy is that it does not account for various types of nonconformity. While some nonconformists may only have their self-interest in mind, there are others who protest norms that are unjust or inconsistent with ideal social goals. Further, Kohlberg (1976) pointed out that following one's conscience as against following the law need not indicate postconventional reasoning. He stated:

To a Jehovah's Witness, who has gone to jail for "conscience," conscience may mean God's law as interpreted by his religious sect or group rather than the standpoint of any individual oriented to universal moral principles or values. (p. 37)

With regard to Kohlberg's stage scheme, the ethics of personal conscience seems more consistent with Stage 2 and the ethics of social responsibility with Stage 4.

Autonomy is one of the five dimensions in Hogan's (1975) model of moral conduct. The concept of autonomy, as used by Hogan (1975) relates to the internalization of social rules such that moral behavior is independent of external controls. Hogan (1975a) stated:

An autonomous person may also refuse to comply with the rules on occasion, but only because he or she regards such compliance as contrary to the long-range welfare of the group. His or her noncompliance is therefore for social, not personal reasons. (p. 163)

However, Hogan's measure of moral judgment, the Survey of Ethical Attitudes, does not discriminate between personal and social reasons for noncompliance.

### Studies of the Political Bias of Kohlberg's Stage Scheme

Hogan (1970) and others (e.g., Emler, 1983; Hogan & Emler, 1978) considered Kohlberg's stage scheme to have a liberal political bias. To demonstrate the political bias of Kohlberg's moral stages, the relationship of Hogan's (1970) ethical attitudes, assumed to represent politically liberal and conservative ethical orientations, to Kohlberg's moral stages has been investigated.

To empirically validate the Survey of Ethical Attitudes, Hogan (1970) compared "natural groups which are in some ways self-selected for the attitudes under study" (p. 207), for example, political activist and police officers. These groups are assumed to use different criteria for making moral judgments. Although the groups may have different attitudes about legal compliance, they may justify their response with either conventional or principled moral reasoning. In addition, the ability of the test to discriminate between these two groups does not necessarily indicate that different moral principles are the basis for the difference in the two groups.

The relationship proposed by Hogan (1970) between ethical attitudes and Kohlberg's stages has been investigated by means of correlational studies. Using the Defining Issues Test (Rest, 1974), Nardi and Tsujimoto (1979) found the ethics of social responsibility to be associated with Stage 4 ( $r=.46$ ,  $p<.001$ ); whereas the ethics of personal conscience was found to be associated with Stage 4 1/2 (Antiestablishment) ( $r=-.21$ ,  $p<.01$ ), Stage 5A ( $r=-.23$ ,  $p<.01$ ), and Stage 5B ( $r=-.32$ ,  $p<.001$ ). For three different samples, Gutkin and Suls (1979) also found that scores on the Survey of Ethical Attitudes (Hogan, 1970) were significantly positively correlated with Stage 4 morality ( $r=.351$ ,

$p < .01$ ;  $r = .263$ ,  $p < .05$ ;  $r = .393$ ,  $p < .01$ ); and significantly negatively correlated with the P Index ( $r = -.275$ ,  $p < .05$ ;  $r = -.234$ ,  $p < .05$ ;  $r = -.265$ ,  $p < .05$ ). These findings were based on the use of the Defining Issues Test (Rest, 1974). In the study using Kohlberg's measure, Dell and Jurkovic (1978) did not find any significant relationship between Survey of Ethical Attitudes and moral stage scores. This finding may be explained by the fact that there was little variance in the stage scores, 90% of the sample was reported to be Stage 3 or Stage 4. Contrary to Hogan's (1970) claim that the two ethical attitudes relate to Kohlberg's Stage 5 and 6, the research evidence suggests that the ethics of social responsibility tends to be related to Stage 4 and the ethics of personal conscience to Stage 5 or principled reasoning (P Index).

Although there is some evidence that ethical attitudes are related to Kohlberg's stages, this finding does not, in itself, establish that Kohlberg's stages are politically biased. From the perspective of Kohlberg's theory, this finding indicates that those subjects who endorse the ethics of social responsibility tend to be developmentally less mature in their moral judgments than those subjects who endorse an ethics of personal conscience. Therefore, it is necessary to investigate Kohlberg's claim that later stages are morally more adequate than earlier ones.

One avenue taken in pursuing the answer to the question of the moral adequacy of Hogan's ethical attitudes or Kohlberg's moral stages was to compare personality profiles of individuals who differ on these dimensions. Johnson and his associates (Johnson, Hogan, Zenderman, Caliens & Rogolsky, 1981) stated:

First, it appears that personality factors as well as reasoning ability are involved in moral judgments. Second, Stage 6 is not an inevitable moral advance over Stage 5, because positive and negative personality traits are associated with both forms of moral reasoning. (p. 370-371)

However, other researchers (e.g., Haan, Smith, & Block, 1968; Sullivan & Quarter, 1972) point to differences in personality characteristics to support the moral adequacy of higher stages.

Most of the personality evidence is correlational which leaves unexplained the causal direction of the relationship, i.e. ethical attitude determines personality structure, vice versa, or they share common determinants. Alternative explanations could be that personality (a) affects the level of principled morality obtained, (b) is a consequence of the level of principled morality obtained, (c) influences the moral reasoning style manifested, or (d) relates to moral content, but not to moral structure.

Another approach used to investigate this question was to compare groups known to differ in moral conduct. Persons convicted of crimes would be expected to score at the ends of the ethical attitudes continuum and the most morally mature individuals would have mid-range scores according to Hogan's (1970, 1974) view. Also, if both ethical attitudes are equally defensible on moral grounds then the scores of prisoners and probationers would be expected to be evenly distributed over the two ends of the continuum.

Although the Survey of Ethical Attitudes (Hogan, 1970) was found to discriminate between police ( $\bar{M}=23.7$ ) and political activist ( $\bar{M}=8.7$ ) (Hogan, 1970); between police ( $\bar{M}=21.76$ ), police science majors ( $\bar{M}=21.68$ ), and students ( $\bar{M}=14.06$ ) (Carlton & Sutton, 1975); and between prisoners ( $\bar{M}=20.87$ ) and college students ( $\bar{M}=15.69$ ) (Hartnett & Shumate,

1980); the scores of prisoners on the Survey of Ethical Attitudes were not compared to the scores of police. However, if the mean scores of prisoners and police are compared across the different studies, the scale does not appear to discriminate between the two groups. These two groups, as judged by their moral conduct in complying with rules, would be expected to differ in moral maturity as defined by Hogan (1970). A study comparing these two groups would be needed to confirm this extrapolation.

Within Hogan's model of moral conduct (1973, 1975a, 1975b), the variation in moral conduct of policemen and prisoners may be explained in terms of other dimensions, for example, empathy, autonomy, socialization. However, the moral judgment dimension proposed by Hogan (1970) does not appear to discriminate between the two groups. Whereas political activists and prisoners may both break the law, they appear to have opposing ethical attitudes. Although Kohlberg's stage theory is able to account for prisoners and police being at the same stage of moral development, for example, both have a Stage 4 law and order orientation, other explanations may be available. Police and prisoners may share by and large the same political ideology.

The moral adequacy of Hogan's ethical attitudes and Kohlberg's moral stages has also been tested by correlating Hogan's, Kohlberg's or Rest's measures with another index of moral maturity (Hogan & Dickstein, 1972a; Nardi & Tsujimoto, 1979; Tsujimoto & Nardi, 1978). Hogan and Dickstein (1972a) developed a scale, Measure of Moral Values, to measure moral maturity. With this measure, individuals were asked to make written responses to 15 statements indicating what their reaction would most likely be if the person they were having a conversation with made

the statement. Examples of items on the Measure of Moral Values (Hogan & Dickstein, 1972a) are:

The FBI has its hands tied in many cases because of the unreasonable opposition of some people to wire tapping. (p. 210)

The new housing law is unfair. Why should I be forced to take in tenants that I find undesirable? (p. 210)

The police should be encouraged in their efforts to apprehend and prosecute homosexuals. Homosexuality threatens the foundations of our society. (p. 211)

With this measure, subjects' responses to 15 statements are scored using the following scoring elements:

- (a) concern for the sanctity of the individual
- (b) judgments based on the spirit rather than the letter of the law
- (c) concern for the welfare of society as a whole
- (d) capacity to see both sides of an issue. (Hogan & Dickstein, 1972a, p. 211)

A response is assigned two points if any one of the four scoring elements is clearly present and one point if any of the four scoring elements could be easily and readily inferred.

Based on the correlation of subjects' scores on the Measure of Moral Values and Survey of Ethical Attitudes, Hogan and Dickstein (1972a) conclude that persons with an ethics of personal conscience tend to make more mature moral judgments ( $r = -.34$ ,  $p < .05$ ), thus refuting their hypothesis that persons with mid-range scores on the Survey of Ethical Attitudes are more morally mature.

The Measure of Moral Values (Hogan & Dickstein, 1972a) was also used as a dependent variable in two studies comparing Hogan's and Kohlberg's measures (Nardi & Tsujimoto, 1979; Tsujimoto & Nardi, 1978). The Measure of Moral Values was found by Tsujimoto and Nardi (1978) to be correlated with Hogan's (1970) Survey of Ethical Attitudes



( $r(170) = .288$ ) and each of Kohlberg's stages measured by Rest's (1974) Defining Issues Test ( $r(170) = .227$  for Stage 5A;  $r(170) = .262$  for Stage 5B; and  $r(170) = -.183$  for Stage 3). Nardi and Tsujimoto (1979) found that moral maturity, when assessed by the Measure of Moral Values (Hogan & Dickstein, 1972a), was curvilinearly related to the Survey of Ethical Attitudes. This represents the only empirical support for Hogan's hypothesis that the highest level of moral maturity is found in the middle of the moral judgment dimension.

One difficulty in creating an independent measure to test the assumptions of Hogan's (1970) or Kohlberg's/Rest's perspectives of moral judgment is that an independent measure would be based on a third perspective and would raise additional questions about which perspective should be accepted as the most adequate.

The scoring elements of the Measure of Moral Values (Hogan & Dickstein, 1972a) appear to be more consistent with Kohlberg's moral judgment perspective than with Hogan's (1970). In addition, the global scoring of responses on the Measure of Moral Values (Hogan & Dickstien, 1972a) reduces the variance that may exist and could obscure real differences in moral maturity. For example, an individual's response may be scored as containing only one of the four scoring elements such as the capacity to see both sides of an issue, but not any of the other three scoring elements. Nevertheless, this individual would be given the same score as an individual whose response included all four scoring elements.

### Summary

A comparison was made of the theoretical assumptions underlying Hogan's (1970) and Rest's (1974, 1979b) moral judgment measures. A discussion was also presented concerning several issues relating to Hogan's (1970) proposed relationship between ethical attitudes and Kohlberg's moral stages. The research evidence indicates that scores on the Survey of Ethical Attitude

- (a) discriminate between various groups (e.g., police and political activists) (Carlson & Sutton, 1975; Hartnett & Shumate, 1980; Hogan, 1970);
- (b) positively correlate with Stage 4 scores and negatively correlate with Stage 5 scores or the P Index, indicating that the ethics of social responsibility is associated with Stage 4 and the ethics of personal conscience with Stage 5 or principled reasoning (Gutkin & Suls, 1979; Nardi & Tsujimoto, 1979);
- (c) correlate with both negative and positive personality characteristics (Hogan, 1970; Johnson, Hogan, Zonderman, Callens & Rogolsky, 1981); and
- (d) negatively correlate with scores on the Measure of Moral Values, indicating that subjects who endorse the ethics of personal conscience are more "morally mature" than those who endorse the ethics of social responsibility (Hogan & Dickstein, 1972a; Nardi & Tsujimoto, 1979; Tsujimoto & Nardi, 1978).

From the research evidence presented, it is not possible to resolve the issue of whether or not Kohlberg's moral stages are politically biased. An alternative conclusion could be that subjects with a conservative

ethical orientation are developmentally less mature in their moral judgments than subjects with a liberal ethical orientation.

The comparison of the two views on the nature of Kohlberg's stages, that is, as hierarchically related organizations of thinking versus politico-social values, directs attention to critical aspects of each view. Implicit in Hogan's (1970) position are the assumptions that statements about values are understood in the same manner by everyone and that actions have the same meaning for all individuals. Concerning the cognitive developmental position, not enough is known about the interaction of particular structure with other "person" and "situation" variables. A clear implication for further research is to focus on the interrelationship of moral structure and moral content in making moral decisions.

#### Studies of Moral Reasoning and Dilemma Content

The assessment of moral judgment, approached from a cognitive-developmental perspective, involves distinguishing the underlying organization of thinking used from the content of the individual's moral judgment. A consistency in the individual's moral structure is assumed, although the content of the moral judgment may vary. However, in Rest's (1979a) model of moral judgment, it is acknowledged that the particular content and properties of the problem may influence the particular moral structure that is manifested.

Several researchers have investigated the effect of differing dilemma content on moral reasoning. Three areas of dilemma content research will be reviewed: (a) variation in dilemma protagonist, (b)

hypothetical dilemmas versus actual dilemmas, and (c) prohibitive dilemmas versus prosocial dilemmas.

### Variation in Dilemma Protagonist

Levine (1976) investigated the effect of two dilemma content variables on conventional moral reasoning: the identity of the protagonist implicated in the moral dilemmas and the content of the moral dilemmas. Four of the nine dilemmas in Kohlberg's 1958 interview were modified in order to present dilemmas in which the protagonist in the dilemmas was (a) a stranger of the same sex, (b) a best friend of the same sex, and (c) the respondent's mother. The three questionnaire treatments were randomly distributed to a sample of 680 first-year sociology students (mean age=18.6 years). Subsamples of 100 were randomly drawn for each of the three treatments. The questionnaires were scored using Kramer's (1968) sentence-coding scoring technique and percent-response scores for Stages 3 and 4 were computed.

A Sex X Treatment X Dilemma analysis of variance was computed for Stage 3 and Stage 4 response rates. The Stage 3 response rate under the primary-other treatment was found to be significantly higher in comparison with the fictitious-other treatment,  $F(2,294)=19.23$ ,  $p<.001$ . Conversely, the Stage 4 response rate was found to be significantly lower for the best friend and mother treatments than for the fictitious-other treatment,  $F(2,294)=13.10$ ,  $p<.001$ . For both Stage 3 and Stage 4, the response rate varied significantly from one moral dilemma to another,  $F(3,882)=6.79$ ,  $p<.001$  and  $F(3,882)=3.78$ ,  $p<.01$ , respectively.

Levine (1976) concluded that Stage 3 moral reasoning is more likely to be employed and Stage 4 reasoning is less likely to be employed when the respondents judge dilemmas implicating their primary others. In addition, different moral dilemmas function to increase or decrease response rate coded at Kohlberg's conventional stages.

The protagonist's identity in the dilemmas was also the variable considered by Rybash, Roodin, and Lonky (1981). These researchers investigated whether moral judgments would differ when the main character of the dilemmas in the Defining Issues Test (Rest, 1974) was the self rather than a hypothetical other. A modified Defining Issues Test was constructed in such a way that each subject was required to assume the role of the protagonist in the moral dilemma. Either the same version or the two different versions of the test were administered on two separate occasions, one week apart, to the subjects, 100 college sophomores enrolled in a psychology course.

A 2 x 2 repeated measures analysis of variance - Type of Test (standard versus modified) x Time of Test (Week 1 versus Week 2) - was conducted on the data from subjects given both versions of the test. There was a significant main effect for Type of Test,  $F(1,46)=10.56$ ,  $p<.005$ , indicating that higher P scores were obtained by subjects in the standard other-oriented version of the Defining Issues Test (Rest, 1974) than obtained by subjects in the modified, self-oriented version. The researchers suggested that higher stage scores for moral judgments on the standard version may be a consequence of the subject's affective distance from the problem. The emotional neutrality involved in making a decision in the other-oriented version may allow the individual to deal with the problem on a more abstract level.

The gender of the protagonist in Kohlberg's dilemmas was varied in a study by Bussey and Maughan (1982). A sample of Australian university students were administered either the original version of three of Kohlberg's dilemmas, with male protagonists, or a revised version with female protagonists. Based on Kohlberg's 1977 scoring system, subjects were assigned global scores.

A significant interaction effect was found between sex of subject and sex of protagonist,  $F(1,32)=6.53$ ,  $p<.05$ . While males scored higher than females on Kohlberg's standard dilemmas, both male and female scores were the same on the dilemmas with female protagonists. Bussey and Maughan (1982) offered the explanation that males see the female characters' actions as stemming from expressive reasons and responded at a lower level of moral reasoning.

#### Hypothetical Dilemmas versus Actual Dilemmas

The correspondence between stages of moral reasoning about hypothetical dilemmas and actual dilemmas was studied by Haan (1975). In this study, the subjects were 310 Berkeley undergraduates who were enrolled during the 1964 Free Speech Movement Crisis. A comparison was made of the students' moral reasoning scores on five of Kohlberg's moral dilemmas and on a Free Speech Movement Questionnaire. Haan (1975) found that two-thirds of the students were assessed at a different stage of reasoning--45% higher and 20% lower--for the actual situation than they were for the hypothetical dilemmas. Haan states, "The thrust of these analyses is that there are systematic differences--apparently attributable to nonmoral characteristics of the participants--between giving a

story character fictitious moral advice and formulating and acting on advice for oneself" (Haan, 1975, p. 269).

On the same theme of hypothetical dilemmas versus real-life dilemmas, Kohlberg, Scharf, and Hickey (1972) reported that a sample of 34 prisoners displayed significantly higher scores ( $p < .05$ ) on Kohlberg's hypothetical dilemmas than they did on a set of dilemmas designed to reflect moral conflicts experienced in the prison setting in which they were living.

Leming (1975) explored the influence of two aspects of dilemmas content on moral reasoning, classical dilemmas versus practical dilemmas, and dilemmas written in the judgment mode versus dilemmas written in the deliberation mode. Kohlberg's dilemmas were considered to be classical, with the situations and characters removed from the subject's life space. In these dilemmas, the moral choice is already made and the subject is asked to evaluate the action made (judgment mode). Another version of Kohlberg's classical dilemmas was written so that they were in the present tense and the moral choice was still open (deliberation mode). As an alternative to Kohlberg's classical dilemmas, Leming (1975) developed three practical dilemmas which contained conflict situations likely to be found within the subject's life space, that is, lying to parents, cheating, and peer group conflict. These dilemmas were also written in both the judgment mode and the deliberation mode.

The subjects, 60 eighth and twelveth grade students, were interviewed on the 12 different dilemmas, three within each of the four forms of moral reasoning. Kohlberg's 1972 moral maturity score was computed for each subject on all four forms of moral reasoning. For the analysis of the data, Kirk's (1968) multiple factors repeated measures split-plot

design was used. The mean moral maturity score for all subjects was found to be significantly higher in the judgment mode than in the deliberation mode. Although no significant main effect for dilemma type was found, two interactions were significant, Mode x Dilemma and Grade x Mode x Dilemma. The significant interaction effects were the result of the twelfth grade subjects' lower Moral Maturity Scores on the practical moral dilemmas written in the deliberation mode. Based on the results of this study, Leming (1975) recommended a moral education program that includes the use of practical dilemmas written in the deliberation mode.

A comparison of adolescents' (ages 13 to 17) moral reasoning on Kohlberg's dilemmas, new dilemmas written to "pull" interpersonal reasoning and game situations was made by Haan (1978). An interpersonal morality is proposed by Haan (1978) in which "moral solutions are achieved through dialogues that strive for balanced agreements among participants" (p. 286). Kohlberg's formal moral judgment theory is viewed as one branch of interpersonal morality. Moral reasoning was assessed using Kohlberg's scoring system and a scoring system based on a developmental interpersonal morality scheme devised by the researcher. The test-retest reliability for two Kohlberg dilemmas was .51 ( $N=56$ ) and for two interpersonal moral dilemmas was .46 ( $N=56$ ). Moral scores represented the modal levels of reasoning used either in the interview format or from all statements made in one game. The moral scores were transformed to continuous scores by weighting the major score by 3 and, when both a major and minor score was assigned, by 2 and 1 respectively.

Although formal reasoning was found to be used more often in the hypothetical dilemmas than interpersonal reasoning, the level of formal reasoning was lower than the level of interpersonal reasoning. In the



game situations, interpersonal reasoning was used more frequently, but the levels for formal and interpersonal morality did not differ. Haan (1978) also found that black adolescents were more advanced in interpersonal than in formal reasoning, but for whites the pattern was reversed. Haan (1978) suggested that interpersonal morality represents the more fundamental way in which people morally relate, and formal morality is one particular branch of interpersonal morality used in special kinds of rule-governed, impersonal situations.

Dilemmas involving the issue of abortion were investigated by Gilligan (1982) to explore the moral reasoning of women. The subjects in this study were 29 women considering abortion, who were referred by abortion and pregnancy counseling services. These women were interviewed twice concerning the abortion issue and were also asked to resolve three hypothetical moral dilemmas, including Kohlberg's Heinz dilemma. Gilligan (1982) found that while several of the women used postconventional reasoning concerning the abortion issue, none of them used principled reasoning as determined from the hypothetical dilemmas.

The finding that women score lower on Kohlberg's dilemmas is explained by Gilligan (1982) in terms of women's differing conception of morality. Women are seen to differ in having a psychological logic of relationships rather than a formal logic of fairness.

#### Prohibitive Dilemmas versus Prosocial Dilemmas

Eisenberg-Berg (1979) has characterized Kohlberg's dilemmas as prohibitive dilemmas concerned with laws, rules, authority, and formal obligations, in contrast to prosocial dilemmas that are concerned with self versus other-centered need satisfaction. To compare the two types

of moral reasoning, Eisenberg-Berg (1979) developed prosocial dilemmas involving conflicts between the main character's own wants, needs, and desires and those of a needy other. An example of a prosocial dilemma used by Eisenberg-Berg (1979) is one in which individuals had to choose between sharing or not sharing food with another town, which had been flooded, when sharing would result in their being very hungry themselves. Responses were coded as one of 16 empirically derived categories, for example, concern with punishment, concern for reciprocity, role taking, reference to rights and justice. On the basis of the categories used, subjects were scored as one of four prosocial stages.

Eisenberg-Berg (1979) reported that elementary and high school students' reasoning about prosocial dilemmas is more likely to reflect internalized standards than is their reasoning about prohibitive dilemmas. She suggested that theoretical conclusions based on research about prohibition-oriented moral judgments cannot necessarily be generalized to moral reasoning about aspects of prosocial behavior.

These results were supported in a study by Kurdek (1981), using a sample of high school and college students. These students were administered the Defining Issues Test (Rest, 1979), Eisenberg-Berg's (1979) prosocial dilemmas, as well as a measure of perspective-taking ability and Hogan's (1969) Empathy Scale. Both the Defining Issues Test dilemmas and the prosocial dilemmas were scored using Eisenberg-Berg's (1979) categories and a measure similar to the P Index was derived by computing a percentage of responses which reflected a strongly internalized moral orientation.

The data indicated that the mean percentage of principled reasoning on the prosocial dilemmas was significantly higher than on the prohibitive dilemmas,  $t(104)=-11.41$ ,  $p<.000$ . Mature moral reasoning in both prohibited and prosocial areas was found to be related to high social sensitivity and to high perspective-taking ability.

Kurdek (1981) concluded that subjects have higher moral maturity in prosocial moral reasoning than in prohibitive moral reasoning when moral maturity is defined by the extent one possesses an internalized code of ethics. However, Kurdek pointed out that the nature of the internalized code may be different for the prosocial and prohibitive issues.

### Summary

In the studies reviewed, moral judgment was found to vary with changes in the content of the dilemmas. When the protagonist of the dilemma was changed to a primary other (Levine, 1976) or the self (Rybash, Roodin, & Lonky, 1981), subjects tended to use moral reasoning at a lower level. When the protagonist in the dilemmas was a female, only males were found to decrease in level of moral reasoning (Bussey & Maughan, 1982).

In general, moral reasoning was found to be higher for Kohlberg's hypothetical dilemmas than for "real-life" or "practical" dilemmas (Kohlberg, Scharf, & Hickey, 1972; Leming, 1975). However, women were found by Gilligan (1982) to be lower in moral reasoning on Kohlberg's dilemmas than on abortion issues. Haan (1978) found that interpersonal reasoning was used more often in game situations than in hypothetical dilemmas. In a comparison of reasoning in an actual situation of civil

disobedience and in Kohlberg's dilemmas, Haan (1975) found a difference for two-thirds of the subjects, 46% higher, 20% lower.

Finally, when prohibitive and prosocial dilemmas were compared, subjects were found to have higher moral maturity on prosocial dilemmas (Eisenberg-Berg, 1979; Kurdek, 1981).

Evidence that dilemma content influences moral judgments has been presented in the above studies. However, none of these studies has addressed certain similarities in the dilemmas used by Kohlberg and Rest and the influence of this content on the assessment of moral judgments.

A content analysis of the Defining Issues Test dilemmas (see Table 1) reveals that in all the dilemmas, the protagonist must decide whether a special case should be made in the interest of one individual or a minority group rather than in the interest of social welfare as a whole. In the dilemmas, the following individuals or minority groups are the focus of concern: Heinz's wife in the Heinz dilemma; SDS and Faculty in the Student Take-over dilemma; escaped prisoner in the Escaped Prisoner dilemma; patient in the Doctor dilemmas; the Oriental mechanic in the Webster dilemma; and the student group in the Newspaper dilemma.

The focus on the needs or concerns of particular individuals or minority groups is accentuated by another similarity. In all the dilemmas, these needs or concerns are not supported by legal or established authority. If the dilemmas were changed in such a way that the interest of individuals or minority groups are not pitted against legal or established authority, would subjects who wished to address these needs or concerns justify their decisions in the same way?

The following table is a summary of dilemmas, parallel to those in the Defining Issues Test, in which individual rights are protected by legal or established authority:

Table 2

Summary of Alternate Dilemmas

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Henry and the Drug - Henry must decide whether or not to steal the formula for a new drug to prevent a scientist from selling it to other people. Henry had become very violent and nearly killed his wife after taking the drug. Should Henry steal the drug?

Student Revolt - A large group of university students take over the university's administration building to protest the university president's decision to retain the Students for Revolution (SFR) warfare training program on campus. Should the students have taken over the administration building?

Bully - Mrs. Smith must decide whether or not to report a group of neighborhood men to the police for beating up and killing a man known to be a bully and criminal although he had never been convicted of a crime. Should Mrs. Smith report the men to the police?

Doctor - A doctor must decide whether to perform surgery on a woman who refuses to sign the papers allowing the surgery to proceed, knowing that she will die if surgery is not performed. What should the doctor do?

Mr. Winston - Mr. Winston, the owner and manager of a business company, did not hire an accountant who was white because he was concerned about his customers who were members of minority groups. What should Mr. Winston have done?

Paper - The principal stopped the publishing of a school newspaper that supported the government's military spending and school rules, such as the rule banning punk clothes. The principal gave as a reason that it interfered with the individual rights of some students who did not agree with the opinion of the paper. Should the principal stop the newspaper?

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By comparing responses of subjects to these dilemmas and to the dilemmas in the Defining Issues Test (see Table 1), content effects on the moral reasoning manifested may be explored.

### Studies of Moral Judgment and Dilemma Action Choice

Moral judgment and moral action are considered to be distinct but related constructs in cognitive development theory. Rest (1979a) contended that stages, as general moral criteria, provide the interpretive framework for defining a particular situation. The way the moral conflict is construed may lead an individual to favor one action over another. However, in any one situation, a moral stage may be compatible with contrasting action alternatives. Consequently, the action choices can not always be predicted by the individual's stage of moral reasoning. Rest (1979a) stated:

To predict the relation of moral judgment to behavior, one must do a logical analysis of the particular interpretive framework of a given stage, and how that framework is likely to interact with features of a particular moral problem in disposing to an action. (p. 260)

Rest (1979a) suggested that the correlation between moral stage and action choice will be higher when one action makes more sense from a principled moral perspective and the other action makes more sense from a conventional moral perspective.

In an investigation of the relation of moral reasoning with dilemma action choice, Rest (1979a) reported that Kohlberg in his early 1958 work found a nonlinear relationship between stages of moral reasoning and action choices. For example in the Heinz dilemma, Kohlberg found that Stage 1 was associated with advocating not stealing the drug, Stage 2 with stealing, Stage 3 and 4 with ambiguity, Stage 5 with stealing, and Stage 6 with definitely stealing.

Using the Defining Issues Test, a significant relationship has been reported between moral reasoning and action choices, defined either as

"humanitarian-liberal" (Cooper, 1972), or as "aligned to established authority" (Martin, Shafto, & Van Deirse, 1977). The "humanitarian-liberal" pattern is based on the action choices that moral philosophy and political science doctoral students tend to make in the six Defining Issues Test dilemmas (Cooper, 1972). The six action choices that Cooper (1972) characterizes as a "humanitarian-liberal" pattern are all choices of actions that are not aligned with authority.

Martin and his colleagues (1977) argued that the relationship between moral reasoning and action choices in the Defining Issues Test dilemmas indicates that:

in some cases, certain decisions seemed to "attract" reasons associated with higher stages. In other words, one decision would be more likely to be compatible with principled reasoning (Stages 5 and 6) than the opposite decisions would be. (pp. 466-467)

Rest (1979a) maintained that moral reasoning should not be completely independent of moral decision. His view is that "form is related to content, but is not reducible to content" (p. 160).

To support this statement, Rest (1979a) provided evidence that reasoning and choice, although correlated, are distinct and, as variables, behave differently. He reported that for a sample of 160 high school and university students, the P Index correlated much higher with age ( $r=.62$ ), comprehension ( $r=.60$ ), and Law and Order Attitude ( $r=.60$ ) than did action choice ( $r=.29$ ,  $r=.20$ , and  $r=-.31$ , respectively). Rest suggested that action choice is not more highly correlated with the P Index ( $r=.34$ ), because the relation is not strictly linear. He points out that when action choice flip-flops back and forth through the order of the stages, the correlation will be highest if one course of action

is strongly favored by the lower stages and the opposite course of action is strongly favored by the higher stages.

### Summary

The relationship of the choice of action in a dilemma and the justification of that action has been investigated. A relationship was reported between "humanitarian-liberal" action choices and principled reasoning (Rest, 1979a). The "humanitarian-liberal" action choices were all actions that were not in compliance with authority. Martin et al. (1977) also reported a relationship between choices of dilemma actions that were in compliance with authority and moral reasoning.

The decision to comply with authority may be influenced by a number of factors. In the Defining Issues Test dilemmas, the individual's political attitude or ethical attitude may interact with dilemma content to influence the decision that is made. In a dilemma in which individual rights are protected by legal authority, the liberal subject may choose to comply with the law. On the other hand, when the issue of individual rights is placed in opposition to legal authority, the liberal individual may be expected not to comply. Conversely, the conservative subject may also choose to comply or not to comply depending on whether legal authority protects the issue supported by that political point of view.

### Summary

The moral judgment literature has been examined in four areas related to this study. Research was reviewed which explored the



relationship of dilemma content and moral judgment, as well as action choice and moral judgment. Furthermore, evidence of the relationships among moral judgment, political attitude, and ethical attitude were identified and discussed. Questions were raised concerning the effect of specified dilemma content on moral judgment, action choice, and on the relationship of moral judgment and two "person" variables, political attitude and ethical attitude. These questions form the basis for the research hypotheses addressed by the procedures discussed in the next chapter.

### CHAPTER III

#### METHODOLOGY

Chapter two presented a review of the literature pertinent to the hypotheses and provided justification for the study. Chapter three presents a description of the sample, the design of the study, which includes an explanation of measuring instruments and test administration procedure, and an outline of data processing and analysis.

The major questions addressed by the study are: (a) Is there an interaction of ethical attitude and moral dilemma content on moral development scores? (b) Is there an interaction of ethical attitude and moral dilemma content on compliance with authority action scores? (c) Is there an interaction of political attitude and moral dilemma content on moral development scores? (d) Is there an interaction of political attitude and moral dilemma content on compliance with authority action scores? (e) Can compliance with authority action scores be predicted from knowledge of subjects' ethical attitude, political attitude, and moral development scores.

### Description of the Samples

High school and university student volunteers participated in this study.

#### High School Sample

The high school population in the study was defined by enrolment in a Grade 11 Law course. The Grade 11 Law course is offered as an elective to any student and no prerequisites are required. Students who enrol in the Law course are representative of the total school population in terms of grade-point average. This course was selected to ensure a similar general background in law-related issues. In addition, the topic of the study was considered relevant to the content presented in the course.

The selection of the secondary schools in the school district wherein data were gathered was dependent on permission for the study being granted by the principal of the school and the teacher of the Law class. Consent was given by six of the eight schools offering the Grade 11 Law course. Two principals refused permission, one because a substitute teacher would be taking the place of the regular teacher of the class, and the other because of particular time constraints involved.

#### University Sample

The university student population was delimited by enrolment in Education courses at The University of British Columbia during the summer session immediately subsequent to the school term involved in the

high school study. The selection of the Education courses was dependent on permission being granted by the instructors.

### Subjects

The study was conducted in two phases and the subjects involved in each phase are described.

Phase One. The participants in the pilot study phase of the study were 47 student volunteers in two Grade 11 Law classes in a suburban, British Columbia secondary school. Comprising the sample were 29 females and 18 males with a mean age of 16.76 years ( $SD=.71$ ) and an age range of 15 years old to 18 years old.

Phase Two - High School Sample. The high school participants in Phase Two of the study consisted of 94 high school student volunteers enrolled in five Grade 11 Law classes in suburban, British Columbia secondary schools. Nine subjects were excluded from the study because they did not complete all the measures. Of those who completed all the measures, 17 subjects were excluded because they did not properly complete the Defining Issues Test and/or the Alternate Dilemmas Test. The Defining Issues Test responses of 14 subjects (16%) and the Alternate Dilemmas Test responses of 13 subjects (15%) contained one or more of the following errors: (a) more than eight errors or more than two stories with inconsistencies in ranking and rating of dilemma statements; (b) rating same number of the scale more than nine times; and (c) M Scores, based on rating and ranking meaningless items too high, of eight or more.

Eighty-two percent of the subjects excluded because of inconsistencies on the moral development measures made errors on both the Defining

Issues Test and Alternate Dilemmas Test. The mean D Index and action choice scores of those deleted from the study were not significantly different statistically from those not deleted.

Rest (1979a) indicated that the loss of questionnaires on the basis of the M Score and the Consistency Check is in the 2 to 15% range, although larger losses have occurred with disadvantaged or unmotivated groups. He recommended excluding the subject with errors because it gives clearer results and better reliability than leaving all the subjects in.

Sixty-eight subjects (36 females, 32 males) were included in the study. Their mean age was 17.15 years ( $SD=.85$ ) and ranged from 16 to 20 years of age.

Phase Two - University Sample. The university sample consisted of 57 university student volunteers enrolled in Education courses at The University of British Columbia. Thirteen of these subjects did not complete one or more of the four measures employed in the study. The mean scores on the measures completed by the subjects who were excluded because of missing data were compared to the mean scores obtained by subjects not excluded from the study and no statistically significant differences were found.

Of those subjects who completed all the measures, nine subjects were excluded because they did not properly complete the Defining Issues Test and/or the Alternate Dilemmas Test. The Defining Issues Test responses of seven subjects (16%) and the Alternate Dilemmas Test responses of five subjects (11%) contained one or more of the following errors: (a) more than eight errors or more than two stories with inconsistencies in ranking and rating of dilemma statements; (b) rating

same number of the scale more than nine times; and (c) M Scores, based on rating and ranking meaningless items too high, of eight or more.

Thirty-three per cent of the subjects excluded from the study because of inconsistencies on the moral development measures made errors on both the Defining Issues Test and the Alternate Dilemmas Test, 44% only on the Defining Issues Test, and 22% only on the Alternate Dilemmas Test. The mean D Index and action choice scores of those deleted from the study due to errors were not significantly different statistically from those not deleted.

The loss of questionnaires for the university sample on the basis of the M Score and the consistency check is on the outer limit of the 2 to 15% range indicated by Rest (1979a). As recommended by Rest (1979a), the subjects with errors were excluded from the study to gain clearer results and better reliability.

Thirty-five subjects were included in the study (21 females, 14 males). The mean age of the university subjects in the study was 31.94 years ( $SD=7.56$ ), ranging in age from 20 years to 50 years. Their mean years of education was 16.54 years ( $SD=1.58$ ).

#### Design of the Study

This study investigated the effect of dilemma content on moral development level and choice of actions in compliance with authority, as well as on the relationship of ethical attitude and political attitude to these variables.

## Procedures

The study was conducted in two phases. Phase One of the study involved the pilot testing of the alternate dilemmas used to measure moral judgment. This provided the opportunity to discover misleading or confusing aspects of the dilemmas and the stage statements that followed each dilemma. In phase two, subjects were administered the measurement instruments used to address the questions raised in the study.

The studies of moral development, ethical attitude, political attitude, and dilemma content reviewed in chapter two have typically involved university students. To validate and extend the generalizations of relevant studies, both a high school sample and university sample were employed in the present study. These two samples were considered separately in testing the hypotheses of the study because they are not viewed to be representative of the same population. The two samples differ in age and education, but also likely varied on other variables such as intelligence and socioeconomic status. Further, the university sample is more restrictive than the high school sample in that many high school students do not pursue post-secondary education and specifically a career in the education field.

## Measuring Instruments

### 1. Defining Issues Test

The Defining Issues Test developed by James Rest (1979b) was used as a measure of the development of moral judgment. This test consists of six moral dilemmas presented in story format, each followed by twelve prototypic stage statements. The statements that follow each story

represent different ways of construing the most important problem in the dilemma, and are considered by Rest (1979b) to exemplify the distinctive reasoning of a particular stage.

Immediately following the moral dilemma story, a question is asked about whether the character in the story should take an action specific to each dilemma, for example, "Should Heinz steal the drug?" The subject chooses one of the three options, for example, "Should take the action," "Can't decide," or "Should not take the action."

In addition to choosing an action choice, the subjects are asked to rate and rank the twelve issue statements that follow each dilemma story. These statements are to be rated and ranked in terms of the importance of each consideration in making decision about what ought to be done. A 5-item Likert scale, ranging from "Great importance" to "No importance," is used for the rating of the statements. Subjects are also asked to select the four most important statements and rank them from "Most Important Reason" to "Fourth Most Important Reason."

The reliability of each subject's responses on the Defining Issues Test is checked on the basis of a Consistency Check. The Consistency Check involves a comparison of a subject's ratings and rankings of dilemma statements for each dilemma. For example, if a subject ranks an item first, then his or her ratings for that item should have no other items higher. The data are discarded if the Consistency Check indicates (a) there are inconsistencies in ratings and rankings on more than two stories, or if the number of inconsistencies on any story exceeds eight instances; and (b) if two stories have more than nine items rated the same. The data are also discarded if the M Score exceeds eight. The M Score is based on the rating and ranking of meaningless items.



Several indices of moral development can be derived from the Defining Issues Test. The relevant indices for the present study are: Stage Scores, P Index, and D Index. A Compliance with Authority Score devised by the researcher based on the subject's action choices was also calculated for the purposes of this study.

Stage Scores. The Stage Scores indicate the relative importance given to different stage characteristics in making a moral decision. The Stage Score is determined by first assigning four points to the items ranked first, three points to the items ranked second, two points to the items ranked third, and one point to the items ranked fourth. Since the items are designated as representing a particular stage, stage scores can be obtained by totalling the points across the six stories for each stage.

P Index. The P Index is interpreted as the relative importance given to principled moral considerations in making a moral decision. The P Index is calculated by adding together the Stage Scores of Stages 5A, 5B, and 6.

D Index. Unlike the P Index, which does not incorporate information from the earlier stages, the D Index is an overall index of development. The D Index reflects the preference for principled reasoning over conventional and preconventional reasoning. The derivation of the D Index is based on the assumptions that: (a) both persons and moral reasons can be assigned scale values on a single underlying continuum of moral development; and (b) persons attach the most importance to statements which express a level of moral reasoning which is nearest their own level of reasoning.

The computation of the D Index involves first, standardizing the subject's rating of each item by subtracting the mean of the subject's item rating, subtracting an item mean computed on a standardization sample, and adding in the grand mean computed from the same standardization sample; second, multiplying each transformed rate by its appropriate factor score; and third, summing all the subject's rating scores. The factor score coefficients, or item weights, are estimates of item scale values, with higher stage reasons having higher weights.

The standardization sample (Rest, 1979b), used to obtain estimates of item weights and item means, consisted of 1,080 subjects, ranging in age from 15 to 82 and in education from junior high school to graduate school.

Compliance with Authority Score. After each dilemma, a question is asked about whether the subject would support a specific action of a character in the dilemma story. A Compliance with Authority Score is calculated based on the subject's responses to these questions. One point is given for each of the following choices: should not steal for the Heinz and the Drug dilemma, should not take over for Student Take-over dilemma, should report for the Escaped Prisoner dilemma, should not give overdose for the Doctor's dilemma, should not hire for the Webster dilemma, and should stop printing for the Newspaper dilemma. This Score was devised by the researcher.

Reliability and Validity Studies. Two extensive reviews (Davison & Robins, 1978; Rest, 1979a) present evidence for the reliability and validity of the Stage Score, P Index, and D Index of the Defining Issues Test.

Davison and Robbins (1978) report the findings of several studies investigating the reliability and validity of the indices of Rest's (1979b) Defining Issues Test. Based on a sample of 160 junior high, senior high, college, and graduate student, the internal consistencies of the following indices were reported: Stage 2 ( $\underline{r}=.50$ ), Stage 3 ( $\underline{r}=.51$ ), Stage 4 ( $\underline{r}=.52$ ), P Index ( $\underline{r}=.77$ ) and D Index ( $\underline{r}=.79$ ).

Test-retest reliabilities were also reported for two samples. The first sample consisted of 123 subjects attending moral education programs. Subjects' ages ranged from 16 to 56 years old and educational level ranged from junior high to college. Based on a retesting interval from one week to five months, reliability coefficients were reported for: Stage 2,  $\underline{r}=.44$ ; Stage 3,  $\underline{r}=.55$ ; Stage 4,  $\underline{r}=.61$ ; P Index,  $\underline{r}=.82$ ; and D Index,  $\underline{r}=.87$ .

Ninth graders ( $N=19$ ) and Australian college students ( $N=46$ ) made up the second sample. The test-retest reliabilities reported for this sample were: Stage 2,  $\underline{r}=.62$ ; Stage 3,  $\underline{r}=.66$ ; Stage 4,  $\underline{r}=.76$ ; P Index,  $\underline{r}=.76$ ; and D Index,  $\underline{r}=.76$ .

A cognitive developmentalist claim is that there is a moderate relation of intelligence with moral judgment, however, moral judgment is a distinct aspect of intellectual development (Rest, 1979a). In a review of 15 studies correlating the P Index with measures of cognitive ability, Rest (1979a) reported that of 52 correlations, 83% are in the .20's to .50's range, confirming the claim of a moderately high correlation. The subjects in the 15 studies included students from junior high to graduate level, delinquents, and nonstudent adults.

To support the hypothesis that understanding accompanies preference for high stage statements, the Defining Issues Test was correlated with

measures of comprehension of social-moral issues. The multiple-choice Comprehension of Moral Issues Test (Rest, Cooper, Coder, Masanz & Anderson, 1974) was designed to test comprehension of such concepts as social contract, legitimate authority, and due process of law. Rest (1979a) reported that for nine studies using the Comprehension of Moral Issues Test and the P Index of the Defining Issues Test, the average correlation was .51. The samples in these studies included students, delinquents, and nonstudent adults ranging in age from 14 to 49 years old. Rest (1979a) interprets the findings as evidence that the way subjects judge moral issues is related to their cognitive comprehension.

Evidence of a relationship between the Defining Issues Test and measures of social and political attitudes is viewed by Rest (1979a) as an indication that moral judgment is not a value-neutral intellectualizing skill. Rest et al. (1974) found that the Defining Issues Test P Index and the Law and Order Test correlated  $-.60$  for a sample of 160 junior high, senior high, college, and graduate students;  $-.48$  for a sample of 65 junior and senior high school students; and  $-.46$  for a sample of nonstudent adults.

The Defining Issues Test was also compared to another measure of moral judgment, Kohlberg's test. Rest (1979a) reported the correlations of the P Index and Kohlberg's stage scores range from  $.17$  to  $.78$  for seven studies. The highest correlation was found for a sample of 45 physicians using Kohlberg's 1976 scoring system and the lowest correlation for a sample of 74 low academic junior high students. Rest (1979a) suggests that the lower correlations are found for homogeneous samples where the range of scores tend to be restricted.

Davison and Robbins (1978) reported correlations of the D Index of the Defining Issues Test with measures of cognitive ability,  $r=.47$ ,  $p<.01$ ; with the Comprehension of Moral Issues Test,  $r=.63$ ,  $p<.01$ ; and with the Law and Order Test,  $r=-.49$ ,  $p<.01$ . The sample used included 160 students ranging from junior high to the graduate school level. They also reported that the D Index correlates with Kohlberg's interview scores for a sample of 74 ninth-graders,  $r=.20$ , and 139 college students,  $r=.35$ . However, when both groups were considered together, the correlation was .70, suggesting that the majority of the common variance in the total sample can be accounted for by the measures common age trends.

Another source of support for the construct validity of the Defining Issues Test is evidence of age trends in scores. The longitudinal data of two studies were reported by Davison and Robbins (1978). In one study, 20 grade nine and 33 grade 11 students were tested in 1972, 1974, and 1976. Over the four years, there was a significant decrease in their Stage 2 and 3 scores and a significant increase in their Stage 5A and 5B scores:  $F=20.06$ ,  $p<.01$  for the P Index, and  $F=24.86$ ,  $p<.01$  for the D Index. A different pattern was reported for the second study involving a sample of 21 junior and senior high school students. Only the scores for Stage 3 ( $F=2.90$ ,  $p<.01$ ) and the D Index ( $F=2.64$ ,  $p<.05$ ) were significant.

Summary. Support for the reliability and validity of the various indices of the Defining Issues Test has been presented. The validating criteria included evidence of the following: internal consistency reliability, test-retest reliability, correlation with measures of

cognitive ability, comprehension of moral issues, social-political attitudes, and Kohlberg's moral judgment measure, and age trends.

## 2. Alternate Dilemmas Instrument

This measure has been constructed by the researcher to provide alternate dilemmas to those used in the Defining Issues Test. The alternate dilemmas are written to differ from the Defining Issues Test dilemmas in the following way. In the alternate dilemmas, the focus is whether to make a special case in the interest of social welfare or the majority group rather than in the interest of individual or minority group rights. Legal or established authority is in support of individual or minority group rights in the alternate dilemmas rather than in opposition to these rights.

Each of the alternate dilemmas is followed by twelve stage prototypic statements similar to the Defining Issues Test statements except for minor wording changes made to fit the changed dilemmas. The statements are written to parallel the Defining Issues Test statements, consequently the number and order of the statements at each stage is identical to those in the Defining Issues Test.

The same instructions are given to subjects as are given for the Defining Issues Test. The moral development scoring indices used for the Defining Issues Test are also used for the alternate dilemmas instrument. These indices are Stage Scores, P Index, and D Index. In addition, a Compliance with Authority Score for the alternate dilemmas is calculated by giving one point for each of the following choices: should not steal for the Henry and the Drug dilemma, should not take over for the Student Revolt dilemma, should report for the Bully

dilemma, should not perform surgery for Doctor's dilemma, should hire for the Winston dilemma, and should stop paper for the Paper dilemma.

The reliability of each subject's responses on the Alternate Dilemmas Test is checked on the basis of a Consistency Check using the same criteria as used for the Defining Issues Test. The subject's protocol was eliminated if: (a) there are inconsistencies in ratings and rankings on more than two stories, or if the number of inconsistencies on any story exceeds eight instances; and (b) if two stories have more than nine items rated the same. An M Score of eight or more will also result in the data being discarded. The M Score is based on the rating and ranking of meaningless items.

### 3. Survey of Ethical Attitudes, Form B

The Survey of Ethical Attitudes was developed by Hogan (1970) to measure the disposition to adopt a particular ethical orientation, either the ethics of social responsibility (high score) or the ethics of personal conscience (low score). The 35 items in this scale are concerned with attitude toward legal and social compliance. Responses involve degree of agreement or disagreement with various item statements or a choice of statements which indicate attitude toward various actions involving compliance or noncompliance.

Hogan (1970) reported the parallel form reliability of the Survey of Ethical Attitudes in an initial sample of respondents as .97, and in a subsequent sample as .88.

To ascertain the validity of the Survey of Ethical Attitudes, Hogan (1970) compared the responses of groups known to differ in their attitudes toward the law. He found that his test discriminated very strongly between policemen and political activists and between ROTC

Seniors and student activists. In another study (Hogan & Dickstein, 1972b), the test was found to discriminate between fraternities that were classed on the basis of campus stereotypes as conservative, moderate, and radical. These groups were considered to use different criteria in justifying their moral decisions.

In this study, the ethics of social responsibility will be operationally defined as a score at or above the median for each sample on the Survey of Ethical Attitudes. Conversely, the ethics of personal conscience will be operationally defined as a score below the median for each sample on the Survey of Ethical Attitudes.

#### 4. Political Attitude Questionnaire

The Political Attitude Questionnaire administered to the high school subjects in Phase Two of the study consisted of two sections: A six item Individualism/Collectivism Scale (Blake, Johnston & Elkins, 1981) and ten items taken from the Politico-Economic Conservatism Scale (Levinson, 1950). The two measures of political attitude were administered to the high school sample to obtain a more reliable measure of political attitude. However, as a result of the low correlation found between the Individualism/Collectivism Scale and the Politico-Economic Conservatism Scale for the high school sample,  $r(76) = -.25$ ,  $p < .05$ , only the Politico-Economic Conservatism Scale scores were utilized in the data analyses.

##### 4A. Individualism/Collectivism Scale

The Individualism/Collectivism Scale was designed by Blake, Johnston, and Elkins (1981) to tap differences in the ideologies of free enterprise (Individualism) and socialism (Collectivism). This scale includes two forced-choice dichotomous items and four agree-disagree



items. An example of an agree-disagree item is, "Let's face it, most unemployed people could find a job if they really wanted to" (Blake, Johnston & Elkins, 1981). Possible scores range from 0 to 6, with higher scores representing greater support for "collectivist" solutions.

Although data on the reliability of this measure were not reported, its validity is supported by the finding that adherents of the two major provincial parties, Social Credit and New Democrats, were differentiated by positions on the scale, based on a sample of 1,050 British Columbian voters.

For the high school sample in Phase Two of this study, Individualism will be operationally defined as a score on the Scale below the median and Collectivism as a score on the Scale at or above the median.

#### 4B. Politico-Economic Conservatism

The Politico-Economic Conservatism Scale was designed by Levinson (1950) to measure politico-economic ideology along a liberalism-conservatism dimension, with high scores representing conservatism and low scores, liberalism. Subjects are asked to express the degree of their agreement or disagreement along a six-point Likert format for ten statements. Four of the fourteen items in the Second Form of the Scale were eliminated because of their United States content.

Levinson (1950) reported the average reliability for the Second Form of the Politico-Economic Conservatism Scale to be .70 for three samples of university students and a sample of Service Club Men. An item analysis indicated the measure has an over-all discriminatory power of 2.08. The finding that Service Club Men made the highest score for Conservatism is provided as support for the validity of the measure. Further validation is provided in the form of case studies in which two

subjects' responses on the Scale and on interview protocols are compared.

For the high school sample in Phase Two of this study, Conservatism will be operationally defined as a score on the Politico-Economic Conservatism Scale at or above the median and Liberalism as a score on the Scale below the median.

#### 5. Conservatism Scale

The Conservatism Scale administered to the university sample in Phase Two of the study was developed by Wilson and Patterson (1970). "Conservatism" is presumed by the authors to be a personality dimension and a general factor underlying the entire field of social attitudes.

The Conservatism Scale was administered to the university sample in place of the political attitude measures used for the high school sample. The decision to use the Conservatism Scale was made when it was discovered that both the Individualism/Collectivism Scale and Politico-Economic Conservatism Scale had low internal consistencies reliabilities for the high school sample.

The fifty items of the Conservatism Scale consist of brief labels or "catch-phrases" representing various familiar and controversial issues with response options of "Yes," "?" and "No." Each item is rated on a three-point Likert-type scale, i.e. liberal response=0, ambiguous response=1, and conservative response=2. The range of possible scores is 0 to 100 (the higher the more conservative).

Wilson (1973) reported the internal consistency coefficients for nine samples from four countries (total of 2,022 subjects) ranged from .83 to .94, with one exception of .63 for a sample of Australian army conscripts. Wilson (1973) also reported test-retest correlations of .89

for a sample of female education students and .94 for German psychology students. The Conservatism Scale is reported to be free of acquiescence response bias (Cloud & Vaughn, 1969) and less susceptible to the effects of social desirability response set (Orpen, 1971).

The construct validity of the measure was supported by four studies which compared groups known to differ on the conservatism dimension (Wilson, 1973). Schneider and Minkman (cited in Wilson, 1973) also found correlations of .51 and .43 between the Conservatism Scale total scores and subjects' self-ratings on two global political scales. Based upon a principal components analysis on a sample of 200 British males, Wilson (1970) claimed support for the unidimensional nature of the Conservatism Scale as a measure of a general factor of conservatism.

For the university student sample in phase two of this study, Conservatism was operationally defined as a score at or above the median on the Conservatism Scale and Liberalism as a score below the median on the Conservatism Scale.

### Administration

Phase One. The unrevised Alternate Dilemmas Test was group-administered by the researcher to a pilot sample of students in two different Grade 11 Law classes. The time required for completion of the instrument was approximately 30 minutes. The remainder of class time was used to discuss the instrument with the students.

Phase Two - High School Sample. In Phase Two, the main high school sample was administered the Defining Issues Test, the Alternate Dilemmas Test, and the Survey of Ethical Attitudes. In addition, this sample was

given the Political Attitude Questionnaire, consisting of the Individualism/Collectivism Scale and the Politico-Economic Conservatism Scale.

All the measures were group-administered by the researcher and/or a trained research assistant. The measures were presented randomly to each subject except for a stipulated minimum of a 48 hour period of time between completion of the two different dilemma instruments and with a maximum of a 5-day period for completion of all four measures.

In general, the time required was two 45-minute periods. Regular class time was used for all high school subjects.

Phase Two - University Sample. In Phase Two, the university sample was administered the Defining Issues Test, the Alternate Dilemmas Test, and the Survey of Ethical Attitudes. The measure of political attitude given to this sample was the Conservatism Scale.

The four measures were group-administered by the researcher and/or a trained research assistant. The measures were presented randomly to each subject except for a stipulated minimum of a 48 hour period of time between completion of the two different dilemma instruments and with a maximum of a 5-day period for completion of all four measures.

The university students were tested either during regular class time or at other times scheduled by the researcher, depending on the response of the course instructor.

### Data Processing and Analysis

#### Data Processing

All measures were hand-scored and coded by a research assistant. The Defining Issues Test and Alternate Dilemmas Test were also scored by

the computer using a program adapted from a model program by Davison et al. (1979). The Survey of Ethical Attitudes and the political attitude measures were computer scored using the Laboratory of Education Research Test Analysis Package, LERTAP (Nelson, 1974). Scores obtained by hand scoring of the measures were verified with scores obtained by computer scoring of the measures.

### Data Analysis

Phase One. The following analyses were completed in Phase One:

- tables of frequency counts for the dilemma statement ratings, rankings, and behavioral choices.
- an item analysis of the Alternate Dilemmas Test using the Statistical Package for the Social Sciences (SPSSX) computer programs (SPSSX Inc., 1983).
- a content analysis of the dilemmas and dilemma statements using the written and spoken comments made about the Alternate Dilemmas Test by the subjects.

Phase Two. Data from the two samples in phase two were analyzed separately. The high school and university sample were considered to represent different populations, differing in age, education, and on other variables such as intelligence and socioeconomic status. Many high school students do not pursue post-secondary education and the university sample is further restricted by including only students who are in Education courses.

The following analyses were completed separately in phase two for each of the samples:

- an item analysis of the Defining Issues Test and the Alternate Dilemmas for each of the following indices: Stage Scores, P Index, D Index, and Compliance with Authority Action Score. The analysis was performed using SPSSX computer programs (SPSSX Inc., 1983).
- an item analysis of the Survey of Ethical Attitudes, the Individualism/Collectivism Scale, the Politico-Economic Conservatism Scale, and the Conservatism Scale using the LERTAP (Nelson, 1970) computer program.
- zero-order correlation coefficients to permit a preliminary investigation of the strength of relationships among the constructs being measured.
- tests of significance for Sex effect on moral development level, Compliance with Authority Score, ethical attitude and political attitude.
- a 2 x 2 x 2 multivariate analysis of variance repeated measures. Political Attitude (High Conservatism, Low Conservatism) and Ethical Attitude (High Social Responsibility, Low Social Responsibility) were used as between-subject factors. Dilemma Type (Defining Issues Test, Alternate Dilemmas Test) was used as a within-subject repeated measures factor. The two dependent variables were moral development level (D Index) and action choice (Compliance with Authority Score).
- a stepwise multiple regression analysis using a SPSSX (1983) computer program analyzing action choice (Defining Issues Test) as a function of moral development level (Defining Issues Test D Index), political attitude, ethical attitude, moral development level (Alternate Dilemmas D Index), sex, and age.

-- a multiple regression analysis using SPSSX (1983) computer program analyzing action choice (Alternate Dilemmas Test) as a function of moral development level (Alternate Dilemmas Test D Index), political attitude, ethical attitude, moral development level (Defining Issues Test D Index), sex, and age.

A detailed description of the results of these data analyses is reported in chapter four.

### Summary

A description of the sample and the design of the study has been presented. An explanation of the procedure used for test administration included information about the measures employed in the study, i.e., Defining Issues Test (Rest, 1979b), Alternate Dilemmas Test (researcher-designed), Survey of Ethical Attitudes (Hogan, 1970), Politico-Economic Conservatism Scale (Levinson, 1950), Individual/Collectivism Scale (Blake, Johnston, & Elkins, 1981), and Conservatism Scale (Wilson & Patterson, 1970). Finally, data processing and analyses were outlined.

## CHAPTER IV

### RESULTS

Chapter four is devoted to the presentation of the results of both phases of the study. Phase one represents the pilot testing of the alternate dilemmas instrument and the results of the item and test analysis of the unrevised alternate dilemmas are reported. The hypotheses of the study were tested in phase two with a high school student sample and a university student sample. The results for phase two of the study are presented separately for each sample in relation to the hypotheses that were tested.

#### Phase One

##### Item and Test Analysis

An item analysis of the unrevised alternate dilemmas was performed. Frequency counts of dilemma statement ratings and rankings indicated a need for revision of some dilemma statements. In addition, a content analysis based on subjects' written and spoken comments was made. Information from these analyses was used in making revisions to the alternate dilemmas.



### Phase Two - High School Sample

The results of the data analyses for the high school sample are presented in relation to the hypotheses that were tested.

#### Preliminary Analyses

An item analysis for the high school sample was performed for each of the four indices of the Defining Issues Test and the Alternate Dilemmas Test, i.e., Stage Scores, P Index, D Index, and Action Choice (Compliance with Authority Score), as well as the Survey of Ethical Attitudes, Individualism/Collectivism Scale and Politico-Economic Conservatism Scale.

Means and standard deviations of the Defining Issues Test (D Index and Action Choice), Alternate Dilemmas Test (D Index and Action Choice), Survey of Ethical Attitudes, Individualism/Collectivism Scale and Politico-Economic Conservatism Scale are presented for the high school sample in Table 3. The internal consistencies test reliabilities are also presented in Table 3 for the ethical attitude and political attitude measures. The test statistics of the high school sample for the Stage Scores and P Index of the Defining Issues Test and Alternate Dilemmas Test are presented in Appendix B (see Table B-1). Although the Stage Scores and P Index are not used in the analysis in this study, information regarding these indices are reported because of their common use in the research literature.

Dividing the sample on the basis of a median score of 17 on the Survey of Ethical Attitudes, resulted in 38 subjects being grouped as high ethics of social responsibility and 30 subjects as low ethics of

Table 3

High School Sample Test Statistics (N = 68)

	SEA	IC	PEC	<u>D Index</u>		<u>Action</u>	
				DIT	ADT	DIT	ADT
<u>M</u>	17.04	4.07	39.71	18.00	18.21	2.65	2.43
<u>SD</u>	4.39	1.21	6.57	5.98	6.20	1.16	1.14
REL	.68	.34	.32				

Notes: SEA = Survey of Ethical Attitudes  
 IC = Individualism/Collectivism Scale  
 DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test  
 PEC = Politico-Economic Conservatism  
 REL = Internal Consistencies Reliability

social responsibility (ethics of personal conscience). The high ethics of social responsibility group had a mean score on the Survey of Ethical Attitudes of 20.00 (SD=2.57), whereas the low ethics of social responsibility group had a mean of 13.30 (SD=3.20).

As a result of the low correlation found between the two measures of political attitude used with the high school subjects, that is, the Individualism/Collectivism Scale and the Politico-Economic Conservatism Scale,  $r(66) = -.25$ ,  $p < .05$ , only the Politico-Economic Conservatism Scale scores were used to group subjects as high conservatism or low conservatism (liberalism). The political attitude groups, formed on the basis of the Politico-Economic Conservatism Scale median score of 40, consisted of 36 subjects in the high conservatism group and 32 subjects in the low conservatism group. The mean score of the high conservatism

group on the Politico-Economic Conservatism Scale was 44.61 ( $SD=4.05$ ), while the low conservatism group's mean score was 34.19 ( $SD=3.92$ ).

Pearson Product Moment correlation coefficients were calculated to permit a preliminary investigation of the strength of the relationships among the constructs being measured. The data were inspected to determine if the planned analyses were appropriate. The correlation matrix of the measures used with the high school sample is presented in Table 4. The correlation matrix for the Stage Scores and P Index is presented in Appendix B (see Table B-2).

The correlation analyses for the high school sample indicated a statistical significance for the relationship between the Defining Issues Test and Alternate Dilemma Test D Index scores,  $r(66)=.69$ ,  $p<.001$ , and action choice scores,  $r(66)=.39$ ,  $p<.001$ . Further, the correlation between the Defining Issues Test D Index and Action Choice scores was found to have statistical significance,  $r(66)=.40$ ,  $p<.001$ . However, the Alternate Dilemma D Index was not found to be statistically significantly correlated with the Alternate Dilemmas Test action choice scores although it was with the Defining Issues Test action choice scores,  $r(66)=.32$ ,  $p<.01$ . Neither ethical attitude nor political attitude measures were significantly correlated with the two moral development measures' D Index or Action Choice scores.

#### Analysis of Sex Differences

Tests of significance were performed for the high school sample to determine whether the sex variable could be disregarded in subsequent analyses. There was no significant difference found between males and

Table 4

High School Sample Correlation Matrix (N = 68)

	SEA	IC	PEC	<u>D Index</u>		<u>Action</u>	
				DIT	ADT	DIT	ADT
SEA	1.00						
IC	-.01	1.00					
PEC	.05	-.25*	1.00				
D Index							
DIT	-.21	.08	-.01	1.00			
ADT	-.22	-.05	-.01	.69***	1.00		
Action							
DIT	.13	.06	.02	.40***	.32**	1.00	
ADT	.12	.06	.02	.18	.19	.39***	1.00

Note: DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test  
 SEA = Survey of Ethical Attitudes  
 IC = Individualism/Collectivism Scale  
 PEC = Politico-Economic Conservatism Scale

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

females in moral development level (D Index) or action choice (Compliance with Authority Score) for either the Defining Issues Test or the Alternate Dilemmas Test. In addition, there was no significant sex difference on any of the ethical attitude or political attitude measures used with the high school sample. Consequently, the sex variable was not included in any of the high school sample analyses that follow.

### 2 x 2 x 2 Multivariate Analysis of Variance Repeated Measures

A 2 x 2 x 2 multivariate analysis of variance repeated measures was performed for the high school sample to test the hypotheses of the study. The two between-subject factors were Ethical Attitude (High Social Responsibility, Low Social Responsibility) and Political Attitude (High Conservatism, Low Conservatism) and the within-subject factor was dilemma type (Defining Issues Test dilemmas, alternate dilemmas). The two dependent variables were moral development level (D Index) and action choice (Compliance with Authority Score).

The moral development level and action choice means and standard deviations of the two dilemma types for the high school groups are presented in Table 5. This information for the high school sample is presented with the P Index as the dependent variable in Appendix B (see Table B-3).

Interactions between subject's ethical attitude/political attitude and dilemma content for both moral development level and action choice were predicted. Scores on the Defining Issues Test and the Alternate Dilemmas Test were hypothesized to vary in terms of the subjects' ethical attitude and political attitude. The dilemma type by ethical attitude interaction effect was predicted to consist of subjects with high ethics of social responsibility scores having lower moral development level and choosing more actions in compliance with authority on the Defining Issues Test than on the Alternate Dilemmas Test than subjects with low ethics of social responsibility scores. It was expected that subjects with high conservatism and low conservatism scores would perform in a similar manner to subjects with high ethics of social

Table 5

High School Sample Means and Standard Deviations  
of the Two Dilemma Types for the Four Groups

	Ethics of <u>Social Responsibility</u>				Ethics of <u>Personal Conscience</u>			
	Conservatism <u>n</u> = 21		Liberalism <u>n</u> = 17		Conservatism <u>n</u> = 15		Liberalism <u>n</u> = 15	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
D Index								
DIT	18.69	4.59	14.50	5.12	18.48	6.69	20.53	6.60
ADT	17.93	5.81	14.97	6.20	19.02	3.88	21.48	7.21
Action								
DIT	2.76	1.14	2.77	1.15	2.47	1.30	2.53	1.13
ADT	2.67	1.24	2.29	1.21	2.07	.88	2.60	1.12

Note: DIT = Defining Issues Test  
ADT = Alternate Dilemmas Test

responsibility and low ethics of social responsibility scores, respectively.

In addition, main effects were predicted for each dilemma type. On the Defining Issues Test, subjects with high ethics of social responsibility scores were hypothesized to have lower moral development level and to choose more actions in compliance with authority than subjects with low ethics of social responsibility scores. Similarly, subjects with high conservatism scores were also hypothesized to score lower in moral development and choose more actions in compliance with authority on the Defining Issues Test than subject with low conservatism scores.

On the other hand, the D Index and action choice scores on the Alternate Dilemmas Test were hypothesized to be in the opposite direction to the score on the Defining Issues Test for the ethical attitude and political attitude groups. Subjects with high ethics of social responsibility scores, or high conservatism scores, were predicted to have higher moral development level and to choose fewer actions in compliance with authority on the Alternate Dilemmas Test than subjects with low ethics of social responsibility scores, or low conservatism scores.

The results for the high school subjects will first be discussed in terms of the hypotheses concerning interaction effects and then main effects. In Table 6, a summary of the results of the analysis for the high school sample is presented. A summary of the analysis using the P Index as a dependent variable is presented in Appendix B (B-4).

Dilemma Type x Ethical Attitude. It was hypothesized that dilemma type would interact with ethical attitude for both the moral development and action choice variables. The following hypothesis was made about the dilemma type by ethical attitude interaction effect for the moral development variable.

9. There will be a significant difference in the relationship of moral development level and ethical attitude for the two types of dilemmas, that is, subjects with high social responsibility scores will have lower moral development level on the Defining Issues Test dilemmas and higher moral development level on the alternate dilemmas than subjects with low social responsibility scores.

In addition, the following hypothesis was made about the dilemma type by ethical attitude interaction effect for action choice scores.

Table 6

## High School Sample Summary Data

2 x 2 x 2 Multivariate Analysis of Variance Repeated Measures							
	Multivariate			Univariate			
	<u>Hotellings</u>	<u>Equiv</u>	<u>p</u>	<u>Moral Dev</u>		<u>Action</u>	
	<u>T<sup>2</sup></u>	<u>F (df)</u>		<u>F</u>	<u>p</u>	<u>F</u>	<u>p</u>
ETH	.16	5.04(2,63)	.009	6.07	.016	.83	.364
POL	.01	.40(2,63)	.673	.59	.446	.02	.897
ETH x POL	.08	2.53(2,63)	.088	5.12	.027	1.06	.308
DIL	.04	1.12(2,63)	.332	.13	.724	2.02	.160
DIL x ETH	.01	.34(2,63)	.711	.65	.425	.10	.758
DIL x POL	.01	.27(2,63)	.767	.53	.468	.00	.996
DIL x ETH x POL	.03	1.01(2,63)	.371	.12	.732	1.81	.183

Note: ETH = Ethical Attitude  
POL = Political Attitude  
DIL = Dilemma Type

10. There will be a significant difference in the relationship of subject's choices of action in compliance with authority and ethical attitude for the two types of dilemmas, that is, subjects with high social responsibility scores will choose more actions in compliance with authority on the Defining Issues Test dilemmas and will choose fewer actions in compliance with authority on the alternate dilemmas than subjects with low social responsibility scores.

The multivariate analysis of variance repeated measures of Table 6 indicated a nonsignificant dilemma type by ethical attitude interaction



effect for the set of dependent variables. There was no significant difference found in the relationship of moral development level or action choice and ethical attitude for the two types of dilemmas. Thus, hypotheses nine and ten are not confirmed for the high school sample.

Dilemma Type x Political Attitude. Dilemma type by political attitude interaction effects were hypothesized for both the moral development and action choice variables. The hypothesis for the dilemma type by political attitude interaction effect for moral development is:

11. There will be a significant difference in the relationship of moral development level and political attitude for the two types of dilemmas, that is, subjects with high conservatism scores will have lower moral development level of the Defining Issues Test dilemmas and higher moral development level on the alternate dilemmas than subjects with low conservatism scores.

The following hypothesis concerns the dilemma type by political attitude interaction effect for the action choice variable.

12. There will be a significant difference in the relationship of subjects' choices of action in compliance with authority and political attitude for the two types of dilemmas, that is, subjects with high conservatism scores will choose more actions in compliance with authority on the Defining Issues Test and will choose fewer actions in compliance with authority on the alternate dilemmas than subjects with low conservatism scores.

When the dependent variables are taken together in the multivariate analysis of variance repeated measures for the high school sample, there was a nonsignificant dilemma type by political attitude interaction effect. Thus, hypotheses 11 and 12, concerning the dilemma type by

political attitude interaction effect for moral development level or action choice, were not supported for the high school sample.

Ethical Attitude. Ethical attitude effects for the moral development and action choice variables were hypothesized for both dilemma types.

The following hypotheses were made about the ethical attitude variable for the Defining Issues Test. Hypothesis one concerns the moral development variable and hypothesis two, the action choice variable.

1. Subjects with high ethics of social responsibility scores will have significantly lower moral development level as assessed by the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores.
2. Subjects with high ethics of social responsibility scores will choose significantly more actions in compliance with authority on the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores.

The hypotheses concerning the ethical attitude effect on the Alternate Dilemmas Test moral development scores (hypothesis three) and action choice scores (hypothesis four) follow:

3. Subjects with high ethics of social responsibility scores will have significantly higher moral development level as assessed by the alternate dilemmas than subjects with low ethics of social responsibility scores.
4. Subjects with high ethics of social responsibility scores will choose significantly fewer actions in compliance with authority on

the alternate dilemmas than subjects with low ethics of social responsibility scores.

The results of the multivariate analysis of variance repeated measures of Table 6 examining the effect of ethical attitude differences on the set of dependent variables shows a statistical significance for the set of dependent variables (D Index and Compliance with Authority Score) considered together,  $F(2,63)=5.04$ ,  $p<.009$ . Inspection of the univariate F ratios reveals a significance for only the moral development variable,  $F(1,64)=6.07$ ,  $p<.016$ .

Inspection of the mean moral development scores indicate that hypothesis one, in which subjects with high ethics of social responsibility scores are predicted to have significantly lower moral development level as assessed by the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores, is supported for the high school sample. However, hypotheses two, concerning the ethical attitude effect for Defining Issues Test action choice scores is not supported for the high school sample.

Neither of the ethical attitude hypotheses concerning moral development level and action choice for the Alternate Dilemmas Test (hypotheses three and four) were supported by the data analysis. Although the difference between the two ethical attitude groups in moral development level was statistically significant, inspection of the mean scores indicated that the difference was not in the direction hypothesized for the Alternate Dilemmas Test. It was predicted that subjects with high ethics of social responsibility scores would have significantly higher moral development level on the Alternate Dilemmas Test than subjects with low ethics of social responsibility score. Contrary to

expectations, subjects with high ethical attitude scores had lower moral development level on the Alternate Dilemmas Test than subjects with low ethical attitude scores.

Political Attitude. Political attitude effects for each dilemma type's moral development and action choices scores were hypothesized.

The hypotheses for the political attitude effects for the Defining Issues Test moral development score (hypothesis five) and action choice scores (hypothesis six) are:

5. Subjects with high conservatism scores will have significantly lower moral development level as assessed by the Defining Issues Test dilemmas than subjects with low conservatism scores.
6. Subjects with high conservatism scores will choose significantly more actions in compliance with authority on the Defining Issues Test dilemmas than subjects with low conservatism scores.

The multivariate analysis of variance repeated measure examining the effect of Political Attitude differences on moral development and action choice variables, considered together, did not show statistical significance. Neither hypothesis five nor six is confirmed by the results of the data analysis for the high school sample.

The hypotheses for the political attitude effects for the Alternate Dilemmas Test moral development scores (hypothesis seven) and action choice scores (hypothesis eight) are:

7. Subjects with high conservatism scores will have significantly higher moral development level as assessed by the alternate dilemmas than subjects with low conservatism scores.

8. Subjects with high conservatism scores will choose significantly fewer actions in compliance with authority on the alternate dilemmas than subjects with low conservatism scores.

Consistent with the findings for political attitude and the Defining Issues Test moral development and action choice scores, the data analysis indicated that there was no statistical significance for political attitude and the Alternate Dilemmas Test moral development and action choice scores. Thus, hypotheses seven and eight, concerning the Alternate Dilemmas Test, were not confirmed by the results of the analysis for the high school sample.

Summary. Subjects with high ethics of social responsibility scores were found to have significantly lower moral development level on the Defining Issues Test than subjects with low ethics of social responsibility scores (hypothesis one). Hypotheses 2 to 12 were not confirmed by the results of the analysis for the high school sample.

#### Multiple Regression Analyses

Two stepwise multiple regression analyses were performed for the high school sample with the dependent variable the action choice scores of either the Defining Issues Test or the Alternate Dilemmas Test.

It was hypothesized that the best predictor of action choice for each dilemma type would be the respective dilemma type D Index score. Further, the ethical attitude, political attitude, Alternate Dilemma Test moral development, sex and age variables were expected to add significance to the regression equation.

Defining Issues Test Action Choice. Using the Compliance with Authority scores derived from the Defining Issues Test as the dependent

variable and scores from moral development level (Defining Issues Test D Index), political attitude, ethical attitude, moral development level (Alternate Dilemmas Test D Index), sex, and age as independent variables, a multiple regression analysis using a stepwise procedure was conducted to ascertain how much of the variance of the Defining Issues Test Action Choice scores was accounted for by the independent variables described. A summary of the stepwise multiple regression analysis using the Defining Issues Test action choice score as the dependent variable is presented in Table 7.

The following two hypotheses concern the prediction of the Defining Issues Test compliance with authority action choice score:

- 13a. The following variables will individually and/or jointly significantly predict Defining Issues Test action choice scores: Defining Issues Test moral development level, ethical attitude, political attitude, Alternate Dilemmas Test moral development level, sex and age.
- 13b. The Defining Issues Test moral development level will account for a significantly greater proportion of the variance of Defining Issues Test action choice scores than ethical attitude, political attitude, Alternate Dilemmas Test moral development level, sex and age.

The high school stepwise regression analysis revealed that the Defining Issues Test D Index is the best predictor of the Defining Issues Test compliance with authority action choice score, accounting for 16% of the variance. Thus, hypothesis 13b is supported by the data analysis. However, hypothesis 13a is not confirmed since none of the other variables considered contributed significantly to the regression equation after the Defining Issues Test D Index was entered.

Table 7Summary of the High School Sample Regression Analysis:Defining Issues Test Action Choice Score as Dependent Variable

Variables in Equation					Variables Not in Equation			
Variable Entered	Beta	$R^2$	df	F	Variables	Beta In	Partial	Simple r
1. DD	.395	.156	1,66	12.19***	SEA	.224	.238	-.130
					PEC	.020	.022	.016
					AD	.087	.069	.317**
					SEX	-.219	-.237	-.172
					AGE	-.075	-.081	-.037

Note: DD = Defining Issues Test D Index  
SEA = Survey of Ethical Attitudes  
PEC = Politico-Economic Conservatism Scale  
AD = Alternate Dilemmas Test D Index

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

Alternate Dilemmas Test Action Choice. Using the Compliance with Authority scores derived from the Alternate Dilemmas Test as the dependent variable and scores from moral development level (Alternate Dilemmas D Index), political attitude, ethical attitude, moral development level (Defining Issues Test D Index), sex, and age as independent variables, a multiple regression analysis using a stepwise procedure was conducted for the high school sample to ascertain how much of the variance of the Alternate Dilemmas Test Action Choice was accounted for by the independent variables described. The following two hypotheses

were made concerning the prediction of the Alternate Dilemmas Test compliance with authority action choice score:

14a. The following variables will individually and/or jointly significantly predict Alternate Dilemmas Test action choice scores:

Alternate Dilemmas Test Moral Development Level, ethical attitude, political attitude, Defining Issues Test moral development level, sex and age.

14b. The Alternate Dilemmas Test moral development level will account for a significantly greater proportion of the variance of Alternate Dilemmas Test action choice scores than ethical attitude, political attitude, Defining Issues Test moral development level, sex and age.

None of the variables were found to contribute significantly to the regression equation for the Alternate Dilemmas Test action choice score, therefore, hypotheses 14a and 14b were not supported for the high school sample.

Summary. The multiple regression analysis for the high school sample revealed that the Defining Issues Test D Index is the best predictor of the Defining Issues Test compliance with authority score. The following variables did not contribute significantly to the regression equation of the Defining Issues Test action choice score after the Defining Issues Test D Index was entered: ethical attitude, political attitude, Alternate Dilemmas Test D Index, sex and age. None of the variables considered were found to contribute significantly to the regression equation for the Alternate Dilemmas Test action choice score.



### Phase Two - University Sample

The results of the data analysis for the high school sample have been presented in relation to the hypotheses of the study. The university sample results will also be presented in relation to these same hypotheses.

#### Preliminary Analyses

An item analysis for the university sample was performed for each of the four indices of the Defining Issues Test and the Alternate Dilemmas Test, i.e., Stage Scores, P Index, D Index, and Action Choice (Compliance with Authority Score), as well as the Survey of Ethical Attitudes and the Conservatism Scale.

Means and standard deviations of the Defining Issues Test (D Index and Action Choice), Alternate Dilemmas Test (D Index and Action Choice), Survey of Ethical Attitudes, and the Conservatism Scale are presented for the university sample in Table 8. The internal consistencies test reliabilities for the ethical attitude and political attitude measures are also presented in Table 8. The university test statistics for the Stage Scores and P Index of the Defining Issues Test and Alternate Dilemmas Test are presented in Appendix C (see Table C-1). Although the Stage Scores and P Index are not used in the analysis in this study, information regarding these indices are reported because of their common use in the research literature.

Table 8

University Sample Test Statistics (N = 35)

	SEA	CS	<u>D Index</u>		<u>Action</u>	
			<u>- DIT</u>	<u>ADT</u>	<u>DIT</u>	<u>ADT</u>
<u>M</u>	16.91	36.00	28.80	27.62	1.91	3.26
<u>SD</u>	5.11	12.25	8.80	7.29	1.22	1.09
<u>REL</u>	.77	.82				

Note: SEA = Survey of Ethical Attitude  
 CS = Conservatism Scale  
 DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test

The ethical attitude groups for the university sample, based on the median score of 17 on the Survey of Ethical Attitudes, consisted of 19 subjects in the high ethics of social responsibility group and 16 subjects in the low ethics of social responsibility group (ethics of personal conscience). The high ethics of social responsibility group had a mean score on the Survey of Ethical Attitudes of 20.68 (SD=2.47), whereas the low ethics of social responsibility group had a mean score of 12.94 (SD=3.52).

The political attitude groups, formed on the basis of the median score of 40 on the Conservatism Scale, consisted of 18 subjects in the high conservatism group and 17 subjects in the low conservatism (liberalism) group. The high conservatism group had a mean score of 45.50 (SD=7.32) and the low conservatism group had a mean score of 25.44 (SD=7.26) on the Conservatism Scale.

In addition, Pearson Product Moment correlation coefficients were calculated for the university sample to permit a preliminary investigation of the strength of the relationships among the constructs being measured. The correlation matrix was inspected to determine if the planned analysis was appropriate. The correlation matrix of the measures used in phase two of the study for the university sample is presented in Table 9. A university correlation matrix including the Stage Scores and P Index is also presented in Appendix C (see Table C-2).

The correlational analyses indicated that the relationship of the Defining Issues Test and Alternate Dilemmas Test D Index scores for the university sample was statistically significant,  $r(33)=.77$ ,  $p<.001$ . The Defining Issues Test D Index was also found to be significantly negatively correlated with ethical attitude,  $r(33)=-.53$ ,  $p<.001$ , and political attitude,  $r(33)=-.48$ ,  $p<.01$ , indicating that low D Index scores were associated with high ethics of social responsibility scores and high conservatism scores. Similarly, the Alternate Dilemmas Test D Index was found to be significantly negatively correlated with ethical attitude,  $r(33)=-.52$ ,  $p<.001$ , and political attitude,  $r(33)=-.56$ ,  $p<.001$ .

Although the ethical attitude and political attitude variables were found to be significantly correlated,  $r(33)=.44$ ,  $p<.01$ , there was a greater significance for the correlation of political attitude and the Defining Issues Test action choice score,  $r(33)=.54$ ,  $p<.001$ , than for ethical attitude and the Defining Issues action choice score,  $r(33)=.34$ ,  $p<.05$ . Further, the Alternate Dilemmas Test action score was not

Table 9

University Sample Correlation Matrix (N = 35)

	SEA	CS	<u>D Index</u>		<u>Action</u>	
			DIT	ADT	DIT	ADT
SEA	1.00					
CS	.44**	1.00				
D Index						
DIT	-.53***	-.48**	1.00			
ADT	-.52***	-.56***	.77***	1.00		
Action						
DIT	.34*	.54***	-.20	-.24	1.00	
ADT	-.01	-.16	.23	.12	.26	1.00

Note: DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test  
 SEA = Survey of Ethical Attitudes  
 CS = Conservatism Scale

\* p<.05  
 \*\* p<.01  
 \*\*\* p<.001

significantly correlated with either ethical attitude or political attitude.

There was no statistical significance found for the correlations between the D Index of the two dilemma types and the action choice scores of either the Defining Issues Test or the Alternate Dilemmas Test. However, the university findings for the different indices of moral development in terms of their correlation with the Defining Issues

Test action choice scores were not consistent. Statistically significant correlations were found between the Defining Issues Test action choice score and the Defining Issues Test Stage 4 Score,  $r(33)=.67$ ,  $p<.001$ , and P Index,  $r(33)=-.53$ ,  $p<.001$ , as well as the Alternate Dilemmas Test Stage 4 score,  $r(33)=.44$ , and P Index,  $r(33)=-.40$ ,  $p<.05$  (see Table C-2).

### Analysis of Sex Differences

Tests of significance were performed to determine whether the sex variable could be disregarded in subsequent analyses for the university sample. There was no significant difference found between males and females in moral development level (D Index), action choice (Compliance with Authority Score), ethical attitude or political attitude. Consequently, the sex variable was not included in any of the university sample analyses that follows.

### 2 x 2 x 2 Multivariate Analysis of Variance Repeated Measures

A 2 x 2 x 2 multivariate analysis of variance repeated measures was performed for the university samples.

The two between-subject factors were Ethical Attitude (High Social Responsibility, Low Social Responsibility) and Political Attitude (High Conservatism, Low Conservatism), and the within-subject factor was dilemma type (Defining Issues Test dilemmas, alternate dilemmas). The two dependent variables were moral development level (D Index) and action choice (Compliance with Authority Score). This analysis was performed to test the hypotheses of the study.

The means and standard deviations of moral development level and action choice scores, assessed by the two dilemma types, are presented for the groups in the university sample in Table 10. The information for the university sample is also presented with the P Index as the dependent variable in Appendix C (see Table C-3).

In the present study, the interaction of dilemma content and ethical attitude or political attitude on moral development and action choice scores was investigated. It was predicted that subjects with high ethics of social responsibility scores, or high conservatism scores, would have lower moral development level and choose fewer actions in compliance with authority on the Defining Issues Test than on the Alternate Dilemmas test than subject with low ethics of social responsibility score, or low conservatism scores.

Main effects for each dilemma type were also investigated. For the Defining Issues Test, it was predicted that subjects with high ethics of social responsibility scores would have lower moral development level and choose more actions in compliance with authority than subjects with low ethics of social responsibility scores. Similarly, it was predicted that subjects with high conservatism scores would have lower moral development level and choose more actions in compliance with authority on the Defining Issues Test than subjects with low conservatism scores.

With the Alternate Dilemmas Test, it was predicted that subjects with high ethical attitude scores, or high political attitude scores, would have higher moral development level and choose fewer actions in compliance with authority than subjects with low ethical attitude scores, or low political attitude scores.

Table 10

University Sample Means and Standard Deviations  
of the Two Dilemma Types for the Four Groups

	<u>Ethics of</u> <u>Social Responsibility</u>				<u>Ethics of</u> <u>Personal Conscience</u>			
	<u>Conservatism</u>		<u>Liberalism</u>		<u>Conservatism</u>		<u>Liberalism</u>	
	<u>n</u> = 13 <u>M</u>	<u>SD</u>	<u>n</u> = 6 <u>M</u>	<u>SD</u>	<u>n</u> = 5 <u>M</u>	<u>SD</u>	<u>n</u> = 11 <u>M</u>	<u>SD</u>
D Index								
DIT	24.08	7.36	28.95	5.16	28.12	9.02	34.62	9.28
ADT	24.08	6.49	26.20	5.97	26.71	4.40	33.01	7.39
Action								
DIT	2.54	.88	1.83	.75	2.40	1.34	1.00	1.26
ADT	3.62	.65	2.83	.75	2.60	1.52	3.36	1.36

Note: DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test

The results of the analysis for the university sample are first discussed in terms of the hypotheses concerning interaction effects and second, main effects. In Table 11, a summary of the results of the university sample analysis is presented. A summary for the university sample is also presented for the P Index as a dependent variable in Appendix C (see Table C-4).

Dilemma Type x Ethical Attitude x Political Attitude. The interpretation of the results for the university sample is complicated by the finding of statistical significance for the Dilemma Type x Ethical Attitude x Political Attitude effect, multivariate  $F(2,30)=3.43$ ,  $p<.05$ .

Table 11

University Sample Summary Data

2 x 2 x 2 Multivariate Analysis of Variance Repeated Measures							
	Multivariate			Univariate			
	<u>Hotellings</u>	<u>Equiv</u>	<u>p</u>	<u>Moral Dev</u>		<u>Action</u>	
	<u>T<sup>2</sup></u>	<u>F (df)</u>		<u>F</u>	<u>p</u>	<u>F</u>	<u>p</u>
ETH	.50	7.54 (2,30)	.002	8.62	.006	3.62	.066
POL	.29	4.36 (2,30)	.022	3.95	.056	3.02	.092
ETH x POL	.02	.32 (2,30)	.730	.36	.555	.45	.508
DIL	1.31	19.62 (2,30)	.000	1.43	.241	40.53	.000
DIL x ETH	.07	1.09 (2,30)	.349	.11	.737	2.25	.144
DIL x POL	.14	2.17 (2,30)	.132	.56	.461	4.32	.046
DIL x ETH x POL	.23	3.43 (2,30)	.046	.36	.555	6.03	.020

Note: ETH = Ethical Attitude  
POL = Political Attitude  
DIL = Dilemma Type

This effect is significant for only the action choice variable as indicated by the univariate analysis,  $F(1,31)=6.03$ ,  $p<.02$ .

Inspection of the mean scores for action choice for the university sample reveals that there was a greater difference in action choice scores between the two ethical attitude groups and the two political attitude groups on the Defining Issues Test than on the Alternate Dilemmas Test. To investigate the Dilemma Type x Ethical Attitude x Political Attitude interaction further a separate multivariate analysis of variance was performed for each dilemma type for the university sample. A summary of the analysis is presented in Table 12.



Table 12

University Sample Summary of Data

2 x 2 Multivariate Analysis of Variance: Defining Issues Test							
	Multivariate			Univariate			
	<u>Hotellings</u>	<u>Equiv</u>	<u>p</u>	<u>Moral Dev</u>		<u>Action</u>	
	<u>T<sup>2</sup></u>	<u>F (df)</u>		<u>F</u>	<u>p</u>	<u>F</u>	<u>p</u>
ETH	.45	6.72 (2,30)	.004	6.64	.015	5.89	.021
POL	.38	5.70 (2,30)	.008	3.74	.062	6.92	.013
ETH x POL	.03	.45 (2,30)	.642	.08	.781	.79	.380

2 x 2 Multivariate Analysis of Variance: Alternate Dilemmas Test							
	Multivariate			Univariate			
	<u>Hotellings</u>	<u>Equiv</u>	<u>p</u>	<u>Moral Dev</u>		<u>Action</u>	
	<u>T<sup>2</sup></u>	<u>F (df)</u>		<u>F</u>	<u>p</u>	<u>F</u>	<u>p</u>
ETH	.31	4.62 (2,30)	.018	8.17	.008	.45	.508
POL	.10	1.52 (2,30)	.235	2.90	.100	.04	.844
ETH x POL	.14	2.03 (2,30)	.149	.77	.386	3.89	.058

Note: ETH = Ethical Attitude  
POL = Political Attitude

A comparison of the results of the multivariate analysis of variance for each dilemma type for the university sample revealed that the significance found for either the ethical attitude or political attitude effect for action choice scores is limited to the Defining Issues Test. The multivariate analysis of variance for the Alternate Dilemmas Test revealed that neither the ethical attitude nor political attitude effect for action choice scores was statistically significant

for the Alternate Dilemmas Test, although there was significance for the moral development variable assessed by this measure.

Dilemma Type x Ethical Attitude. It was hypothesized that dilemma type would interact with ethical attitude for both the moral development and action choice variables. The following hypothesis concerns the interaction effect for moral development level.

9. There will be a significant difference in the relationship of moral development level and ethical attitude for the two types of dilemmas, that is, subjects with high social responsibility scores will have lower moral development level on the Defining Issues Test dilemmas and higher moral development on the alternate dilemmas than subjects with low social responsibility scores.

The hypothesis for the dilemma type by ethical attitude interaction effect for action choice is:

10. There will be a significant difference in the relationship of subject's choices of action in compliance with authority and ethical attitude for the two types of dilemmas, that is, subjects with high social responsibility scores will choose more actions in compliance with authority on the Defining Issues Test and will choose fewer actions in compliance with authority on the alternate dilemmas than subjects with low social responsibility scores.

The multivariate analysis of variance repeated measures examining the dilemma type by ethical attitude interaction effect revealed that there was a lack of statistical significance for the set of dependent variables (moral development level, action choice) considered together. Therefore, hypotheses nine and ten, relating to the dilemma type by

ethical attitude interaction effect, were not supported by the results of the analysis for the university sample.

Dilemma Type x Political Attitude. Predictions were made that dilemma type would interact with political attitude for the moral development and action choice variables. The hypothesis for the dilemma type by political attitude interaction effect for moral development is:

11. There will be a significant difference in the relationship of moral development level and political attitude for the two types of dilemmas, that is, subjects with high conservatism scores will have lower moral development level of the Defining Issues Test dilemmas and higher moral development level on the alternate dilemmas than subjects with low conservatism scores.

The following hypothesis concerns the dilemma type by political attitude interaction effect on action choice score.

12. There will be a significant difference in the relationship of subjects' choices of action in compliance with authority and political attitude for the two types of dilemmas, that is, subjects with high conservatism scores will choose more actions in compliance with authority on the Defining Issues Test and will choose fewer actions in compliance with authority on the alternate dilemmas than subjects with low conservatism scores.

The multivariate analysis of variance repeated measures of Table 11 examining the dilemma type by political attitude interaction effect indicated that there was no statistical significance for the set of dependent variables (moral development level, action choice) considered together. Thus, hypotheses 11 and 12, concerning the dilemma type by

political attitude interaction effect, are not supported for the university sample.

Ethical Attitude. In addition to interaction effects, ethical attitude main effects for the moral development and action choice variables were hypothesized for each dilemma type.

In terms of the Defining Issues Test, the hypothesis for the ethical attitude effect for moral development level is:

1. Subjects with high ethics of social responsibility scores will have significantly lower moral development level as assessed by the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores.

The hypothesis for the ethical attitude effect for action choice on the Defining Issues Test is:

2. Subjects with high ethics of social responsibility scores will choose significantly more actions in compliance with authority on the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores.

In the multivariate analysis of variance repeated measures of Table 11, the lack of statistical significance of the univariate F ratio found for the ethical attitude effect on action scores can be attributed to the fact that both the Defining Issues Test and the Alternate Dilemmas Test action choice scores were pooled together in the analysis. The multivariate analysis of variance for each dilemma type of Table 12 revealed that there is a statistical significance for the ethical attitude effect for dilemma action choice scores on the Defining Issues Test, but not on the Alternate Dilemmas Test.

Inspection of the mean moral development and action choice scores for the university sample revealed that subjects with high ethics of social responsibility scores were lower in moral development level and chose fewer actions in compliance with authority than subjects with low ethics of social responsibility scores for the Defining Issues Test. Consequently, both hypotheses one and two, concerning the effect of ethical attitude on the Defining Issues Test moral development and action choice variables, are supported for the university sample.

For the Alternate Dilemma Test, the following hypothesis was made in respect to the ethical attitude effect for moral development level.

3. Subjects with high ethics of social responsibility scores will have significantly higher moral development level as assessed by the alternate dilemmas than subjects with low ethics of social responsibility scores.

The hypothesis for the ethical attitude effect for the Alternate Dilemmas Test action choice score is:

4. Subjects with high ethics of social responsibility scores will choose significantly fewer actions in compliance with authority on the alternate dilemmas than subjects with low ethics of social responsibility scores.

The multivariate analysis of variance repeated measures for the university sample (see Table 11) indicated that there was a statistical significance for the ethical attitude effect for the Alternate Dilemmas Test moral development score. This significance was also confirmed by the multivariate analysis of variance for the Alternate Dilemmas Test

(see Table 12). However, inspection of the mean scores for the Alternate Dilemmas Test D Index revealed that the significance was not in the direction hypothesized.

The hypothesized effect of ethical attitude for the Alternate Dilemmas Test moral development scores, that is, subjects with high ethical attitude scores would have higher moral development level on the Alternate Dilemmas Test than subjects with low ethical attitude scores (hypothesis three), is not supported for the university sample.

The data analysis also indicated that there is not a statistically significant difference in Alternate Dilemmas Test action scores for the two ethical attitude groups. Therefore, hypothesis four, concerning the ethical attitude effect for Alternate Dilemmas Test action choice, is not confirmed for the university sample.

Political Attitude. Political attitude effects were predicted for the moral development and action choice variables for each dilemma type. For the Defining Issues Test, the hypothesis for the political attitude effect for moral development is:

5. Subjects with high conservatism scores will have significantly lower moral development level as assessed by the Defining Issues Test dilemmas than subjects with low conservatism scores.

The hypothesis for the political attitude effect for action choice for the Defining Issues Test is:

6. Subjects with high conservatism scores will choose significantly more actions in compliance with authority on the Defining Issues Test dilemmas than subjects with low conservatism scores.

The results of the multivariate analysis of variance repeated measures of Table 11 examining the effect of political attitude differences on the set of dependent variables shows a significance for the set of dependent variables (D Index and Compliance with Authority Score) considered together,  $F(2,30)=4.36$ ,  $p<.022$ . Inspection of the univariate  $F$  ratios revealed that neither the moral development nor action choice variables are significant, although they both approach significance,  $F(1,31)=3.95$ ,  $p<.056$  and  $F(1,31)=3.02$ ,  $p<.092$ .

The univariate  $F$  ratio for the political attitude effect on the moral development variable was found not to be statistically significant by the multivariate analysis of variance repeated measures. The separate multivariate analysis of variance for each dilemma type also revealed that this effect was not significant for either the Defining Issues Test or the Alternate Dilemmas Test, although both approached significance,  $F(1,31)=3.74$ ,  $p<.09$  and  $F(1,31)=2.90$ ,  $p<.10$ , respectively. Thus, hypothesis five, concerning political attitude and the Defining Issues Test moral development scores, was not supported for the university sample.

The multivariate analysis of variance for each dilemma type revealed that the political attitude effect is significant for action scores on the Defining Issues Test, univariate  $F(1,31)=6.92$ ,  $p<.013$ , but not the Alternate Dilemmas Test, univariate  $F(1,31)=.04$ ,  $p<.844$ . The action scores for the two types of dilemmas were pooled in the multivariate analysis of variance repeated measure of Table 11 in testing the main effects, accounting for the lack of statistical significance for the political attitude effect for action choice in this analysis.

The mean action choice scores for the university subjects indicate that subjects with high conservatism scores chose fewer actions in compliance with authority than subjects with low conservatism scores for the Defining Issues Test. This difference was found to be statistically significant for the Defining Issues Test, consequently hypothesis six is supported for the university sample.

The Alternate Dilemmas Test hypotheses for the effect of political attitude in relation to moral development and action scores are:

7. Subjects with high conservatism scores will have significantly higher moral development level as assessed by the alternate dilemmas than subjects with low conservatism scores.
8. Subjects with high conservatism scores will choose significantly fewer actions in compliance with authority on the alternate dilemmas than subjects with low conservatism scores.

The results of the analyses for the university sample indicated that the political attitude effect is not statistically significant for the Alternate Dilemmas Test moral development and action choice variables. Therefore, the hypotheses concerning political attitude and the Alternate Dilemmas Test moral development and action choice variables, hypotheses seven and eight, are not confirmed for the university sample.

Dilemma Type. The multivariate analysis of variance repeated measures of Table 11 revealed a significant dilemma type effect for the dependent variables considered together,  $F(2,30)=19.62$ ,  $p<.001$ . However, only the univariate F ratio for action choice was statistically significant,  $F(2,30)=40.53$ ,  $p<.001$ . The action choice mean scores are significantly higher on the Alternate Dilemmas Test than on the Defining



Issues Test. This result was not predicted in the initial hypotheses, but it is discussed in the next chapter.

Summary. For the university sample, the multivariate analysis of variance repeated measures indicated that there was a statistically significant Dilemma Type x Ethical Attitude x Political Attitude interaction effect for the action choice variable. However, the Dilemma Type x Ethical Attitude, Dilemma Type x Political Attitude, and Ethical Attitude x Political Attitude interaction effects were not found to be statistically significant. Multivariate analysis of variance for each type of dilemma revealed that ethical attitude and political attitude main effects for the action choice variable were statistically significant for the Defining Issues Test ( $p < .021$ ) but not for the Alternate Dilemmas Test ( $p < .508$ ). The action choice scores on the Defining Issues Test were statistically significantly higher for subjects with high ethics of social responsibility scores than for subjects with low ethics of social responsibility scores. Further, subjects with high conservatism scores chose significantly more actions in compliance with authority on the Defining Issues Test than subjects with low conservatism scores ( $p < .013$ ).

In relation to moral development scores, the multivariate analysis of variance repeated measures for the university sample indicated a statistical significance for ethical attitude differences on the moral development variable ( $p < .006$ ). The multivariate analysis of variance for each dilemma type revealed that the ethical attitude effect was significant for both the Defining Issues Test and Alternate Dilemmas Test moral development scores ( $p < .015$  and  $p < .008$ , respectively). Subjects with high ethics of social responsibility scores were found to

have lower moral development level than subjects with low ethics of social responsibility scores. However, the difference between the two ethical attitude groups for the Alternate Dilemmas Test moral development score was not in the direction hypothesized.

### Multiple Regression Analyses

Stepwise multiple regression analyses were performed for the university sample with the dependent variable the action choice score of either the Defining Issues Test or the Alternate Dilemmas Test.

The best predictor of the action choice scores for each dilemma type was hypothesized to be the respective dilemma type D Index score. It was also hypothesized that ethical attitude, political attitude, the Alternate Dilemmas Test D Index score, sex and age would add significance to the regression equation.

Defining Issues Test Action Choice. Using the Compliance with Authority scores derived from the Defining Issues Test as the dependent variable and scores from moral development level (Defining Issues Test D Index), political attitude, ethical attitude, moral development level (Alternate Dilemmas Test D Index), sex and age as independent variables, a multiple regression analysis using a stepwise procedure was conducted to ascertain how much of the variance of the Defining Issues Test action choice would be accounted for by the independent variables described.

A summary of the stepwise multiple regression analysis using the Defining Issues Test action choice score as the dependent variable for the university sample is presented in Table 13.

Table 13

Summary of the University Sample Regression Analysis:Defining Issues Test Action Choice Score as Dependent Variable

Variables in Equation					Variables Not in Equation			
Variable Entered	Beta	$R^2$	df	F	Variables	Beta In	Partial	Simple $r$
1. CS	.542	.294	1, 33	13.77***	DD	.083	.086	-.199
					SEA	.128	.137	.343*
					AD	.097	.096	-.238
					SEX	-.027	-.031	-.136
					AGE	.077	.091	.129

Note: DD = Defining Issues Test D Index  
SEA = Survey of Ethical Attitudes  
CS = Conservatism Scale  
AD = Alternate Dilemmas Test D Index

\*  $p < .05$   
\*\*  $p < .01$   
\*\*\*  $p < .001$

The following hypotheses were made about the prediction of the Defining Issues Test compliance with authority action choice score:

13a. The following variables will individually and/or jointly significantly predict Defining Issues Test action choice scores: Defining Issues Test moral development level, ethical attitude, political attitude, Alternate Dilemmas Test moral development level, sex and age.

13b. The Defining Issues Test moral development level will account for a significantly greater proportion of the variance of Defining Issues

Test action choice scores than ethical attitude, political attitude, Alternate Dilemmas Test moral development level, sex or age.

When all the variables were allowed to enter the regression equation on the basis of their strength of relationship with the dependent measure, political attitude entered the equation first accounting for 29% of the total variance. No other variable was found to contribute significantly to the regression equation after the political attitude variable was entered. Therefore, hypotheses 13a and 13b were not supported for the university sample.

#### Alternate Dilemmas Test Action Choice

Using the Compliance with Authority scores derived from the Alternate Dilemmas Test as the dependent variable and scores from moral development level (Alternate Dilemmas Test D Index), political attitude, ethical attitude, moral development level (Defining Issues Test D Index), sex and age as independent variables, a multiple regression analysis using a stepwise procedure was conducted to ascertain how much of the variance of the Alternate Dilemmas Test Action Choice was accounted for by the variables described.

The hypotheses for the prediction of the Alternate Dilemmas Test compliance with authority action choice are:

- 14a. The following variables will individually and/or jointly significantly predict Alternate Dilemmas Test action choice scores: Alternate Dilemmas Test moral development level, ethical attitudes, political attitudes, Defining Issues Test moral development level, sex and age.

14b. The Alternate Dilemmas Test moral development level will account for a significantly greater proportion of the variance of Alternate Dilemmas Test action choice scores than ethical attitude, political attitude, Defining Issues Test moral development level, sex or age.

None of the variables was found to account for a significant amount of the variance of the Alternate Dilemmas Action Choice scores. Thus hypotheses 14a and 14b were also not supported for the university sample.

Summary. The best predictor of Defining Issues Test action choice scores for the high school sample was the D Index,  $R^2 = .16$ , and for the university sample, political attitude,  $R^2 = .29$ .

#### Summary

In phase two, the high school and university data were analyzed separately to test the hypotheses of the study. A summary of the hypothesis test results for both samples is presented in Table 13. With the high school sample, only hypothesis one was supported. Subjects with high ethics of social responsibility scores were found to have significantly lower moral development level on the Defining Issues Test than subjects with low ethics of social responsibility scores. This same hypothesis was also supported for the university sample.

However, unlike the high school subjects, university subjects with high ethics of social responsibility scores chose significantly more actions in compliance with authority on the Defining Issues Test than subjects with low ethics of social responsibility scores, thus, supporting hypothesis two. Another hypothesis supported for the university

Table 13

Summary of Results of Hypothesis Testing for High School  
and University Samples

<u>Hypothesis</u>	<u>High School</u>	<u>University</u>
<b>Ethical Attitude Effect</b>		
1. DIT - D Index	s	s
2. DIT - Action Choice	ns	s
3. ADT - D Index	ns	ns
4. ADT - Action Choice	ns	ns
<b>Political Attitude Effect</b>		
5. DIT - D Index	ns	ns
6. DIT - Action Choice	ns	s
7. ADT - D Index	ns	ns
8. ADT - Action Choice	ns	ns
<b>Dilemma Type x Ethical Attitude Effect</b>		
9. DIT & ADT - D Index	ns	ns
10. DIT & ADT - Action Choice	ns	ns
<b>Dilemma Type x Political Attitude Effect</b>		
11. DIT & ADT - D Index	ns	ns
12. DIT & ADT - Action Choice	ns	ns
<b>Prediction of Action Choice</b>		
13a. DIT - All	ns	ns
13b. DIT - DIT D Index	s	ns
14a. ADT - All	ns	ns
14b. ADT - ADT D Index	ns	ns

Note: s = Significant  
ns = Not significant

DIT = Defining Issues Test  
ADT = Alternate Dilemmas Test

sample was hypothesis six. Subjects with high conservatism scores chose significantly more actions in compliance with authority on the Defining Issues Test dilemmas than subjects with low conservatism scores. An unpredicted finding was that university subjects' action choice scores on the Alternate Dilemmas Test were significantly higher than their action choice scores on the Defining Issues Test, univariate  $F(1,31)=40.53, p<.001$ .

The multiple regression analysis for the high school sample indicated that the Defining Issues Test D Index was the best predictor of the Defining Issues Test action choice scores,  $R^2=.16$ . The best predictor for the university sample was political attitude,  $R^2=.29$ .

## CHAPTER V

### SUMMARY OF RESULTS, DISCUSSION, AND CONCLUSIONS

The purpose of the study was to investigate the effect of specified variation in dilemma content on moral development and action choice scores. In addition, the effect of this variation in dilemma content on the relationship among ethical attitude, political attitude, moral development, and action choice scores was examined.

#### Summary of Results and Discussion

The study consisted of two phases: phase one involved the pilot testing of the alternate dilemmas; phase two of the study addressed the questions concerning the effect of dilemma content on (a) moral development level and action choice, (b) the interaction effect of dilemma content, ethical attitude, and political attitude on moral development level and action choice, and (c) the relationship between moral development level and action choice in two different age groups respectively.

The following measures were employed in phase two of the study: the Defining Issues Test (Rest, 1979b); the Alternate Dilemmas Test designed by the researcher; and the Survey of Ethical Attitudes (Hogan, 1970). In addition, the Politico-Economic Conservatism Scale (Levinson, 1950), and the Individualism/Collectivism Scale (Blake, Johnston, &



Elkins, 1981) were employed with the high school sample, and the Conservatism Scale (Wilson & Patterson, 1970) with the university sample in phase two of the study.

The subjects who participated in phase one of the study included 47 high school student volunteers enrolled in Grade 11 Law classes. In phase two, complete data were available from 68 high school student volunteers enrolled in Grade 11 Law classes, and 35 university student volunteers enrolled in Education courses at The University of British Columbia.

Results are summarized for moral development level and action choice.

#### Moral Development - Ethical Attitude

In the present study, it has been hypothesized that the individual's ethical attitude would interact with dilemma content to influence moral development scores. However, counter to expectations, the multivariate analysis of variance repeated measures for the two samples indicated that there was no significant difference in the relationship of ethical attitude and moral development scores (D Index) for the two types of dilemmas.

Previous research (Nardi & Tsujimoto, 1979; Gutkin & Suls, 1979) had indicated that higher scores on the Survey of Ethical Attitudes (Hogan, 1970) were associated with lower scores on the Defining Issues Test. Nardi and Tsujimoto (1979) found that the ethics of social responsibility was significantly correlated with the Defining Issues Test Stage 4 score,  $r=.46$ ,  $p<.001$ , whereas, the ethics of personal conscience was significantly correlated with Stage 5A,  $r=-.23$ ,  $p<.01$ ,

and Stage 5B,  $r = -.32$ ,  $p < .001$ . Gutkin and Suls (1979) reported similar results for three samples, finding significant positive correlations between the Survey of Ethical Attitudes and Stage 4, ( $r = .351$ ,  $p < .01$ ,  $r = .263$ ,  $p < .05$ , and  $r = .393$ ,  $p < .01$ ) and significant negative correlations between the Survey and the P Index, ( $r = -.275$ ,  $p < .05$ ,  $r = -.234$ ,  $p < .05$ , and  $r = -.265$ ,  $p < .05$ ). Both of these studies involved university students.

These findings were supported in the present study using the D Index. In addition, stage scores and the P Index were calculated (see Appendices B and C) in order to make comparisons with other studies. For the university sample, the Survey of Ethical Attitudes was found to be significantly positively correlated with Stage 2,  $r(1,33) = .61$ ,  $p < .001$  and Stage 4,  $r(1,33) = .43$ ,  $p < .01$ , and significantly negatively correlated with Stage 5A,  $r(1,33) = -.37$ ,  $p < .05$ ; Stage 5B,  $r(1,33) = -.42$ ,  $p < .05$ ; Stage 6,  $r(1,33) = -.34$ ,  $p < .05$ ; and the P Index,  $r(1,33) = -.55$ ,  $p < .001$ . Thus, the conclusion that the ethics of social responsibility tends to be associated with Stage 2 and Stage 4 statements on the Defining Issues Test and the ethics of personal conscience with Stages 5A, 5B, 6, and the P Index (the sum of Stage 5A, 5B, and 6 scores) is supported.

The correlations between the Survey of Ethical Attitudes and scores on the Defining Issues Test for the high school sample were in the same direction, but significant only for Stage 4,  $r(1,66) = .29$ ,  $p < .05$ ; Stage 5A,  $r(1,66) = -.27$ ,  $p < .05$ ; and the P Index,  $r(1,66) = -.27$ ,  $p < .05$ . A possible reason for the lower statistical significance for these correlations when compared to the correlations for the university subjects is that there was less variance in the stage scores of high school subjects. The high school subjects tended to have higher Stage 3

and 4 scores and lower Stage 5A, 5B, 6 and P Index scores than university subjects (see Appendices B and C).

When the dilemma content was changed, it was thought that the direction of the relationship would change, with higher scores on the Survey of Ethical Attitudes being associated with higher moral development scores. Inspection of the data revealed that, in fact, subjects with high ethical attitude scores had significantly lower moral development level on the Alternate Dilemmas Test than those with low ethical attitude scores (i.e., ethics of personal conscience).

The alternate dilemmas were written to differ from the dilemmas in the Defining Issues Test such that individual rights were supported rather than opposed by legal or established authority. In the Defining Issues Test, the dilemmas were assumed to reflect an individual rights-social welfare conflict with individual rights opposed by legal or established authority.

Ethical attitude, as operationalized by the Survey of Ethical Attitudes, appears to represent a preference for either statements that advocated compliance or noncompliance with authority, with items advocating compliance being scored as ethics of social responsibility. The relationship of the Survey of Ethical Attitudes and the Defining Issues Test was assumed to be based on the preference of subjects with high ethics of social responsibility scores for dilemma statements that referred to the existing legal system or conventions as the basis of moral decisions or that promote social welfare concerns over individuals' rights.

In Rest's measure, the preference for statements that appeal to higher principles are scored as representing higher, principled stages.

The following statements are among those for the Heinz dilemma in the Defining Issue Test (Rest, 1979b):

Whether a community's laws are going to be upheld (Stage 4).

Whether the law in this case is getting in the way of the most basic claim of any member of society (Stage 5A).

Whether stealing in such a case will bring about more total good for the whole society or not (Stage 5A) (p. 2).

The subject is asked to rate and rank these statements according to how important they are in making a decision in the dilemma.

By changing the dilemmas in a way that individuals' rights were protected by authority, it was hypothesized that the decisions of subjects with high ethical attitude scores would be more ambiguous and that they would tend to prefer statements that refer to issues other than compliance with authority.

Conversely, it was thought that the preference of subjects with an ethics of personal conscience (low ethical attitude scores) for higher stage statements on the Defining Issues Test would change if legal or established authority was on the side of individual rights in the dilemmas. In this case, these subjects would then tend to choose more statements that imply issues involving legal or social compliance.

The lack of statistical significance found for a Dilemma Type x Ethical Attitude interaction can be interpreted in a number of ways. It may be that a real interaction exists but the alternate dilemmas were inadequate in discerning the relationship of ethical attitude and dilemmas content for moral development scores.

The alternate dilemmas were written to parallel the dilemmas in the Defining Issues Test. The stage statements used were similar to those in the Defining Issues Test with only minor changes made to fit the

dilemma. An assumption was that the same issues are relevant for both types of dilemmas. While Rest (1979a) claims to have based the use of statements for each dilemma on extensive interviewing of subjects, this same procedure was not used for the alternate dilemmas. The alternate dilemmas may have been aligned too closely with the Defining Issues Test dilemmas, thus obscuring any real differences that might have been revealed if a different, more independently derived set of dilemma statements was used.

Another possibility is that subjects did not perceive the dilemmas as posing an individual rights-social welfare conflict. The important questions that they may have considered in the dilemmas may have been irrelevant to the issues raised in the present study.

Ethical attitude, conceptualized as either an orientation toward a personal intuitive notion of morality or toward a reliance on existing law and tradition as the criteria for making moral decisions, may be too broad a characterization of a person's ethical orientation. Such a characterization may ignore important differences in an individual's orientation toward moral conflict in different contexts or differences between persons in the same context. Persons may differ in their moral judgments relative to moral content, but not in terms of ethical attitude as measured by the instrument used in this study.

The fact that moral development scores of individuals who differ in ethical orientation did not change as a result of the specified variation in dilemma content directs attention to another issue, that is, the basis of the relationship of ethical attitude to moral development scores on the Defining Issues Test. To the extent that both the Survey of Ethical Attitudes and the Defining Issues Test seek to measure a "law

and order" orientation, this relationship may represent not a moral judgment dimension but a conventionalism versus nonconventionalism dimension. While both Rest (1979a) and Hogan (1970) purport to measure more than just this, the relationship of the two measures may be dependent on the degree that both measure this aspect.

Summary. In this study, an attempt was made to relate moral development scores not only to specific content, but also to a person's ethical attitude in interaction with specific content. The finding of no statistically significant differences for such an interaction may be a consequence of several factors. However, ethical attitude was found to be related to moral development scores.

#### Moral Development - Political Attitude

The results of the multivariate analysis of variance repeated measures differed for the high school and university samples.

For the high school sample, both the political attitude main effect and interaction effect were found to be not statistically significant. One difficulty in making any inferences from this finding is that the internal consistencies reliabilities of the measures of political attitude used were very low. While the reliability of the Politico-Economic Conservatism Scale has been established for other groups (see Levinson, 1950), some of the statements included in the measure may not have had relevance for the subjects in this sample.

Because of this difficulty with the measures of political attitude used in the high school sample, the Conservatism Scale (Wilson & Patterson, 1970) was used for the university sample. The internal

consistencies reliability of this measure with the university sample was .82.

Based on data from the university sample, the multivariate analysis of variance repeated measures indicated a statistically significant main effect for political attitude when the two dependent variables were considered together,  $F(2,30)=4.36$ ,  $p<.02$ , but the univariate F ratio for moral development was not statistically significant although it approached significance,  $F(2,30)=3.95$ ,  $p<.06$ .

Previous studies have reported significant correlations between political attitude and Defining Issues Test moral development scores (Emler, Renwick, & Malone, 1983; Fincham & Barling, 1979; Rest, Cooper, Coder, Masanz, & Anderson, 1974). Rest et al. (1974) reported statistically significant negative correlations between the P Index and a Law and Order Test for three samples which ranged in educational level from ninth grade to graduate school,  $r(191)=-.60$ ,  $r(49)=-.48$ , and  $r(83)=-.46$ . He also reported a lower, but statistically significant negative correlation for a sample of ninth grade students,  $r=-.23$ ,  $p<.05$ . The negative correlations indicate that the higher moral development level as assessed by the P Index is associated with low law and order scores. Fincham and Barling (1979) also found the P Index and Wilson and Patterson's (1970) Conservatism Scale to be negatively correlated,  $r(54)=-.22$ ,  $p<.05$ .

Using the New Left Scale (Gold, Christie, & Friedman, 1976), Emler et al. (1983) reported statistically significant correlations between the Traditional Moralism subscale and Stage 4 scores,  $r=.60$ ,  $p<.001$ , as well as the P Index,  $r=-.49$ ,  $p<.001$ . The New Left Philosophy subscale was also found to be statistically significantly correlated with Stage 4

scores,  $r = -.52$ ,  $p < .001$  and the P Index,  $r = .39$ ,  $p < .001$ . Traditional moralism relates to a conservative, status quo view of society and New Left Philosophy to disenchantment with current society. The direction of the correlations supports the conclusion that Stage 4 scores tend to be associated with high conservatism scores and the P Index with low conservatism scores.

The correlations found in the present study between the Conservatism Scale and the D Index scores of both the Defining Issues Test,  $r(33) = -.53$ ,  $p < .001$ , and the Alternate Dilemmas Test,  $r(33) = -.52$ ,  $p < .001$ , for the university sample support previous findings. The correlations found between the Conservatism Scale and other indices of moral development, that is, the stage scores and P Index (see Table C-2) of university subjects also replicate previous findings. The Conservatism Scale was found to be significantly positively correlated with the Defining Issues Test Stage 4 score,  $r(33) = .57$ ,  $p < .001$ ; Stage 5A,  $r(33) = -.60$ ,  $p < .001$ ; Stage 5B,  $r(33) = -.39$ ,  $p < .05$ ; and the P Index,  $r(33) = -.64$ ,  $p < .001$ .

However, there were no statistically significant correlations found between the political attitude measures and any of the moral development indices for the high school sample (see Table 4 and Table B-2). The Individualism/Collectivism Scale (Blake, Johnston & Elkins, 1981) and the Politico-Economic Conservatism Scale (Levinson, 1950) were used as measures of political attitude for the high school sample. Item analysis of these measures revealed low internal consistencies reliabilities for both measures, .34 for the Individualism/Collectivism Scale and .32 for the Politico-Economic Conservatism Scale. With the use of



measures with low reliability, measurement error may obscure lawful relations that exist.

There are a number of possible explanations for the poor reliability of the two measures, such as, insufficient number of items, inadequate sampling of content, relevance of items to current situation, and ambiguity of test items. However, certain characteristics of the subjects in the high school sample may also explain the low test reliability scores. If subjects have not developed a consistent position toward certain issues, they may randomly endorse items representing different positions. Further, the subjects, varying in their understanding of the issues, may interpret and endorse items in a manner not related to the dimension being measured.

Moral stages, assessed by Kohlberg's Interview measure, have also been found to be related to scores on various measures of political attitude (e.g., Alker & Poppen, 1973; Candee, 1976; Fishkin, Keniston & Mackinnon, 1973; Fontana & Noel, 1973; Sullivan & Quarter, 1972). In general, the findings of these studies support the conclusion that Stage 4 scores tend to be associated with high conservatism scores and Stage 5 and 6 scores with low conservatism scores.

Stage scores on Kohlberg's interview measure have also been found to be related to political activism (Haan, Smith & Block, 1968). Haan et al. (1968) reported that a higher proportion of subjects at the preconventional and postconventional levels participated in the Free Speech Movement Sit-In than subjects at the conventional level.

In a reanalysis of the Haan et al. (1968) data, Kohlberg and Candee (1984), using a revised scoring system, found a greater proportion of subjects at each higher stage sat in, Stage 3, 10%; Stage 3/4, 31%;

Stage 4, 44%; Stage 4/5, 73%. They also found that among subjects who thought it was right to sit-in, a greater proportion at each higher stage of moral reasoning did so, Stage 3, 23%; Stage 3/4, 54%; Stage 4, 63%; and Stage 4/5, 75%.

The Free Speech Movement demonstration represented an act of civil disobedience opposed by the university administration. As such, the measures of moral development and political activism share similar content. The relationship found between moral development and political activism may represent a conventionalism-nonconventionalism dimension rather than a conventional reasoning - principled reasoning dimension.

Hogan's (1970) Survey of Ethical Attitudes has also been found to be related to political attitude measures (Hogan, 1970; Lorr & Zea, 1977; Snodgrass, 1975). Hogan (1970) reported that the two forms of the Survey correlated .45,  $p < .01$ , and .35,  $p < .01$ , with the California F Scale (Adorno, Frenkel-Brunswik & Levinson, 1950), a measure of anti-democratic tendencies and conservatism. However, Hogan (1970) pointed out that the mean score on the California F Scale for the group was low, and thus, the correlations indicate that high Survey scores are associated with low to moderate scores for the F Scale and low Survey scores with very low scores on the F Scale.

Snodgrass (1975) also reported significant positive correlations between the Survey of Ethical Attitude and three measures of political attitude: liberalism-conservatism,  $r = .55$ ,  $p < .001$ ; law and order ideology,  $r = .59$ ,  $p < .001$ ; and sentence severity,  $r = .33$ ,  $p < .001$ . These results indicate that the high ethical attitude scores (ethics of social responsibility) are associated with conservatism, a law and order ideology and greater sentence severity for criminals.

In the present study, a statistically significant positive correlation was found between the Survey of Ethical Attitudes and the Conservatism Scale for the university sample,  $r(33) = .44$ ,  $p < .01$ . This results supports the conclusions of previous studies that the ethics of social responsibility tends to be associated with high conservatism scores and the ethics of personal conscience with low conservatism scores.

Ethical attitude scores on the Survey of Ethical Attitudes were not found to be statistically significantly correlated with scores on the political attitude measures used for the high school sample. A possible explanation for the lack of statistical significance is the poor reliability of the political attitude measures used.

Failure to find a significant interaction effect of dilemma content and political attitude for the moral development variable may also be a consequence of the particular political attitude measures used in the study. In addition, the specific dilemmas included in the Alternate Dilemmas Test may not have addressed issues on which liberal and conservatives strongly differ.

Summary. The multivariate analysis of variance with repeated measures indicated that there was no significant interaction effect of dilemma content and political attitude on moral development scores for either high school or university samples. However, the Conservatism Scale was found to be significantly correlated with both the Defining Issues Test and the Alternate Dilemmas Test. Possible explanations for the findings were presented.

### Action Choice - Ethical Attitude

Divergent findings were obtained from the data analyses of the two different samples. Multivariate analysis of variance repeated measures indicated that ethical attitude was not significantly statistically related to the Defining Issues Test action choice scores or the Alternate Dilemmas Test action choice scores for high school subjects. However, for the university sample, the multivariate analysis of variance repeated measures indicated a statistically significant Dilemma Type x Ethical Attitude x Political Attitude interaction effect. Further analysis revealed that there was a statistically significant difference in action choice scores for subjects with different ethical attitudes on the Defining Issues Test but not on the Alternate Dilemmas Test.

It was hypothesized that in the Defining Issues Test dilemmas, in which individual rights are opposed by legal or established authority, subjects with low ethics of social responsibility scores (i.e., ethics of personal conscience) would tend to choose fewer actions that comply with authority; but in the Alternate dilemmas, in which individual rights are supported by legal or established authority, they would tend to choose more actions in compliance with authority. In that case, it would be expected that these individuals would have lower compliance with authority scores on the Defining Issues Test than on the Alternate dilemmas test. The mean action choice scores for university subjects with low ethics of social responsibility were consistent with this expectation;  $\bar{M}=1.44$ ,  $\bar{SD}=1.41$  for the Defining Issues Test action choice and  $\bar{M}=3.12$ ,  $\bar{SD}=1.41$  for the Alternate Dilemmas Test action choice.

The hypothesis that subjects with high ethics of social responsibility would choose more actions in compliance with authority on the Defining Issues Test than on the Alternate Dilemmas Test was not confirmed. The high social responsibility subjects did not statistically significantly differ in action choice for the two dilemmas;  $M=2.32$ ,  $SD=.89$  for the Defining Issues Test action choice score and  $M=3.37$ ,  $SD=.76$  for the Alternate Dilemmas Test action choice score.

One implication of this finding is that individuals with high social responsibility scores tend to choose actions in compliance with authority more often than subjects who have low ethics of social responsibility scores for dilemmas in which individual rights are opposed by authority (i.e., Defining Issues Test dilemmas). However, in dilemmas where individual rights are not opposed by authority, there is no difference in the choice of actions in compliance with authority for the two ethical attitudes.

However, interpretation of the results of the university data analysis is complicated by a number of factors. University subjects tended to choose more actions in compliance with authority for the alternate dilemmas and thus there was less variability in action choice scores for the Alternate Dilemmas Test than for the Defining Issues Test. This could be a consequence of the specific dilemmas included in the Alternate Dilemmas Test. There may be more consensus about the action choices in the alternate dilemmas because of considerations other than the authority issue raised in this study.

Another possibility is that the source of authority in the dilemma may be perceived by the subject as other than that used for determining the compliance with authority action score in the present study.

Finally, action choice, as a measure of compliance, is subject to criticism concerning reliability. Where variance is foreshortened, the possibility of obtaining a high reliability coefficient (either internal consistency or stability) is limited. Measurement error may attenuate relationships that would be present if a full range of dilemma action choices were presented.

The high school subjects' action choices were not significantly different for the two ethical attitude groups on the Defining Issues Test,  $\underline{M}=2.50$ ,  $\underline{SD}=1.20$  for the low social responsibility (personal conscience) group; and  $\underline{M}=2.76$ ,  $\underline{SD}=1.13$  for the high social responsibility group; or on the Alternate Dilemmas Test,  $\underline{M}=2.33$ ,  $\underline{SD}=1.03$  for the low social responsibility group and  $\underline{M}=2.50$ ,  $\underline{SD}=1.23$  for the high social responsibility group. Further, there was no statistically significant difference between the action choice scores on the two dilemma types. This is inconsistent with the findings of the university subjects who showed statistically significant action choice differences for ethical attitude groups on the Defining Issues Test and between the two dilemma types.

The high school subjects' mean action choice scores on both the Defining Issues Test and Alternate Dilemmas Test,  $\underline{M}=2.65$ ,  $\underline{SD}=1.16$  and  $\underline{M}=2.43$ ,  $\underline{SD}=1.14$ , respectively, fall between the university subjects' mean score on the Alternate Dilemmas Test,  $\underline{M}=1.91$ ,  $\underline{SD}=1.22$  and mean score on the Alternate Dilemmas Test,  $\underline{M}=3.26$ ,  $\underline{SD}=1.09$ .

The difference between the high school and university sample in terms of action choice scores is difficult to explain because the two groups differ on a number of dimensions not considered in this study. One possibility is that high school subjects are less committed to any

one position when making action choices. Further research is required before any conclusions can be drawn from this finding.

Summary. While no significant relationship was found between ethical attitude and action choice scores for the high school sample, a significant Dilemma Type x Ethical Attitude x Political interaction effect was found for university subjects action choice scores. Subjects with low ethical attitude scores (ethics of personal conscience) chose significantly fewer actions in compliance with authority on the Defining Issues Test than on the Alternate Dilemmas Test, but subjects with high ethical attitude scores did not significantly differ in action choice scores for the two dilemma types. Several reservations concerning the interpretation of the results were presented.

#### Action Choice - Political Attitude

The relationship found between political attitude and action choice scores differed for the two samples. There were no statistically significant effects found in the analysis of the high school data. However, a significant Dilemma Type x Ethical Attitude x Political Attitude interaction effect was found for the university sample. Similar to the results for ethical attitude, university subjects with low conservatism scores (liberalism) were found to choose significantly fewer actions in compliance with authority on the Defining Issues Test,  $\bar{M}=1.29$ ,  $\underline{SD}=1.16$ , than on the Alternate Dilemmas Test;  $\bar{M}=3.18$ ,  $\underline{SD}=1.19$ . Further, there was a statistically significant difference between subjects with high and low conservatism scores for Defining Issues Test action choices but not for the Alternate Dilemmas Test action choice scores.

The same issues raised concerning the interpretation of the results for the ethical attitude variable are also relevant here. The adequacy of the Alternate Dilemma Test dilemmas and action choices is subject to criticism on the grounds of both reliability and validity. Additional questions can be raised about the measures of political attitude. The lack of significance of the political attitude variable for the high school sample may be a function of the poor reliability of the political attitude measure.

Summary. A similar pattern of results for the ethical attitude variable was found for the political attitude variable in terms of action choice scores for both high school and university samples.

#### Moral Development - Action Choice

In terms of the relationship of moral development (D Index) and action choice (Compliance with Authority Score), the results of the data analyses varied for the high school and university samples. Multiple regression analyses, using the stepwise procedure, indicated for the high school sample that the Defining Issues Test D Index accounted for 16% of the variance of the Defining Issues Test action choice scores, but none of the variables considered accounted for a significant proportion of variance of the Alternate Dilemma Test action choice scores.

For the university sample, the only variable that accounted for a significant amount of the variance was political attitude which accounted for 29% of the variance of the Defining Issues Test action choice scores.



Other studies (Cooper, 1972; Martin, Shafto, & Van Deirse, 1977) have reported a significant relationship between moral development and dilemma action choices:

Cooper (1972) determined that moral philosophy and political science doctoral students tended to make the same action choices in the Defining Issues Test dilemmas: that is, they advocated steal for the Heinz and the Drug dilemma, takeover for the Student Take-over dilemma, not report for the Escaped Prisoner dilemma, euthanasia for Doctor dilemma, equal opportunity hiring for the Webster dilemma and not stop printing for the Newspaper dilemma. Cooper developed a "humanitarian-liberal" pattern score, ranging from 0 to 6. He found that the "humanitarian-liberal" score was statistically significantly correlated .34 with the P Index for 160 high school and university subjects.

The opposing action decisions to those defined as "humanitarian-liberal" by Cooper (1972) were considered by Martin et al. (1977) to represent alignment with authority, with the exception of the Webster dilemma. Martin et al. (1977) found that in five dilemmas (Webster is the exception), subjects who decided to align with established authority had significantly higher Stage 4 scores ( $p < .05$ ) than did those who went against established authority. The sample used included junior high, high school and college students.

The compliance with authority action choice score employed in the present study is based on dilemma actions which are considered to represent compliance with a law or a person in authority, that is, university administrator, boss, and principal. A high score for compliance with authority would mean a low score on Cooper's humanitarian-liberal scale. For example, the decision to steal in the Heinz

and the Drug dilemma would be scored zero for compliance with authority but scored 1 for the humanitarian-liberal pattern.

In the present study, the D Index was used rather than the Stage Scores and P Index. However, these scores were calculated to allow comparison with other studies (see Appendices B and C). The D Index was developed later and was not generally used until after 1977 (Rest, 1979a). The D Index, as an overall measure of moral development, incorporates information included in Stage Scores and the P Index and is thus taken to be more inclusive and a more valid measure of moral development.

For the university subjects in this study, no significant correlation was found between the D Index scores and compliance with authority action choice scores. However, the Defining Issues Test Stage 4, Stage 5A, 5B and P Index scores of university subjects were statistically significantly correlated with the Defining Issues Test action scores,  $r(33)=.67$ ,  $p<.001$ ;  $r(33)=.44$ ,  $p<.01$ ;  $r(33)=-.50$ ,  $p<.01$ ;  $r(33)=-.53$ ,  $p<.001$ , respectively (see Table C-2), thus supporting the findings of Martin et al. (1977) and Cooper (1972).

The lack of statistically significant correlation between the D Index and the compliance with authority action choice scores for the university sample may be a result of the positive correlation of action choice and Stage 4 statements and the negative correlation of action choice and Stage 5A and 5B statements being obscured when the stage information is combined in the D Index. However, the same pattern of results occurred for the correlations between stage scores and other variables, ethical attitude and political attitude, but the P Index and D

Index for each sample reflected the same relationship for these variables.

The high school sample also differed from the university sample in the relationship found between moral development indices and action choice scores. For high school subjects, the Defining Issues Test D Index was statistically significantly correlated with the Defining Issues Test action choice score,  $r(66) = .40$ ,  $p < .001$ , but not with the stage scores or P Index.

The difference in the relationship of action choice scores and moral development for the high school and university samples may be related to the level of moral development of the two groups. The mean D Index score was 18.00 ( $SD = 5.98$ ) for the high school sample and 28.80 ( $SD = 8.80$ ) for the university sample, indicating a wide spread in moral development level. On the other hand, the mean Survey of Ethical Attitude scores were not as disparate for the two samples,  $M = 17.04$ ,  $SD = 4.39$  for the high school sample and  $M = 16.91$ ,  $SD = 5.11$  for the university sample. The same may be true of political attitude, but the means can not be compared because different measures of political attitude were used for the two samples.

Summary. The results of the analysis of the relationship of moral development and action choice scores varied depending on the index of moral development level used. For the high school sample, the Defining Issues Test D Index was found to account for 16% of the variance of the Defining Issues Test action choice scores. For the university sample, the D Index was found to be not significantly correlated with the Defining Issues Test action scores, however the Stage 4 scores and P Index were significantly correlated with these action scores. None of

the variables considered accounted for a significant amount of variance of the Alternate Dilemmas Test action choice scores. Further research may be necessary to adequately explain these inconsistencies.

### Conclusions

The effect of specified variation in dilemma content on moral development, action choice, and the relationship of ethical attitude and political attitude to these variables, as well as the relationship of moral development and action choice, has been investigated in this study and the following conclusions are drawn:

1. The subjects' measured moral development level does not vary overall between the Defining Issues Test dilemmas and the alternate dilemmas as scored by conventional means.
2. The findings concerning subjects' choices of actions in compliance with authority for the two dilemma types are not entirely consistent for the high school and university samples.
  - a. For the high school sample, the action choice scores of subjects did not differ for the Defining Issues Test dilemmas and the alternate dilemmas.
  - b. For the university sample, subjects chose more actions in compliance with authority for the alternate dilemmas than for the Defining Issues Test dilemmas.
3. The relationship between ethical attitude and moral development level as assessed by the Defining Issues Test is substantiated. Subjects with low ethics of social responsibility scores have a

higher moral development level than subjects with high ethics of social responsibility scores.

4. The findings concerning the relationship of ethical attitude and moral development level did not differ for the Defining Issues Test dilemmas and the alternate dilemmas. For both types of dilemma content, subjects with low ethics of social responsibility scores have higher moral development level than subjects with high ethics of social responsibility scores.
5. The findings regarding the relationship of ethical attitude and dilemma action choice are not consistent for the high school and university samples.
  - a. For the high school sample, ethical attitude and dilemma action choice is not related.
  - b. For the university sample, ethical attitude is related to the choice of actions in compliance with authority for the Defining Issues Test dilemmas. Subjects with high ethics of social responsibility scores chose more actions in compliance with authority for the Defining Issues Test dilemmas than subjects with low ethics of social responsibility scores. However, subjects' compliance with authority scores for the alternate dilemmas were not related to ethical attitude scores.
6. Political attitude is not related to moral development level as assessed by the Defining Issues Test D Index or the Alternate Dilemmas Test D Index.
7. The findings regarding the relationship of political attitude and action choice differ for the high school and university samples.

- a. There is no relationship between political attitude and action choice for the high school sample.
  - b. For the university sample, there is a relationship between political attitude and the Defining Issues Test action choice scores. Subjects with high conservatism scores chose more action in compliance with authority for the Defining Issues Test dilemmas than subjects with low conservatism scores. However, there is no relationship between political attitude and compliance with authority scores on the alternate dilemmas.
8. The findings concerning the interaction effect of the dilemma type, ethical attitude, and political attitude variables are different for the high school and university samples.
- a. For the high school sample, there is no interaction of dilemma type, ethical attitude and political attitude on action choice scores.
  - b. For the university sample, subjects with low ethics of social responsibility scores chose fewer actions in compliance with authority for the Defining Issues Test than for the Alternate Dilemmas Test, but subjects with high ethics of social responsibility scores did not differ in their action choice scores for the two dilemma types. Further, subjects with low conservatism scores chose fewer actions in compliance with authority on the Defining Issues Test than on the Alternate Dilemmas Test, but subjects with high conservatism scores did not differ in action choice scores for the two dilemma types.
9. The association of moral development level and action choice varied for the two samples.

- a. For the high school sample, higher moral development level as assessed by the Defining Issues Test D Index is related to the choice of actions in compliance with authority for the Defining Issues Test dilemmas. The Stage 4 score and P Index are not related to the action choice for either type of dilemma, that is, Defining Issues Test dilemmas or alternate dilemmas.
  - b. For the university sample, moral development level as assessed by the Defining Issues Test D Index is not related to the choice of actions in compliance with authority for either dilemma type, that is, Defining Issues Test dilemmas and alternate dilemmas. However, the Stage 4 score and P Index are related to the choice of actions in compliance with authority for the Defining Issues Test dilemmas.
10. The best predictor variable for action choice differs for the two samples.
  - a. For the high school sample, the Defining Issues Test D Index is a better predictor of the Defining Issues Test compliance with authority scores than ethical attitude, political attitude, Alternate Dilemmas Test D Index, sex or age.
  - b. For the university sample, political attitude is a better predictor of the Defining Issues Test compliance with authority score than the D Index of the Defining Issues Test or Alternate Dilemmas Test, ethical attitude, sex or age.

### Limitations of the Study

The generalizability of the results of this study are subject to limitations of sampling, measurement, and methodology.

#### Sample

The high school sample in the study can be described in terms of the following characteristics:

- a. Enrolled in a Grade 11 Law class in a suburban British Columbia school district.
- b. Ranged in age from 16 to 20 with a median age of 17.07.
- c. Voluntarily completed all measures.

The university sample in the study has the following characteristics:

- a. Enrolled in educational courses at The University of British Columbia during the summer.
- b. Ranged in age from 20 to 50 with a median age of 31.25.
- c. Ranged in educational level from first year university to graduate level with a median years of education of 16.33.
- d. Voluntarily completed all measures.

These samples are not representative of all high school and university students and, therefore, generalization of the results of the study are limited to those students who fit within the above sample descriptions.

A further limitation of the study is a possible sampling bias due to the loss of subjects because of missing data or the improper completion of the measurement instruments used.



## Measurement

Measurement instruments used in any study present their own limitations on the generalizability of the results.

The Defining Issues Test is a "paper and pencil" objectively scored alternative to Kohlberg's interview measure of moral development. Each of the six dilemmas in the Defining Issues Test is followed by stage prototypic statements which subjects rate and rank. As such, subjects' preference for various stage statements is restricted to those included in the measure. The alternate dilemmas were designed to parallel the dilemmas in the Defining Issues Test and the number and order of the various stage statements were the same as in the Defining Issues Test. Consequently, subjects are also restricted in the Alternate Dilemmas Test to stage statements included in the measure.

In considering the results concerning moral development and dilemma content, it is important to recognize the limitations imposed by this type of measurement. The type of dilemmas and stage statements included in the measure may restrict the responses made by the subject. As a result, the subjects' scores on the measure may have limited generalization. However, it should be noted that an important reason for this study was to explore the effect of varying dilemma content on subjects' moral development scores.

Another limitation of the Defining Issues Test format is the complexity of the response task for the measure. Subjects must first rate the statements in terms of their importance in making a decision in the dilemma, and then rank the four most important statements for each dilemma. Rest (1979b) recommended excluding subjects' protocols that show inconsistencies in the rating and ranking of the statements. Rest

(1979b) indicated that the lost data due to the consistency check is usually in the range of 2% to 15%. Sampling bias, due to the loss of subjects as a result of the consistency check, may affect the findings of the study. On the other hand, if subjects' protocols that have inconsistencies are not excluded from a study, the findings may also be biased.

The Survey of Ethical Attitudes and the political attitude measures, the Individualism/Collectivism Scale, Politico-Economic Conservatism Scale, and the Conservatism Scale are also paper and pencil objectively scored measures. In general, item responses in these measures involve the indication of agreement or disagreement with various statements or "catch-phrases." Results should, therefore, be considered in relation to the type of task involved in classifying subjects in terms of ethical attitude and political attitude.

In addition, the Individualism/Collectivism Scale and Politico-Economic Conservatism Scale scores reflected relatively low internal consistencies reliabilities and this means that measurement error may attenuate any relationships that may exist.

### Methodology

The correlational analyses in this study afford limitations of the results to the description of strengths of relationships.

The results of the multivariate analysis of variance must be considered with caution because of the artificial dichotomy of two continuous variables, that is, ethical attitude and political attitude. The median score was the specified point used to divide the subjects in terms of ethical attitude or political attitude. A limitation of this

approach to grouping subjects is that subjects who scored slightly above and slightly below the median score will be classified into different groups although they may have similar characteristics. Another limitation to this approach is that considerable variance is lost when a variable that can take on a range of values is dichotomized. This may mean lowered correlations with other variables and even nonsignificant results when in fact the tested relations may be significant. A partial remedy for this involves the use of correlational and regression analyses reported herein. However, the nature of the instruments as noted above may well have truncated the range of scores obtained as compared to the possible range of scores if more highly reliable measures of the constructs in question were obtainable.

Limitations of the study have been presented and have been considered when stating the implications and recommendations of the study.

#### Implications and Recommendations of the Study

This study raises the issue of the effect of dilemma content on the assessment of moral development. Relevant to the particular variation in dilemma content studied was the relationship of ethical attitude and political attitude to moral development and dilemma action choices using different dilemma types will be discussed in relation to the testing of the theory and potential educational uses. Recommendations of the study will be discussed in relation to research design.

## Implications

Testing of the theory. The results of the investigation of moral development and action choice, and the interaction of dilemma content, ethical attitude and political attitude with these variables, has implications for Rest's (1979a) and Hogan's (1970) conceptions of moral judgment. Ethical attitude was found to be related to the D Index (moral development level) of both the Defining Issues Test and Alternate Dilemmas Test. This finding draws attention to a common aspect that is assessed by Rest's and Hogan's respective measures of moral judgment, the Defining Issues Test and the Survey of Ethical Attitudes.

With the Survey of Ethical Attitudes, Hogan (1970) sought to discriminate between those who prefer personal, intuitive criteria for making moral decisions and those who prefer to rely on existing laws and tradition. On the basis of the Defining Issues Test D Index, subject's responses are evaluated in terms of a continuum from an orientation of punishment and obedience, to one of maintaining the family and social order, and to one of making appeals to moral principles. The critical dimension that appears to be part of both perspectives is the relative importance of existing laws and tradition to an individual in resolving moral conflict.

Previous studies (e.g., Haan, Smith & Block, 1968, Woll & Cozby, 1976) indicated that Kohlberg's moral stages and Hogan's ethical attitudes related to political attitude and activism. The same criteria of "law and order" is also an aspect that distinguishes liberalism from conservatism as defined by these researchers. Further, political activism is generally defined by civil disobedience or dissatisfaction with the existing establishment. Thus, the relationship found between

the political attitude measures and the two moral judgment measures may be a function of the extent that each assesses preference for existing laws and tradition as criteria for making decisions.

However, concluding from the evidence that the Survey of Ethical Attitudes and the Defining Issues Test are measuring the same thing does not seem to be warranted. The Defining Issues Test is purported to measure more than the relative preference for the moral criteria of conformity to legal or social norms; rather it is assumed to measure differences in the structures of reasoning that underlie conformance or nonconformance. Rest's model of moral judgment acknowledges that nonconformance may be based on different levels of reasoning. One individual may not conform on the basis of concern for peer pressure and another to protest unjust treatment.

On the other hand, the evidence also does not appear to warrant the conclusion that the ethics of social responsibility is less "morally mature" than the ethics of personal conscience. Just as individuals may vary on the basis of their nonconformity, they may also use different reasoning to justify their conformity to establish norms. For example, they may justify their actions on the basis of punishment or on principles of social contract.

Neither the Defining Issues Test nor the Survey of Ethical Attitudes directly assesses the choice of action in a dilemma; but instead focus on preference for various statements. In the present study, a Compliance with Authority action score was calculated on the basis of choice of actions in the Defining Issues Test dilemmas that were in compliance with the law or person in authority. The action choice score was found to be related to ethical attitude, political attitude and

dilemma content for the university sample, but not for the high school sample.

One implication of the divergent findings for the high school and university sample is that the relationship of the variables under study may depend on certain characteristics of the sample used, for example, level of moral development, age, and educational level.

An interesting finding in the present study was that the Defining Issues Test action choice score was related to the D Index for the high school sample, but not for the university sample. Further, the action choice scores were found to be positively related to university subjects' Stage 4 scores and negatively related to their P Index scores. This has implications for the use of the different indices of the Defining Issues Test in studies of moral choice and behavior and for the relative validity of the different moral development indices.

Political attitude was the only dilemma content variable considered in the present study. This variable may not be important to the subject in construing the dilemma. Other content similarities, however, may have relevance to the subject in making responses to the dilemmas, but are not considered.

From the cognitive developmental perspective of Rest (1979a), a person's reasons or motives must be examined before an act may be considered moral. However, from Hogan's perspective, morality may be determined without reference to the person's thought. An implication of the interplay of the ethical attitude, political attitude, dilemma content and moral development variables with regard to the choice of actions in compliance with authority is that attention to both Kohlberg's stages of reasoning and the content of reasoning may provide

the basis for a better understanding of the moral decision-making process.

Education. Kohlberg's moral reasoning approach is one of the major value education programs in the schools today (Gow, 1980; Lockwood, 1978). Moral education programs based on Kohlberg's approach typically involve classroom discussions in a problem-solving format designed to induce the individual to think about the reasoning used in resolving conflicts. By seeing the inconsistencies and inadequacies in a way of thinking, the individual is encouraged to find new ways of resolving moral conflicts.

The Defining Issues Test (Rest, 1974, 1979b) has been used to evaluate moral education programs and intervention studies (see review by Lawrence, 1980). In assessing the effectiveness of educational programs, the properties of the Defining Issues Test define the kinds of evidence that will be used to indicate growth in moral development. An examination of various assumptions underlying Kohlberg's/Rest's cognitive development approach and the Defining Issues Test by educators is important for judging the advisability of such moral education programs and for interpreting the meaning of an individual's moral development score.

Hogan (1970) had challenged Kohlberg's assumption that moral stages represent progressively more advanced and qualitatively different structures of reasoning. Hogan (1970) proposed that Kohlberg's higher moral stages are equivalent to ethical attitudes representing politically liberal or conservative positions. The relationship of Hogan's (1970) and Rest's (1979a) measures of moral judgment was investigated in

the present study. The comparison of the different theoretical viewpoints underlying the Defining Issues Test (1979b), based on Kohlberg's six stage scheme, and Hogan's (1970) measure of moral judgment, the Survey of Ethical Attitudes, was undertaken to highlight the strengths and weaknesses of each approach.

An implication of the present study for educators is that the two different approaches to morality are not value-neutral. Both approaches reflect a particular orientation to law and conventions, and to political conservatism and liberalism. Further, each approach is limited to the dimension of morality that is addressed by the theory. The Defining Issues Test (Rest, 1979a) is concerned with moral reasoning about justice and the Survey of Ethical Attitudes with orientation toward laws and tradition with regard to conformance and nonconformance.

Findings of cognitive developmental research has significance for educators, not only for important program "applications" or evaluation, but also for increasing the understanding of students' development. However, the meaning of a student's moral development score derived from the Defining Issues Test is subject to various conceptual and methodological considerations. In the present study, the question was raised about whether or not dilemma content affects moral development scores on the Defining Issues Test. Although dilemma content was not found to influence moral development scores in the present study, awareness of possible situation and/or test effects are important in interpreting scores.



### Recommendations for Research

The exploratory nature of the present study does not permit definitive answers to the questions raised. However, several areas of further research are suggested by the findings of the study.

The alternate dilemmas were written to parallel the dilemmas in the Defining Issues Test. Lack of a significant difference in moral development scores derived from the two different dilemma types may be an artifact of such factors as the particular dilemmas used in the Alternate Dilemma Test, the use of issue statements similar to those in the Defining Issues Test or the specific law-authority issue raised by the alternate dilemmas. This possibility could be investigated by comparing the assessment of moral development with Kohlberg's dilemmas presented in an interview format with alternate dilemmas presented in a similar format.

The results concerning the relationship of political attitude with moral development and dilemma action choices varied with the high school and university samples. The difference in results for the two samples may be a consequence of using different measures of political attitude. A recommendation for further research would be to use the same measure of political attitude for both samples.

In addition to the variation in findings for political attitude, the high school and university samples differed in terms of the relationship found among dilemma action choices, dilemma type, ethical attitude and moral development. The inconsistency in findings suggest that research is needed to investigate the difference of high school and university subjects in political attitude and in responses to the alternate dilemmas.

Conclusions concerning moral judgment have been based primarily on research involving students samples as in the present study. Further research is needed to explore the questions raised in the present study using nonstudent samples representing a wider range of ages and occupations. Of particular interest would be a study of the differences of police and criminals' attitudes toward compliance with authority and political-social issues.

In the present study, variables such as socio-economic status and age were not explored. Further research is needed to assess the effect of such variables on moral development, political attitude and ethical attitude.

The effects of historical shifts toward political liberalism or conservatism in North America on particular social policy having moral repercussions is another subject for research suggested by the present study. In addition, cross-cultural differences in political attitude and social policies need to be further explored.

The need for further research on subjects' compliance with authority action choices is also suggested by the findings of this study. By interviewing subjects, it may be possible to discern the kinds of issues that subjects raise when making decisions regarding compliance or noncompliance with the law, as well as the association of other values with these decisions.

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APPENDIX A  
ALTERNATE DILEMMAS TESTS

## HENRY AND THE DRUG

In Europe a scientist discovered a drug that could make anyone who took it feel very good. However, the scientist knew that the drug could have a different effect on a few people. Instead of feeling better, they would become very violent. Since it was a newly discovered drug, there was no law against selling it. Henry was one of the first people who bought the drug. After taking the drug, Henry became very violent towards his wife and nearly killed her. He knew the many other people would buy the drug. He told the scientist about the effect that the drug had on him and asked him not to sell the drug to anyone else. But the scientist said, "No, I discovered the drug and I'm going to make money from it." So Henry became desperate and thought about breaking into the scientist's lab to steal all of the drug and the formula to protect other people.

Should Henry steal the drug?

(Check one).

- ☐ Should steal it
- ☐ Can't decide
- ☐ Should not steal it

## HENRY STORY

GREAT  
 IMPORTANCE  
 MUCH  
 IMPORTANCE  
 SOME  
 IMPORTANCE  
 LITTLE  
 IMPORTANCE  
 NO  
 IMPORTANCE

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

- |   |   |   |   |   |  |
|---|---|---|---|---|--|
| — | — | — | — | — | 1. Whether a community's laws are going to be upheld.  |
| — | — | — | — | — | 2. Isn't it only natural for a loving husband to care so much for his wife and people like her that he'd steal?                          |
| — | — | — | — | — | 3. Is Henry willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might protect other people? |
| — | — | — | — | — | 4. Whether Henry is a professional wrestler, or has considerable influence with professional wrestlers.                                  |
| — | — | — | — | — | 5. Whether Henry is stealing for himself or doing this solely to protect other people.   |
| — | — | — | — | — | 6. Whether the scientist's rights to his discovery have to be respected.   |
| — | — | — | — | — | 7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.                          |
| — | — | — | — | — | 8. What values are going to be the basis for governing how people act towards each other.  |
| — | — | — | — | — | 9. Whether the scientist is going to be allowed to hide behind a worthless law which only protects those who harm other people anyhow.   |
| — | — | — | — | — | 10. Whether the law in this case is getting in the way of the most basic claims of members of society.                                   |
| — | — | — | — | — | 11. Whether the scientist 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

-----

Third most important

\_\_\_\_\_

Second most important

\_\_\_\_\_

Fourth most important

\_\_\_\_\_



## STUDENT REVOLT

At the University of A.D., a group of students called Students for Revolution (SFR) believe that any means should be used to overthrow a government if its policies were not acceptable to them. The SFR regularly trained in methods of warfare. Many students at the university didn't agree with the SFR. The students thought that the SFR should not be allowed to hold meetings at the university.

In agreement with these students, the professors voted to ban the SFR from the university. But the President of the University stated that he wanted to continue to allow the SFR to have their meetings on campus.

So, one day last April, hundreds of students walked into the University's Administration building and told everyone else to get out. They said they were doing this to force the University to stop the Students for Revolution (SFR) from meeting on the university campus.

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

☐ Yes, they should take it over

☐ Can't decide

☐ No, they should not take it over

## STUDENT REVOLT

GREAT  
IMPORTANCE  
 MUCH  
IMPORTANCE  
 SOME  
IMPORTANCE  
 LITTLE  
IMPORTANCE  
 NO  
IMPORTANCE

- |           |  |
|-----------|--|
| — — — — — | 1. Are the students doing this to really help other people or are they doing it just for kicks?                        |
| — — — — — | 2. Do the students have any right to take over property that doesn't belong to them.                                   |
| — — — — — | 3. Do the students realize that they might be arrested and fined, and even expelled from school?                       |
| — — — — — | 4. Would taking over the building in the long run benefit more people to a greater extent?                             |
| — — — — — | 5. Whether the president stayed within the limits of his authority in ignoring the faculty vote.                       |
| — — — — — | 6. Will the take-over anger the public and give all students a bad name.   |
| — — — — — | 7. Is taking over a building consistent with principles of justice?  |
| — — — — — | 8. Would allowing one student take-over encourage many other student take-overs.                                       |
| — — — — — | 9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative.                |
| — — — — — | 10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people. |
| — — — — — | 11. Are the students following principles which they believe are above the law.  |
| — — — — — | 12. Whether or not university decisions ought to be respected by students.   |

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

Most important \_\_\_\_\_

Third most important \_\_\_\_\_

Second most important \_\_\_\_\_

Fourth most important \_\_\_\_\_

## BULLY

A man had been committing crimes for 10 years. However, there was never enough evidence to convict him. After committing many crimes in one area, he moved on to another area of the country and took on the name of Roberts. He lived in this area for 8 years and during this time, he had been unemployed. He lived off what he could steal from other people. He bullied others, lied, cheated and started fights for no reason. Then one day, Mrs. Smith, an old neighbour saw a group of men from the community beat up and kill Mr. Roberts. She had heard about Mr. Roberts' activities. She recognized the men who were in the group that killed him.

Should Mrs. Smith report the men to the police? (Check one)

- ☐ Should report the men
- ☐ Can't decide
- ☐ Should not report the men.

## BULLY

GREAT  
IMPORTANCE

MUCH  
IMPORTANCE

SOME  
IMPORTANCE

LITTLE  
IMPORTANCE

NO  
IMPORTANCE

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| — | — | — | — | — | 1. Hasn't Mr. Roberts been bad enough for such a long time to prove he isn't a good person?                           |
| — | — | — | — | — | 2. Whether allowing the men to escape punishment for a crime would encourage more crime?                              |
| — | — | — | — | — | 3. Wouldn't we be better off without legal rights for people like Mr. Roberts and the oppression of our legal system? |
| — | — | — | — | — | 4. Whether or not the law ought to be respected.  |
| — | — | — | — | — | 5. Would society be failing what Mr. Roberts or the men should fairly expect?   |
| — | — | — | — | — | 6. What benefits would prisons be apart from society?   |
| — | — | — | — | — | 7. How could anyone be so cruel and heartless as to kill a man?   |
| — | — | — | — | — | 8. Would it be fair to all the prisoners who had to go to jail for their crimes if these men were not reported?       |
| — | — | — | — | — | 9. Was Mrs. Smith an enemy of these men or was she thinking of other people?  |
| — | — | — | — | — | 10. Wouldn't it be a citizen's duty to report a crime, regardless of the circumstances?                               |
| — | — | — | — | — | 11. How would the will of the people and the public best be served?   |
| — | — | — | — | — | 12. Would reporting these men do any good for society or protect anybody?   |

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

Most important \_\_\_\_\_

Third most important \_\_\_\_\_

Second most important \_\_\_\_\_

Fourth most important \_\_\_\_\_

## DOCTOR

A lady had been in a bad car accident and needed surgery in order to live. She was in terrible pain, but the surgery could save her life. She refused to sign the papers to allow the surgery to proceed. She also refused to tell anyone her name so that her family could be contacted. Without her permission, the doctor could not legally perform the surgery. She said she couldn't stand the pain and that she wanted to die anyway.

What should the doctor do? (Check one)

- ☐ Should go ahead with the surgery and save her life
- ☐ Can't decide
- ☐ Should not perform the surgery

## DOCTOR

GREAT  
IMPORTANCE  
 MUCH  
IMPORTANCE  
 SOME  
IMPORTANCE  
 LITTLE  
IMPORTANCE  
 NO  
IMPORTANCE

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| — | — | — | — | — | 1. Whether the woman's family would be in favor of the surgery if they knew about it.                             |
| — | — | — | — | — | 2. Is the doctor obligated by the same laws as everybody else if performing the surgery would be saving her life? |
| — | — | — | — | — | 3. Whether people would be much better off without society regimenting their lives and even their deaths.         |
| — | — | — | — | — | 4. Whether the doctor could make it appear like she had given permission.   |
| — | — | — | — | — | 5. Does the doctor have the right to force continued existence on those who don't want to live?                   |
| — | — | — | — | — | 6. What is the value of death prior to society's perspective on personal value?                                   |
| — | — | — | — | — | 7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.        |
| — | — | — | — | — | 8. Is allowing another's life to end ever a responsible act of cooperation?                                       |
| — | — | — | — | — | 9. Whether only God should decide when a person's life should end.  |
| — | — | — | — | — | 10. What values the doctor has set for himself in his own personal code of behavior?                              |
| — | — | — | — | — | 11. Can society afford to let everybody end their lives when they want to?  |
| — | — | — | — | — | 12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live?      |

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

Most important \_\_\_\_\_

Third most important \_\_\_\_\_

Second most important \_\_\_\_\_

Fourth most important \_\_\_\_\_

## MR. WINSTON

Mr. Winston was the owner and manager of a business company. He wanted to hire another accountant and there seemed to be many good accountants around. Many of the applicants had the qualifications needed for the job. One of the applicants, Mr. Banner, was from a minority group. While Mr. Winston himself didn't care whether the accountant was from a minority group, he was concerned about his customers.

Many of Mr. Winston's customers were people of different races and nationalities. He was afraid they would take their business elsewhere if he didn't hire someone from a minority group.

Mr. Winston decided to hire Mr. Banner for the job and to tell the other applicants who were white that the job had been filled. One of the applicants accused Mr. Winston of unfair hiring practices. He felt he had been discriminated against because of his race.

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

\_\_\_\_\_ Should have hired Mr. Banner

\_\_\_\_\_ Can't decide

\_\_\_\_\_ Should not have hired him.

## MR. WINSTON

Great  
Importance  
 Much  
Importance  
 Some  
Importance  
 Little  
Importance  
 No  
Importance

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| — | — | — | — | — | 1. Does the owner of a business have the right to make his own business decisions or not?   |
| — | — | — | — | — | 2. Whether there is a law that forbids reverse discrimination in hiring for jobs on the basis of race.                                  |
| — | — | — | — | — | 3. Whether Mr. Winston is prejudiced against whites himself or whether he means nothing personal in refusing the job.                   |
| — | — | — | — | — | 4. Whether hiring a good accountant or paying attention to his customers' wishes would be best for his business?                        |
| — | — | — | — | — | 5. What individual differences ought to be relevant in deciding how society's roles are filled?   |
| — | — | — | — | — | 6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.   |
| — | — | — | — | — | 7. Do a majority of people in Mr. Winston's society feel like his customers or are a majority against reverse discrimination in hiring? |
| — | — | — | — | — | 8. Whether hiring men like Mr. Banner would use talents and eventually be good for society in the long run.                             |
| — | — | — | — | — | 9. Would refusing the job to a white applicant be consistent with Mr. Winston's own moral beliefs?                                      |
| — | — | — | — | — | 10. Could Mr. Winston be so hard-hearted as to refuse the job to any of the white applicants knowing how much it means to them?         |
| — | — | — | — | — | 11. Whether the Christian value to be kind to your fellow man applies in this case.   |
| — | — | — | — | — | 12. If someone's competent, shouldn't he be hired regardless of what you get from the customers?  |

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

Most important \_\_\_\_\_

Third most important \_\_\_\_\_

Second most important \_\_\_\_\_

Fourth most important \_\_\_\_\_



## PAPER

Mike, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could promote school spirit. He wanted to support the government's policies of military spending and to support some of the school's rules, like the rule forbidding students from wearing punk clothes.

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

But the principal had not expected that Mike's newspaper would receive so much attention. A few students were so upset by the paper that they began to organize protests against the punk clothes regulation and other school rules. Angry parents of these students objected to Mike's opinions. They phoned the principal telling him that the newspaper was too patriotic and should not be published. As a result of the rising excitement, the principal ordered Mike to stop publishing. He gave as a reason that Mike's activities interfered with the individual rights of some students.

Should the principal stop the newspaper? (Check one)

- ☐ Should stop it
- ☐ Can't decide
- ☐ Should not stop it.

## PAPER

GREAT  
IMPORTANCE  
MUCH  
IMPORTANCE  
SOME  
IMPORTANCE  
LITTLE  
IMPORTANCE  
NO  
IMPORTANCE

- |   |   |   |   |   |  |
|---|---|---|---|---|--|
| — | — | — | — | — | 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 continue to protest even if the principal stopped the newspaper?   |
| — | — | — | — | — | 4. When a right of an individual in the school is threatened, does the principal have the right to give an 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 student views?   |
| — | — | — | — | — | 7. Whether the principal's order would make Mike lose faith in the principal.  |
| — | — | — | — | — | 8. Whether Mike was really concerned about another student's opinion and supported individual rights.  |
| — | — | — | — | — | 9. What effect would stopping the paper have on the students' education in critical thinking and judgment?   |
| — | — | — | — | — | 10. Whether Mike 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 Mike was using the newspaper to stir up hatred and discontent.   |

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

Most important \_\_\_\_\_

Third most important \_\_\_\_\_

Second most important \_\_\_\_\_

Fourth most important \_\_\_\_\_

**APPENDIX B****HIGH SCHOOL SAMPLE - STAGE SCORES AND P INDEX**

Table B-1

High School Sample Test Statistics forStage Scores and P Index (N=68)


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	<u>Defining Issues Test</u>		<u>Alternate Dilemmas Test</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Stage 2	5.74	3.70	3.96	3.17
Stage 3	12.44	5.62	11.78	5.17
Stage 4	18.93	6.56	20.59	6.77
Stage 5A	12.31	6.10	13.15	6.20
Stage 5B	2.60	2.31	2.49	2.37
Stage 6	2.28	2.17	2.49	2.36
P Index	17.19	7.58	18.12	7.80

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Table B-2

High School Sample Correlation Matrix for  
Stage Scores and P Index (N = 68)

	SEA	IC	PEC	<u>D Index</u>		<u>Action</u>	
				DIT	ADT	DIT	ADT
Defining Issues Test							
Stage 2	.06	-.00	.15	-.36**	-.35**	-.17	-.08
Stage 3	.10	.04	-.09	-.36**	-.18	-.13	-.14
Stage 4	.29*	.06	.10	-.21	-.27*	.00	.01
Stage 5A	-.27*	-.15	.06	.58***	.50***	.11	.09
Stage 5B	-.15	.04	-.03	.42***	.40***	.06	.15
Stage 6	-.02	-.02	.04	.28*	.19	.22	.15
P Index	-.27*	-.11	.05	.67***	.58***	.17	.16
Alternate Dilemmas Test							
Stage 2	.11	.11	-.01	-.22	-.24	.00	-.18
Stage 3	-.06	-.06	.02	-.22	-.26*	-.28*	.04
Stage 4	.27*	.05	.06	-.30*	-.39***	.08	.01
Stage 5A	-.23	.11	-.05	.34**	.56***	.03	.01
Stage 5B	.02	.01	.01	.26*	.33**	.04	.12
Stage 6	-.09	.27*	-.04	.40***	.45***	.33**	.19
P Index	-.20	.00	-.05	.47***	.69**	.13	.10

Note: SEA = Survey of Ethical Attitudes  
 IC = Individualism/Collectivism Scale  
 PEC = Politico-Economic Conservatism  
 DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test

\*  $p < .05$   
 \*\*  $p < .01$   
 \*\*\*  $p < .001$

Table B-3

High School Sample Means and Standard Deviations for  
the P Index for Two Dilemma Types for the Four Groups

	Ethics of Social Responsibility				Ethics of Personal Conscience			
	Conservatism		Liberalism		Conservatism		Liberalism	
	<u>n</u> = 21		<u>n</u> = 17		<u>n</u> = 15		<u>n</u> = 15	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
P Index								
DIT	17.48	6.77	13.29	5.64	19.33	9.25	19.07	7.77
ADT	16.43	7.33	15.18	7.06	20.07	8.04	21.87	7.67
Action								
DIT	2.76	1.14	2.76	1.15	2.47	1.30	2.53	1.13
ADT	2.67	1.24	2.29	1.21	2.07	.88	2.60	1.12

Note: DIT = Defining Issues Test  
ADT = Alternate Dilemmas Test

Table B-4

High School Sample Summary Data  
for P Index and Action Choice

2 x 2 x 2 Multivariate Analysis of Variance Repeated Measures							
	Multivariate			Univariate			
	Hotellings $T^2$	Equiv $F$ (df)	p	P Index $F$	p	Action Choice $F$	p
ETH	.15	4.69 (2,63)	.013	7.11	.010	.83	.364
POL	.01	.30 (2,63)	.742	.52	.474	.02	.897
ETH x POL	.03	.88 (2,63)	.419	1.14	.290	1.06	.308
DIL	.05	1.63 (2,63)	.205	1.36	.247	2.02	.160
DIL x ETH	.02	.49 (2,63)	.615	.89	.350	.10	.758
DIL x POL	.04	1.26 (2,63)	.291	2.56	.115	.00	.996
DIL x ETH x POL	.03	.92 (2,63)	.405	.07	.788	1.81	.183

Note: ETH = Ethical Attitude  
POL = Political Attitude  
DIL = Dilemma Type

## APPENDIX C

### UNIVERSITY SAMPLE - STAGE SCORES AND P INDEX



Table C-1

University Sample Test Statistics for  
Stage Scores and P Index (N=35)

	<u>Defining Issues Test</u>		<u>Alternate Dilemmas Test</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Stage 2	2.06	2.03	2.09	1.67
Stage 3	6.83	5.27	7.97	4.56
Stage 4	17.31	8.01	15.77	7.69
Stage 5A	18.40	5.77	16.46	6.87
Stage 5B	5.71	3.24	5.23	2.49
Stage 6	5.63	3.62	7.26	4.04
P Index	29.74	8.61	28.94	9.19

Table C-2

University Sample Correlation Matrix for  
Stage Scores and P Index (N = 35)

			<u>D Index</u>		<u>Action</u>	
	SEA	CS	DIT	ADT	DIT	ADT
Defining Issues Test						
Stage 2	.61***	.03	-.54***	-.54***	-.05	.06
Stage 3	.07	.19	-.31	-.19	-.08	-.06
Stage 4	.43**	.57***	-.44**	-.48**	.67***	-.02
Stage 5A	-.37*	-.60***	.47**	.43**	-.44**	.17
Stage 5B	-.42*	-.39*	.48**	.44**	-.50**	-.30
Stage 6	-.34*	-.22	.66***	.40*	-.11	-.01
P Index	-.55***	-.64***	.78***	.62***	-.53***	-.01
Alternate Dilemmas Test						
Stage 2	.47**	.15	-.47**	-.52**	.12	-.03
Stage 3	-.10	.17	-.04	-.29	-.04	.03
Stage 4	.67***	.57***	-.58***	-.63***	.44**	-.10
Stage 5A	-.40*	-.52***	.23	.54***	-.36*	-.03
Stage 5B	-.63***	-.42*	.42*	.51**	-.26	-.04
Stage 6	-.29	-.25	.67***	.57***	-.14	.06
P Index	-.60***	-.62***	.58***	.79***	-.40*	.04

Note: SEA = Survey of Ethical Attitudes  
 CS = Conservatism Scale  
 DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

Table C-3

University Sample Means and Standard Deviations for  
P Index for Two Dilemma Types for the Four Groups

		<u>Ethics of</u> <u>Social Responsibility</u>				<u>Ethics of</u> <u>Personal Conscience</u>			
		<u>Conservatism</u> <u>(n=13)</u>		<u>Liberalism</u> <u>(n=6)</u>		<u>Conservatism</u> <u>(n=5)</u>		<u>Liberalism</u> <u>(n=11)</u>	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
<hr/>									
P Index									
	DIT	24.00	6.82	30.67	6.56	27.20	5.63	37.18	7.37
	ADT	24.31	8.99	24.83	7.55	27.40	5.13	37.36	5.82
Action									
	DIT	2.54	.88	1.83	.75	2.40	1.34	1.00	1.26
	ADT	3.62	.65	2.83	.75	2.60	1.52	3.36	1.36

Note: DIT = Defining Issues Test  
 ADT = Alternate Dilemmas Test

Table C-4

University Sample Summary Data for P Index  
and Action Choice

2 x 2 x 2 Multivariate Analysis of Variance Repeated Measures							
	Multivariate			Univariate			
	Hotellings $T^2$	Equiv $F$ (df)	p	P Index $F$	p	Action Choice $F$	p
ETH	.67	9.98 (2,30)	.000	18.56	.000	3.62	.066
POL	.34	5.17 (2,30)	.012	8.67	.006	3.02	.092
ETH x POL	.09	1.34 (2,30)	.278	2.07	.160	.45	.508
DIL	1.31	19.62 (2,30)	.000	.40	.530	40.53	.000
DIL x ETH	.10	1.47 (2,30)	.245	.52	.478	2.25	.144
DIL x POL	.17	2.58 (2,30)	.092	1.52	.226	4.32	.046
DIL x ETH x POL	.26	3.88 (2,30)	.032	1.26	.270	6.03	.020

Note: ETH = Ethical Attitude  
 POL = Political Attitude  
 DIL = Dilemma Type