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Locus of Control and Levels of Moral Reasoning Related to Changes in Moral Reasoning Under Coercion

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LOCUS OF CONTROL AND LEVELS OF MORAL REASONING
RELATED TO CHANGES IN MORAL REASONING
UNDER COERCION

BY

JANE K. CAREY

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY
IN
PSYCHOLOGY

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Abstract

The purpose of this study was to investigate the relationship of levels of moral reasoning and of locus of control to changes in moral reasoning in a situation where external pressure is present. It was hypothesized that changes in moral reasoning would be toward higher levels of reasoning. A second hypothesis was that a person's locus of control related to that person's resistance to change moral reasoning in a situation where pressure to change that reasoning was exerted.

Subjects in the study were 88 students at a large New England community college. At pre-test sessions an original large sample of subjects was administered the Rotter Internal-External Locus of Control Scale (Rotter, 1966) and the Defining Issues Test (Rest, 1979). Subjects were classified as Internal or External by splitting the sample at the median of their scores on the Rotter Scale (Mdn. = 10). Subjects were classified as high or low reasoners depending on their original P-scores on the DIT. The P-score represents the magnitude of a respondent's preference for principled moral issues (Stages 5a, 5b and 6) in deciding the course of action to be followed in a moral dilemma. High reasoners had original P-scores in the third and fourth quartiles; low reasoners had original P-scores in the first and second quartiles.

Subjects were paired for the post-test or consensus session. Pairing matched high reasoners with low reasoners in four groups. In two groups high reasoners were Internals. One group matched a high reasoning Internal with a low reasoning External (DiffLOC); the other matched a high reasoning Internal with a low reasoning Internal (SameLOC). Two other groups had Externals for high reasoners. One matched a high reasoning External with a low reasoning Internal (DiffLOC) while the other matched a high reasoning External with a low reasoning External (SameLOC). At this session subjects were given their original DIT answers (pre-test) and paired subjects were instructed to discuss their original answers and come to an agreed upon answer for each item (consensus score). From their independently obtained scores and their consensus scores, change scores were derived for each subject.

Analysis of the results indicated strong support for the first hypothesis. There was a significant difference between the change scores of low reasoners and the change scores of high reasoners. The main effect of Locus of Control was not significant. However, being paired with a person of same or different locus of control differentially affected changes in P-scores. Locus of Control was important only when that reasoner was a high External paired with an Internal. When that combination occurred, Externals changed significantly more.

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CHAPTER I

Statement of the Problem

The purpose of this study is to investigate factors that influence moral reasoning. For centuries morality has been the central category for defining social relationships and development. The social sciences were called the "moral sciences." These depicted the moral principles which underlie social arrangements, practices and institutions in society. "Moral rules and principles regulate the basic relationships among people in terms of allocating rights (what kinds of claims a person can make on others in his own interest) and allocating responsibilities (the claims that others can make on their behalf from the person)" (Rest, 1979a, p. 18). A crucial ingredient in this social design is the moral reasoning that provides the plan for such allocation of the benefits and responsibilities of social collaboration.

With the rise of the psychoanalytic movement, the early 1900's witnessed a focusing on the superego, the "guilt of Freud," as the source of conscience or morality. In this focus, any intellectual dimension was almost completely missing; the emotion of guilt served as the basic motive for morality.

At about the same time that Hartshorne and May (1928) were investigating the moral behavior of children, Piaget (1932) developed and published his theory of the moral

judgment of the child. Piaget claimed that there is an orderly and logical pattern in the development of children's moral judgment, a pattern that is associated with children's intellectual growth. Further research into the questions concerning moral development was relatively inactive until the late 1950's.

Renewed interest in the question of morality in public life grew in the wake of World War II when activities at concentration camps were studied and sometimes defended as "carrying out orders." Vietnam, Watergate and, more recently, government involvement in the affairs of the Philippines, in Nicaragua and in the Middle East have raised the national consciousness of the need for moral referents and of the need for understanding the origins and nature of moral reasoning and behavior.

Kohlberg, one of the leaders of research in moral development has elaborated Piaget's cognitive-developmental theory of moral reasoning to include six stages and ages of development. Attaining a more advanced stage depends upon the earlier attainment of the preceding stage and, consequently, the restructuring and displacement of that previous stage (Kohlberg, 1969). Kohlberg stresses and offers evidence of the role that social interactions play in changing the moral reasoning of individuals (Kohlberg, Scharf, & Hickey, 1972).

Elliot Turiel, while studying the question of an invariant sequence of stages of moral reasoning, looked at factors that influence changes in moral reasoning. Presenting reasoning that was either above or below the identified stage level of his subjects, he tested the implication that changes would be toward the next higher stage. He also tested the implication that subjects would resist lower stage reasoning (Turiel, 1966). Rest, Turiel, and Kohlberg (1969) also examined factors that promote changes in moral reasoning. Their results demonstrated that subjects preferred moral judgments that were one or two stages above their own identified stage. Their highest preference was determined by their comprehension.

Another area of research that has received considerable attention is that concerning the construct of Locus of Control. Since the publication of Rotter's (1966) article in Psychological Monographs, much research has been conducted on the expectancy of internal-external control of reinforcement and Rotter's work has become one of the most influential in contemporary psychology. Testimony to this can be found in the frequency that Rotter's monograph has been cited.

It is the purpose of this study to investigate the role of the personality variable of locus of control as a factor which influences when and how a person will make changes in moral judgments. Rotter describes a locus of

control orientation as a belief that the outcomes of a person's actions are contingent on what that person does (internal control orientation) or on events outside that individual's personal control (external control orientation). Eichmann (Arendt, 1963) and Calley (Esper, 1988) both pointed to an external control, the law, as reason for their actions in Germany and MyLai, respectively. What they were asked to do was legitimate. Milgram's experiments in the early 1960's demonstrated what history makes obvious, harmful behavior can occur on demand (Milgram, 1963). The twentieth anniversary of MyLai reminded the world of that.

Sometimes lost in the accounts of the MyLai massacre is another reminder that not everyone responds the same way in the same situation. According to an Associated Press report, "Warrant Officer Hugh Thompson landed his helicopter ... and ordered his crew to fire on American infantrymen if they fired on the Vietnamese," the 12 to 16 Vietnamese women, children and old men Thompson was trying to evacuate (Esper, p. A-12). For Thompson the control for his behavior was internal. His reasoning about his action is not included in Esper's report. What, if any, factors can account for Thompson's refusal to obey a command and change his moral judgment about the command? What factors may have influenced Calley to act otherwise?

From a common sense point of view, locus of control would seem to be related to the ability to resist coercion. This study is an extension of the Turiel investigation and that of Rest, Turiel and Kohlberg. It examines the relationship between an individual's locus of control and changes in that person's moral reasoning in a situation where external pressure is present in an effort to influence that person to change his/her moral reasoning.

CHAPTER II

Background Theory and Research

Cognitive-Developmental Theory of Moral Development

The fundamental assumptions of the cognitive-developmental approach to moral judgment research are that a person's moral judgments reflect an underlying organization of thinking and that these organizations develop through a definite succession of transformations. Inherent to the cognitive-developmental paradigm are two major concepts. The first of these is that a person's perception of reality is cognitively structured. The second concept is that cognitive structures evolve - that is, there is a developmental progression in which earlier cognitive structures are elaborated to accommodate greater complexity in experience.

Piaget's (1932) classic study, The Moral Judgment of the Child, provided the basis for much of the current psychological research in the area of moral judgment. His cognitive-developmental approach supplied a conceptual framework for the study of the growth of moral thought, and his method of posing problems for children and observing their responses furnished a widely-used technique for measuring moral reasoning levels.

Piaget's Theory of Moral Development

Assuming morality to be a matter of justice, Piaget defined morality as respect for rules and as the fair application of rules to those who constructed them as well as to those to whom the rules applied. Moral judgment involves an understanding of the rules of justice and fairness by which a society functions (Piaget, 1965).

Piaget stated that there is an orderly and logical pattern in the development of children's moral judgments and that this development is based on the sequential changes associated with children's intellectual growth. He reasoned that moral development occurs as children act upon, transform and modify the world they live in. They, in turn, are transformed and modified by the consequences of their actions.

Piaget's Two-Stage Model of Moral Reasoning. Piaget provided a two-stage theory of moral development. According to his model, an individual at different ages will demonstrate qualitatively different cognitive constructions when reasoning about the morality of situations.

Piaget (1965) hypothesized the following two stages of morality:

1. **Heteronomous morality:** The first stage, that of heteronomous morality, emerges from the unequal interactions between children and adults and represents the earliest stage of development wherein the child demonstrates an awareness of rules. Viewed as a morality

of constraint, heteronomous morality results from the interaction of cognitive immaturity and unquestioning emotional respect for adults. In this context children develop a conception of moral rules as absolute and unchanging.

2. Autonomous morality: Children progress from the first stage of moral development to a stage of autonomous morality. Whereas heteronomous morality evolves from unequal relationships, autonomous morality, or the morality of cooperation, arises from the interaction among equals. Piaget maintains that social interchanges under conditions of mutual respect and equality, coupled with general intellectual growth and a weakening in the constraints of adult authority, create a morality characterized by rationality, flexibility and social consciousness. Social consciousness revolves around a sense of justice - concern for equality, for the rights of others and for reciprocity in human relations (Piaget, 1965).

In the Piagetian view all children will move from a premoral stage to the stage of autonomous morality unless development is retarded or hindered by severe social deprivation. For Piaget moral development has a basic cognitive-structural or moral judgmental component. An individual's basic cognitive structures change as an individual develops. These structures represent qualitative rather than quantitative organizations of

thought processes. Just as moral development depends upon stimulation defined in cognitive-structural terms, this stimulation must also be social, "the kind that comes from social interaction and from moral decision-making, moral dialogue, and moral interaction" (Lickona, 1976, p. 49).

Traditionally, cognitive-developmental theorists have relied on the specific criteria of a hard structural stage model in identifying Piagetian cognitive stages. These criteria include:

(1) Stages imply a distinction or qualitative difference in structures (modes of thinking) that still serve the same basic function (for example, intelligence) at various points in development.

(2) These different structures form an invariant sequence, order, or succession in individual development. While cultural factors may speed up, slow down, or stop development, they do not change its sequence.

(3) Each of these different and sequential modes of thought forms a 'structural whole.' A given stage response on a task does not just represent a specific response determined by knowledge and familiarity with that task or tasks similar to it; rather, it represents an underlying thought-organization. The implication is that various aspects of stage structures should appear as a consistent cluster of responses in development.

(4) Stages are hierarchical integrations. As noted, stages form an order of increasingly differentiated and integrated structures to fulfill a common function. Accordingly, higher stages displace (or, rather, integrate) the structures found at lower stages.

(Kohlberg, Levine, & Hower, 1983, p. 31)

Kohlberg's Six-Stage Model of Moral Reasoning

The most influential and systematic extension of Piaget's theory has been Kohlberg's cognitive-developmental theory of moral reasoning. Kohlberg

outlines stages that cover the range of moral development from childhood through adulthood. In his theory Kohlberg subdivides Piaget's stages of moral reasoning and he extends them to include more advanced development.

For Kohlberg, the primary theoretical definition of structural moral development is that of an organism passing through invariant sequential stages. A more advanced stage is dependent upon the earlier attainment of the preceding stage and consequently, the restructuring and displacement of that previous stage (Kohlberg, 1969). In the course of acquiring new modes of thinking, individuals experience alternating periods of transition and consolidation as higher stages of reasoning displace structures used at lower stages. Such restructuring and displacement result from a stimulation that comes from social interaction (Kohlberg, 1976). In the process of restructuring or reorganizing internal thought patterns, "change factors include (a) 'pure' cognitive growth to a higher logical stage, (b) social-cognitive growth through opportunities for enlarged role-taking and (c) experiences of cognitive-moral conflict between one's own moral reasoning and those of others" (Kohlberg, 1984, p. 428).

Six Stages of Reasoning. The six moral stages, proposed by Kohlberg, are grouped into three major levels. The first level, preconventional level (Stages 1 and 2) includes most children under 9, some adolescents, and many

criminal offenders. The conventional level (Stages 3 and 4) is the level of most adolescents and adults. The postconventional level (Stages 5 and 6) includes a minority of adults (Kohlberg in Lickona, 1976).

Since the levels are organized around the term "conventional," i.e., conforming to and upholding the rules and expectations of society, one might consider the levels as depicting different types of relationships between the individual and society's rules and expectations. In Level I, the rules and expectations are external to the self. At Level II, the self has identified with or has internalized those rules and expectations, especially those of authority figures. Level III includes those who define their values in terms of self-chosen principles after having differentiated themselves from the rules and expectations of others. Within each level, the second stage is a more advanced form of moral reasoning. Table 1 lists the six stages and describes what Kohlberg explains as the reasoning at each stage for upholding what is right and the social perspective behind each stage.

TABLE 1 The Six Moral Stages

Content of Stage			
Level and Stage	What Is Right	Reasons for Doing Right	Social Perspective of Stage
LEVEL I- PRE-CONVENTIONAL Stage 1- Heteronomous Morality	To avoid breaking rules backed by punishment, obedience for its own sake, and avoiding physical damage to persons and property.	Avoidance of punishment, and the superior power of authorities.	Egocentric point of view. Doesn't consider the interests of others or recognize that they differ from the actor's: doesn't relate two points of view. Actions are considered physically rather than in terms of psychological interests of others. Confusion of authority's perspective with one's own.
Stage 2- Individualism, Instrumental Purpose, and Exchange	Following rules only when it is to someone's immediate interest; acting to meet one's own interests and needs and letting others do the same. Right is also what's fair, what's an equal exchange, a deal, an agreement.	To serve one's own needs or interests in a world where you have to recognize that other people have their interests, too.	Concrete individualistic perspective. Aware that everybody has his own interest to pursue and these conflict, so that right is relative (in the concrete individualistic sense).
LEVEL II- CONVENTIONAL Stage 3- Mutual Interpersonal Expectations, Relationships, and Interpersonal Conformity	Living up to what is expected by people close to you or what people generally expect of people in your role as son, brother, friend, etc. "Being good" is important and means having good motives, showing concern about others. It also means keeping mutual relationships, such as trust, loyalty, respect and gratitude.	The need to be a good person in your own eyes and those of others. Your caring for others. Belief in the Golden Rule. Desire to maintain rules and authority which support stereotypical good behavior.	Perspective of the individual in relationships with other individuals. Aware of shared feelings, agreements, and expectations which take primacy over individual interests. Relates points of view through the concrete Golden Rule, putting yourself in the other guy's shoes. Does not yet consider generalized system perspective.

Level and Stage	What Is Right	Reasons for Doing Right	Social Perspective of Stage
Stage 4-Social System and Conscience	Fulfilling the actual duties to which you have agreed. Laws are to be upheld except in extreme cases where they conflict with other fixed social duties. Right is also contributing to society, the group, or institution.	To keep the institution going as a whole, to avoid the breakdown in the system "if every-one did it," or the imperative of conscience to meet one's defined obligations.	Differentiates societal point of view from inter-personal agreement or motives. Takes the point of view of the system that defines roles and rules. Considers individual relations in terms of place in the system.
LEVEL III-POST-CONVENTIONAL, or PRINCIPLED Stage 5-Social Contact or Utility and Individual Rights	Being aware that people hold a variety of values and opinions, that most values and rules are relative to your group. These relative rules should usually be upheld, however, in the interest of impartiality and because they are the social contract. Some nonrelative values and rights like life and liberty, however, must be upheld in any society and regardless of majority opinion.	A sense of obligation to law because of one's social contract to make and abide by laws for the welfare of all and for the protection of all people's rights. A feeling of contractual commitment, freely entered upon, to family, friendship, trust, and work obligations. Concern that laws and duties be based on rational calculation of overall utility, "the greatest good for the greatest number."	Prior-to-society perspective. Perspective of a rational individual aware of values and rights prior to social attachments and contracts. Integrates perspectives by formal mechanisms of agreement, contract, objective impartiality, and due process. Considers moral and legal points of view; recognizes that they sometimes conflict and finds it difficult to integrate them.
Stage 6-Universal Ethical Principles	Following self-chosen ethical principles. Particular laws or social agreements are usually valid because they rest on such principles. When laws violate these principles, one acts in accordance with the principle. Principles are universal principles of justice: the equality of human rights and respect for the dignity of human beings as individual persons.	The belief as a rational person in the validity of universal moral principles, and a sense of personal commitment to them.	Perspective of a moral point of view from which social arrangements derive. Perspective is that of any rational individual recognizing the nature of morality or the fact that persons are ends in themselves and must be treated as such.

Note. From Moral Development and Behavior: Theory, Research, and Social Issues (pp. 34-35) by Thomas Lickona (Ed.), 1976, New York: Holt, Rinehart and Winston.

To assess moral development level Kohlberg employs a semi-structured interview. The predominant stage orientation of a subject is assessed by analyzing his/her responses to several moral dilemmas. These are scored with respect to issues such as "considering the value of life in judging actions" (Kohlberg, 1976, p. 45). The number of issues and specific details of the scoring system have been modified several times by Kohlberg. As the scoring system has been modified, average stage profiles have changed. In Kohlberg's earlier scoring systems, stage scores for a subject were very mixed. Profiles of stage usage indicated that, on the average, 50% of an individual's moral judgment fit a single stage (Kohlberg, 1969). Stage mixture of more than two stages was the rule. The new scoring system produces less stage mixture with a subject's predominant stage accounting for about 67% of the total scores assigned (Colby, et al, 1983).

Kurtines and Gewirtz (1984) assert that in line with the assumption of "a structured whole," one would expect to find a high degree of internal consistency. They report that their data support this assumption. Their analysis of stage distributions showed that most interviews scored at either a single stage or at two adjacent stages.

Kohlberg's later scoring system takes into account what he defines as A and B substage distinctions. He states that this distinction is helpful in any attempts to relate moral judgment to moral action. Subjects "using B-substage reasoning would be more likely to engage in the moral action they believed to be just, than would users of A-substage reasoning" (Kohlberg, 1983, p. 44).

Kohlberg explains the B substage as corresponding "to Piaget's notion of an orientation of autonomy, mutual respect, and reversibility, in contrast to the heteronomy of the A substage" (1983, p. 7). In addition to the Piagetian criteria, Kohlberg assigns to the B substages an "intuition" of a hierarchy of values; such as, of life over property and of promise or contract over authority. B-substage reasoning involves an intuition of a hierarchy that is only given a logical justice rationale at principled stages of justice reasoning.

Kohlberg's stages of moral reasoning have been the center of considerable controversy. Several experimental studies (Bandura & McDonald, 1963; Prentice, 1972; Plummer, 1983; Lawson, 1986) have argued that moral judgments are directly affected by social influence. These studies conclude that it is possible to induce changes in moral judgments that run counter to cognitive-developmental predictions.

Some of the controversy has arisen from concerns about the universality of the stages (Gibbs, 1977; Simpson, 1974). There has been considerable disagreement about the question of gender differences in moral reasoning. In early research Kohlberg (1969) and other researchers using his model found that most men reach stage 4, while most women remain at stage 3. Carol Gilligan (1982) has recently taken issue with this claim, proposing that women do follow a different developmental path and that Kohlberg's scoring scheme is biased in favor of men. Gilligan's work on gender differences has been criticized as a plan of study rather than an empirical work completed (Greeno & Maccoby, 1986). Walker (1984), in an extensive review of the empirical literature, concludes that gender differences in moral reasoning are rarely found, and when they are found, they are explained by the male subjects having a higher average education level than the female subjects.

Turiel examined the question of Kohlberg's stages forming an invariant sequence by testing the implication that movement should be from one stage to that stage directly above. Turiel hypothesized that if the sequence of stages is invariant, subjects exposed to moral reasoning directly above their dominant stage would be influenced more than those exposed to stages further above their own. He also hypothesized that if acquisition of each stage is a reorganization of the preceding stages,

and not simply an addition to them, then subjects would resist lower stage reasoning. It was expected, then, that subjects exposed to moral reasoning one stage above would be influenced more than subjects exposed either to one stage below or more than one above. Both hypotheses were confirmed by his findings (Turiel, 1966).

Even though Turiel's purpose was to test the invariant sequencing of moral stages, his design indicated that he expected certain situational elements to influence moral reasoning. His results suggested that moral reasoning provided by others did influence the moral judgments of his subjects.

In a 1969 study, Rest, Turiel and Kohlberg attempted to replicate Turiel's findings and, at the same time, isolate some of the developmental factors that might explain Turiel's results. They tested subjects' preference for and comprehension of moral judgments made by others. Results indicated that subjects prefer moral concepts that are above their predominant stage of moral reasoning whether that preferred reasoning is one or two stages higher. Individuals preferred the highest level which they could comprehend, rather than their own level or the one directly above.

Kohlberg (1969) would explain this as an alternate "Platonic level" notion. "An individual's aesthetic productions may be at the level of 'Chopsticks' on the piano, ... Yet, his comprehension ... may be at the level

of Bach" (Rest, et al., 1969, p. 242). The view is termed "Platonic" because it assumes that developmental order exists in passive intuition, as well as in the active reorganization of cognitive structures.

It is also Platonic in supposing that there may be a latent higher-level structure in the individual who will display it under certain eliciting conditions of partial exposure to it. Rest, Turiel and Kohlberg (1969) conclude that "it is clear that in most areas of thought, the ability to appreciate and comprehend higher-level material outstrips the ability to function spontaneously at that level" (p. 247). Like the Turiel (1966) study, the results of their investigation also suggested that exposure to the moral reasoning of others influenced moral choices. The exposure comprised the eliciting conditions.

Rest's Complex Stage Model of Moral Reasoning

Since its appearance in 1958, Kohlberg's paradigm has generated a great deal of research. Among the more prolific researchers is a former colleague and co-author of Kohlberg's, James Rest. Rest (1979) reviewed what he considered to be four kinds of empirical discrepancies present in Kohlberg's simple stage model. These discrepancies included:

1. Subject fluctuation. Moral judgment research provides much evidence of subject fluctuation (Selman & Lieberman, 1975; Kuhn, 1976). According to Rest (1979a) acquisition is not an all-or-none matter, "but seems rather to increase in degree of probability that the structure will be in evidence" (p. 54).

2. Inconsistencies due to test characteristics. Using the Kohlberg paradigm, some researchers have demonstrated differential "story pull" of the dilemmas in the Kohlberg test. Test characteristics make a significant difference in the manifestation of cognitive structure.

3. Lack of decalage across content domains. Subjects do not demonstrate the same level of moral reasoning in all situations. Evidence for synchrony across story lines is ambiguous. Kohlberg's research allows that subjects demonstrate a mix of stage scores across moral dilemmas.

4. Discrepancies due to response mode. In the interview method a subject is credited with possessing a cognitive structure only if he/she can explain it. Piagetian researchers who use non-verbal methods of assessment often report earlier ages of acquisition of cognitive structures. Capacity for verbal expression may be a confounding variable in the assessment of moral reasoning.

Rest agrees with Kohlberg that qualitatively different forms of moral judgment can be identified and that development involves the increasing use of more sophisticated types of reasoning. He disagrees, however, with the claim that development proceeds through a stepwise sequence of internally consistent stages. Rest avers instead that individuals simultaneously use reasoning of many types and that an adequate description of an individual's moral reasoning development must include a quantitative account of the proportion of each type of reasoning rather than a global stage designation for the individual.

Figure 1 is Rest's graphic presentation of the simple stage model representing Kohlberg's major theoretical tenets regarding moral development. Each stage peaks at 100% usage with the only stage mixture being what occurs between adjacent stages. Stages are evenly spaced across development.

Figure 1. Graphic presentation of the simple stage model.

Note. From Development in Judging Moral Issues (p. 52) by J.R. Rest, 1979, Minneapolis: University of Minnesota Press.

Rest (1973) tested empirically the hierarchical nature of moral judgment by studying patterns of comprehension and preference of moral stages. Rest pointed out that studies of moral judgment usually assume that a subject's moral judgments are produced at the highest stage s/he is capable of; it is also assumed that when a subject later produces moral judgments at a higher stage, the change represents the acquisition of new capacities. He argued that a subject might not produce moral judgments at the highest stage of which s/he is capable, and that changes in judgments over time might

represent shifts in preferences for certain kinds of moral judgments. Rest states that "no pure, direct assessment of cognitive structure exists that is unaffected by the specific task, content, and response characteristics of the situation" (p. 64). His complex stage model adapts Kohlberg's structural theory to take into account "the situational aspects along with the structural capacities of the reasoner" (Plummer, 1983, p. 17).

Figure 2 illustrates Rest's extension of structural theory to account for the different types of responses expected as a function of the relative usage of six different stages across development. Subjects begin by using a type of reasoning only in certain instances and move towards solidifying that reasoning and applying it to a wider variety of situations. Rest's complex stage model refers to development as the increasing probability of using higher stages of reasoning (Plummer, 1983).

Figure 2. The complex stage model. A disjunctive scale formed by the relative usage of six different stages across development.

Note. From Development in Judging Moral Issues (p. 224) by J.R. Rest, 1969, Minneapolis: University of Minnesota Press.

Development, as described by Rest's complex stage model, is sequential as well as hierarchical wherein development is described as a continuous rather than a discrete process. Within this model a subject is hypothesized to exhibit a developmental profile rather than unitary stage behavior.

In the "Foreward" to Rest's Development in Judging Moral Issues, Kohlberg states that Rest's early "questioning of the simple stage model was entirely in line with empirical findings at that time" (Rest, 1979a,

p. XIV). Such questioning led Rest to develop the Defining Issues Test (DIT), a recognition test of moral development. Rest (1979) asserts in his "Preface" that "alternative schemes for assessing moral judgment became a compelling interest to me" (p.xviii) and ultimately he devised a multiple-choice questionnaire.

While Rest allows that reasoners utilize a full range of stage responses to address each moral situation, he considers the amount of principled reasoning an individual uses as the index of the maturity of his/her moral reasoning. One of the indices provided by the DIT is the P-index, i.e., the relative importance given to Stages 5 and 6, principled thinking. Rest cites studies which compared the validity and reliability of indices in the DIT and insists on the superiority of the P-index as a measure of moral reasoning maturity (Rest, 1979b).

The P-index of the DIT reflects an individual's preference for principled moral reasoning. It combines issue choices from Stages 5a, 5b and 6. Unlike a unitary stage score, it represents a combined reasoning and demonstrates more sensitivity to change.

Rotter's Locus of Control Theory

It was in the context of social learning theory that the concept of locus of control emerged. Attempting to integrate reinforcement theories and cognitive field theories, Rotter stressed that human behavior is so

complex that it cannot be explained through single concepts (Rotter, Chance, & Phares, 1972). Rather, behavior is determined both by the structure of the situation and by the beliefs or expectancies brought to the situation by the person.

Expectancy is defined as the probability held by the individual that a particular reinforcement will occur as a function of a specific behavior on his/her part in a specific situation or situations. It is the emphasis placed on the expectancy construct that sets Rotter's theory apart (Rotter, 1975). While Rotter makes it clear that perceived degree of control may certainly vary in an individual as a function of both specific situation and the value of specific reinforcements for that individual, as a personality variable he views it as a generalized expectancy built up across many life situations, the sum total of which is a general expectation regarding the degree of personal control in the future.

In his original monograph Rotter (1966) explained that:

When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the

event is contingent upon his own behavior or his relatively permanent characteristics, we have termed this a belief in internal control (p. 1).

Lefcourt (1982) insists that the locus of control construct should not be expected to account for "the lion's share" of the variance in most situations. Perception of control is a single expectancy construct. "People are not totally internals or externals ... the terms internal and external control depict an individual's more common tendencies to expect events to be contingent or noncontingent upon their actions" (p. 186).

Studies of locus of control have investigated its relationship to numerous variables, such as achievement (Bar-Tal & Bar-Zohar, 1977), and psychopathology (Frank, 1976). Several studies have examined the relationship of locus of control to resistance to influence (Getter, 1966; Cravens & Worchel, 1977) while a few others have looked at the issue of locus of control and moral responsibility (Karabenick & Srull, 1978; Midlarski, 1971).

In his review of the research of locus of control, Lefcourt proposes that "maintenance of an internal control orientation is a bulwark against unquestioning submission to authority" (Lefcourt, 1976, p. 40). Conformity and compliance research is relatively consistent in indicating that persons with an internal locus of control withstand pressures to behave or to respond in prescribed manners. The findings of Getter (1966) and Strickland (1962, 1970)

indicate that Internals resist attempts of both covert and subtle influence. Similar findings have been reported by Jolley and Spielberger (1973) and Algire and Murray (1974).

Situational variables suggest that Internals are discriminating and not just stubborn. Persons who view themselves as responsible for their own fates might be more cautious about what they accept from others than would those who do not perceive themselves to be in active control of the outcome of their efforts. In several studies (Ritchie & Phares, 1969; Mausner & Platt, 1971; McGinnies & Ward, 1974), Internals discriminated between the prestige of the messenger and the importance of the message. When the message was convincing, as in that concerning the link between smoking and illness, Internals were less resistant and were influenced to change their smoking behavior (Platt, 1969). Externals, on the other hand, were more conforming to the opinions of others when the other person was of a higher status, regardless of whether that person's expertise was relevant or not to the issues being discussed (Ryckman, Rodda & Sherman, 1972). Other studies (Biondo & MacDonald, 1971; Doctor, 1971) further demonstrate the resistance of Internals, particularly under overt influence conditions. Regardless of the style of influence, Externals appear to be more compliant than Internals (Cravens & Worchel, 1977).

A few investigations have looked at the issue of moral responsibility and locus of control. Studies by R. C. Johnson, Ackerman, Frank and Fionda (1968) and by C. D. Johnson and Gormly (1972) provide support for the link between locus of control and resistance to temptation.

Some investigators have attempted to explore the relationship between locus of control and moral judgment maturity. (Alker & Poppin, 1973; Bloomberg, 1974; Connolly & McCarrey, 1978). Though the evidence is in some ways conflicting, persons classified as internal have been found to score higher on assessments of moral judgment maturity (Lefcourt, 1978).

This study is an extension of the Turiel investigation and that of Rest, Turiel and Kohlberg. While those studies explored changes in moral reasoning in general, the present study looks at certain factors that influence those changes. It will investigate the relationship of an individual's locus of control to changes in moral reasoning.

A first hypothesis is that movement in moral reasoning is toward higher levels of reasoning. It is predicted that those exposed to moral reasoning above their own will change more than those exposed to lower levels of reasoning.

A second hypothesis is that a person's locus of control relates to that person's resistance to change moral reasoning in a situation where pressure to change that reasoning is exerted. It is predicted that if presented with moral reasoning that is above their own, subjects with an internal locus of control are not as likely as externally controlled subjects to change in moral reasoning.

CHAPTER III

Method

Subjects

All subjects included in this study came from a sample of college undergraduate volunteers. These volunteers were solicited from introductory psychology classes at a large community college in New England. The college population derives largely from the working class with the second largest number coming from the lower middle class population. Requisition for volunteers stated that the age range include 18-32 and that only students with English as their first language could participate.

From an original large sample of 171 subjects who were administered the screening instruments, the final subsample of 88 were selected according to criteria outlined for participation in the research design. This final group included 24 males and 64 females (Age range 18-32, Mdn = 19). Other demographic information requested was incomplete.

This study was reviewed and approved by the Institutional Review Board at the University of Rhode Island (See Appendix A). Subjects were required to sign an informed consent form (See Appendix B) and were debriefed at the conclusion of the project.

Instruments

Defining Issues Test (DIT). The Defining Issues Test, designed by Rest (1979b) (See Appendix C) consists of six moral dilemma situations. In responding to the DIT, subjects are first required to decide the course of action to be followed in resolving the moral dilemma. Following each dilemma are twelve statements which characterize various issues or questions that might affect the decision about the dilemma. These twelve issues reflect reasoning at Kohlberg's moral development stages 2, 3, 4, 5a, 5b and 6. Respondents rate each of the twelve statements from "Great Importance" to "No Importance." Finally, respondents identify and rank the four most important issues concerning the dilemma.

Each of the four issues identified and ranked in importance in respect to the resolution of the dilemma is weighted as follows: first choice, 4 points; second choice, 3 points; third choice, 2 points; fourth choice, 1 point. The subject's P-score is derived by summing the weighted scores for issue choices within stages 5a, 5b and 6. The P-score represents the magnitude of a respondent's preference for principled moral issues (Stages 5a, 5b and 6) in deciding the course of action to be followed in a moral dilemma. The %P is the subject's actual P-score divided by the total number of possible points on the entire test. The score can range from 0 to 95.

The D-score is an overall index of moral judgment which uses information from all stages rather than from only Stages 5 and 6. It is a composite score in which the score is higher to the extent that the subject gives high ratings to high stage items, and the score is lower to the extent that the subject gives high ratings to low stage items. Whereas P reflects the level of a subject's principled reasoning, D reflects his/her relative preference for principled reasoning over conventional and preconventional reasoning. Unlike the P-score, which is based on the rankings of the four items ranked in order of importance, the D-score is based on ratings of all of the test items ("Great Importance" to "No Importance").

Rest, Cooper, Coder, Masanz and Anderson (1974) report a test-retest correlation of .81 (N = 28, test-retest interval not reported). Carey (1985) reports a test-retest correlation of .72 (N = 77, test-retest interval 5 weeks). Bode and Page (1978) obtained an internal consistency estimate for the DIT, as measured by Cronbach's alpha of .74 for the P-score. Correlation of the DIT with Kohlberg's Moral Development Interview is reported at .68 (Rest et al., 1974).

To contribute to the criterion group validity of the DIT, Rest (1976) collected data from 50 studies on 5,714 subjects in 136 different samples. These data suggest that subjects with differing educational levels show significant discriminant DIT scores. Rest contends that

subjects' DIT scores should be positively correlated with educational level since both indices tap cognitive development in general. If subjects at different educational levels evidence differential DIT performance, evidence for criterion group validity is provided. His student groups - junior high ($N = 1,322$), senior high ($N = 581$), college ($N = 2,479$), graduate ($N = 183$) - averaged progressive P-scores of 21.9, 31.8, 42.3 and 53.3 respectively.

Evidence for convergent-divergent validity of the DIT is provided by Rest (1979b) in his summary of data from several studies which correlated the DIT with performance on Kohlbergian tests or moral judgment. Rest reports correlations ranging from .68 - .78 ($N = 41 - 213$).

The Rotter Scale. The Rotter Internal-External Locus of Control (LOC) Scale (Rotter, 1966) is a twenty-three item forced choice questionnaire with six filler items adopted from the sixty item James Scale (Lefcourt, 1981). It is scored in the external direction; that is, the higher the score, the more external the individual. Each item consists of a pair of alternatives. Subjects are asked to select the one statement of each pair which they more strongly believe to be more true. Each pair of alternatives offers a choice that reflects a fatalistic,

external control viewpoint and a choice reflecting a belief in one's own ability to affect and to be in control of the events in one's life. (See Appendix D).

Rotter (1966) reports test-retest correlations ranging from .49 - .83 (test-retest interval 1-2 months and $N = 30 - 177$). Internal consistency estimates of the Rotter Internal-External Scale, as measured by the Kuder-Richardson reliability coefficient, range from .69 - .79. A Spearman-Brown coefficient of .79 was reported (Rotter, 1966).

Procedure

The Defining Issues Test (Rest, 1979) and the Rotter Internal-External Locus of Control Scale (Rotter, 1966) were administered to the original large sample during class time. Class groups ranged in size from 18-28 and met on two different days. Before the instruments were administered, students were told that the questionnaires were part of a research project. The examiner emphasized that participation was voluntary, that their test results would be anonymous and that participation or non-participation would in no way affect their grade. It was explained that the research would comprise two parts and some of them would be asked to participate in the second part. Only three students elected not to participate.

Standard directions to the Rotter Locus of Control Scale were distributed and read (See Appendix D) to each

class. When all subjects had completed that scale, the DIT was distributed and standard directions for that test were read. (See Appendix C).

Both instruments were scored by computer with later random selection for handscoring. To insure anonymity each subject received a coded number. From the initial sample, a subsample was selected for assignment to eight experimental groups. Selection and assignment of subjects were determined by their scores on the Defining Issues Test and on the Rotter Internal-External Locus of Control Scale.

Subjects were classified as Internal or External by splitting the sample at the median of their scores on the Rotter Scale (Mdn. = 10; SD = 3.36).

Subjects were paired according to their locus of control classification and by their moral reasoning P-score.

In Group A, each pair had one Internal and one External subject (Different LOC) with the Internal having the higher P-score. Group B had pairs where the External subject had the higher P-score (Different LOC). Groups C and D matched an External with an External in the first (Same LOC) and an Internal with an Internal in the second (Same LOC). P-scores were used to form the four groups according to the recommended four quartile cut-offs (Rest,

1979b). Each pair of subjects had individuals who scored either in the first and third quartiles or in the second and fourth quartiles.

To control for the factor of sex, males were paired with males and females with females. To avoid any confounding of data from the factor of age, subjects were matched within four years of each other's age.

These procedures produced four groups of pairs, which could then be further divided by splitting the pairs, resulting in eight distinct groups of subjects as follows:

HID: high scoring Internal paired with low scoring External (3 males, 8 females).

HED: high scoring External paired with low scoring Internal (1 male, 10 females).

HIS: high scoring Internal paired with low scoring Internal (4 males, 7 females).

HES: high scoring External paired with low scoring External (4 males, 7 females).

LID: low scoring Internal paired with high scoring External (1 male, 10 females).

LED: low scoring External paired with high scoring Internal (3 males, 8 females).

LIS: low scoring Internal paired with high scoring Internal (4 males, 7 females).

LES: low scoring External paired with high scoring External (4 males, 7 females).

Several internal checks on subject reliability eliminated some subjects from the original sample from participating in the final subsample. One check was the "M" score on their DIT protocols.

M items were written to sound pretentious but not to mean anything relative to the dilemma. These statements, according to Rest, "do not represent any stage of thinking but rather represent a subject's tendency to endorse statements for their pretentiousness rather than their meaning" (Rest, 1979, p. 3.3). Test instructions cautioned the subject about rating and ranking items that sound like "gibberish" as having "no importance." Subjects' protocols with M scores of 8 or more were eliminated ($\underline{N} = 2$).

The consistency check compared the subject's ratings of issue statements with the subject's rankings of item importance. If a subject ranked an item first, then no other item should have a higher rating. If a subject had inconsistencies on more than 2 stories, that subject's protocol was eliminated ($\underline{N} = 49$).

A third consistency check involved eliminating subjects who showed little discrimination in ratings. If two stories had more than 9 items rated the same, the protocol was discarded ($\underline{N} = 14$).

Some subjects were lost because of their absence or the absence of their partners on the day the consensus situation was scheduled ($\underline{N} = 18$).

The second session was scheduled for four weeks after the first administration of the two instruments. At the class period before the scheduled date, those students who were to participate in the second testing were informed of their selection; other students were given a take-home assignment for that class period. At the second meeting two classes had six pairs of students, while four classes had eight pairs of students. Subjects in the subsample received their original Defining Issues Test. At this session they were asked to sign the informed consent form which stated that they agreed to discuss their answers with one other person and to come to agreement with that person on the questions concerning the six dilemmas in the DIT.

The paired subjects were instructed that in this session they were to discuss their original responses on the test and that they had to come to a mutual agreement on their choices for completing the DIT. They were advised that they should discuss each issue and come to a shared decision. Discussion and agreement produced a consensus score whereby each pair then submitted one answer for each item. These were scored for the consensus or post-test scores for each subject.

Subjects involved in the original sample and in the final subsample were debriefed after the second session results were obtained.

CHAPTER IV

Results

The research procedures produced four groups of pairs which could be further divided by splitting the pairs, resulting in eight distinct groups of subjects. For each subject in each group an independently obtained P-score and D-score (Pre-test) and a consensus P-score and D-score (Post-test) were obtained. First, the significance of P-score and D-score change was evaluated for each group. Then P-score and D-score changes, obtained by subtracting Pre-test scores from Post-test scores, were used to compare relative changes among the groups. The results of these analyses follow.

Analysis of P-scores

P-scores were calculated according to standardized DIT scoring instructions. Table 2 contains the means and standard deviations of original (Pre-test) scores and of consensus (Post-test) scores for individuals in each of the eight groups. To determine which groups changed significantly, t-tests, using Sandler's A-statistic, were performed on each group's pre-and post-test scores (Runyon & Haber, 1980). Because of multiple comparisons an alpha level of .01 was used. All comparisons were significant at this level, $p < .01$ (See Table 2).

Table 2

Means and Standard Deviations of Pre-test and Post-test P-scores and the A-statistic for Groups with 2 levels of Locus of Control, 2 levels of Moral Reasoning and 2 levels of Pairing ($N = 11$ per group).

Group	M_1	SD_1	M_2	SD_2	$A^\wedge$
Different Pairing					
High Internal	45.45	5.75	37.09	10.92	0.169**
Low Internal	17.27	7.26	26.09	9.95	0.182**
High External	41.90	7.90	26.09	9.95	0.108***
Low External	22.27	9.03	37.09	10.92	0.135**
Same Pairing					
High Internal	44.54	9.46	37.00	12.74	0.161**
Low Internal	22.27	8.77	37.00	12.74	0.122***
High External	45.72	7.54	38.54	8.10	0.131***
Low External	22.81	8.77	38.54	8.10	0.107***

$^\wedge$ Sandler's A statistic

** $p < .01$

*** $p < .001$

Note: Experimenterwise error rate = .07

Each group changed significantly. Some of the groups changed positively and some changed negatively. Both groups of higher reasoning Internals, as well as both groups of higher reasoning Externals moved in a negative direction. All lower reasoning groups, two of Internal locus of control and two of External locus of control, changed in a positive direction. Therefore, one can conclude that higher moral reasoners moved downward

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significantly, while lower moral reasoners moved upward significantly.

Analysis of P-Score Changes

P-score changes were obtained on each individual by subtracting the P-score originally obtained by the subject working independently (Pre-test) from the consensus P-score (Post-test). Table 3 contains the means and standard deviations of change scores for individuals in each of the eight groups, separated by locus of control, level of moral reasoning and nature of pairing (Same/Different).

Table 3
Means and Standard Deviations of P-Score Changes for Groups with 2 Levels of Locus of Control, 2 Levels of Moral Reasoning and 2 Levels of Pairing ($N = 11$ per group).

		Paired with Same Locus of Control		Paired with Different Locus of Control	
		Moral Reasoning Higher of Pair	Lower of Pair	Moral Reasoning Higher of Pair	Lower of Pair
<hr/>					
Internals		M -7.55	14.73	-8.36	8.82
		SD 6.98	9.14	8.14	9.27
<hr/>					
Externals		M -7.18	15.73	-15.82	14.82
		SD 5.02	7.04	8.48	10.55
<hr/>					

Hartley's F -maximum test was not significant, $F(10, 8) = 4.65$, $p > .05$, indicating that the assumption of homogeneity of variance among the groups was not violated.

To determine significant changes in moral reasoning a $2 \times 2 \times 2$ factorial analysis of variance (Winer, 1971) was performed on the P-score changes with two levels each of moral reasoning (High, Low) of locus of control (Internal, External) and of type of pairing (SameLOC, DiffLOC). Table 4 presents a summary of the results obtained in the ANOVA.

Table 4
Summary of $2 \times 2 \times 2$ ANOVA of P-Score Changes for 8 Groups with 2 Levels of Locus of Control, 2 Levels of Moral Reasoning and 2 Levels of Pairing ($N = 11$ per group).

<u>Source</u>	<u>SS.</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Reason	11892.375	1	11892.375	173.416***
Locus	0.011	1	0.011	.001
Same/Diff.	364.102	1	364.102	5.309*
Reason X Locus	273.011	1	273.011	3.981*
Reason X Same/Diff.	9.557	1	9.557	0.139
Locus X Same/Diff.	10.920	1	10.920	0.159
ReasonXLocusXSame/Diff.	225.920	1	225.920	3.294
Error	5486.182	80	68.577	
Total	18262.080	87	209.909	

* $p < .05$
*** $p < .001$

The main effect for reasoning level, $F(1, 80) = 173.416$, $p < .001$, indicates a significant difference in P-score changes between low reasoners ($M = 13.52$) and high reasoners ($M = -9.73$). These results support the first hypothesis. The main effect for Same/Difference of pairing was also significant, $F(1, 80) = 5.309$, $p < .02$, indicating that being paired with a person of same or different locus of control differentially affected changes in the P-score. Change scores for subjects paired with other subjects with similar locus of control ($M = 3.93$) differed significantly from change scores of subjects paired with persons of a different locus of control ($M = -0.14$). The main effect of locus of control was not significant.

The interaction effect of ReasonXLocus of Control was also significant, $F(1, 80) = 3.981$, $p < .049$, indicating differential changes for different combinations of reasoning level and locus of control.

A Newman-Keuls (Howell, 1987) procedure for multiple comparisons applied to the ordered means (See Table 5) revealed that:

1. there was a significant difference between higher reasoning Externals and lower reasoning Internals with lower reasoning Internals ($M = 11.77$) changing in an upward direction and higher reasoning Externals ($M = -11.50$) changing downward.

2. there was a significant difference between higher reasoning Externals and lower reasoning Externals. Lower reasoners ($M = 15.27$) changed upwards while higher reasoners ($M = -11.50$) moved down.

3. there was a significant difference between higher reasoning Internals and lower reasoning Internals where lower reasoners ($M = 11.77$) changed upwards and higher reasoners ($M = -7.95$) changed downwards.

4. there was a significant difference between higher reasoning Internals and lower reasoning Externals. Lower reasoning Externals ($M = 15.27$) changed up while higher reasoning Internals ($M = -7.95$) moved down.

5. there was no significant difference between higher reasoning Externals and higher reasoning Internals.

6. there was no significant difference between lower reasoning Internals and lower reasoning Externals.

Table 5

Newman-Keuls Multiple Comparisons for 2-way Reason by Locus Interaction: Difference Between Ordered Means

	(1) HiE	(2) HiI	(3) LoI	(4) LoE
Mean	-11.50	-7.95	11.77	15.27
-11.50		3.55	23.27*	26.77*
- 7.95			19.72*	23.22*
11.77				3.50

* $p < .05$

These results are depicted graphically in Figure 3.

Figure 3. A graphic presentation of the two-way interaction effect of Reason X Locus of Control.

The 3-way interaction of ReasonXLocusXSame/Different was not statistically significant. However, for exploratory purposes, follow-up tests were applied to see if comparison of any particular pairs of groups revealed statistical significance.

The Duncan Multiple Range procedure for multiple comparisons applied to the 3-way interaction, that is, to the eight individual cell means, (See Table 6) revealed that:

1. lower reasoning Externals paired with a similar locus of control (LES) differed significantly from higher reasoning Externals regardless of the pairing (HES, HED) ($p < .05$).

2. lower reasoning Externals paired with a similar locus of control (LES) differed significantly from higher reasoning Internals regardless of the pairing (HIS, HID) ($p < .05$).

3. lower reasoning Externals paired with different locus of control (LED) differed significantly from higher reasoning Externals regardless of the pairing (HES, HED) ($p < .05$).

4. lower reasoning Externals paired with different locus of control (LED) differed significantly from higher reasoning Internals regardless of the pairing (HIS, HID) ($p < .05$).

5. lower reasoning Internals paired with other Internals (LIS) differed significantly from higher reasoning Internals regardless of the pairing (HIS, HID) ($p < .05$).

6. lower reasoning Internals paired with other Internals (LIS) differed significantly from higher reasoning Externals regardless of the pairing (HES, HED) ($p < .05$).

7. lower reasoning Internals paired with different locus of control (LID) differed significantly from higher reasoning Internals regardless of the pairing (HIS, HID) ($p < .05$).

8. lower reasoning Internals paired with different locus of control (LID) differed significantly from higher reasoning Externals regardless of the pairing (HES, HED) ($p < .05$).

9. higher reasoning Externals paired with lower reasoning Internals (HED) differed significantly from higher reasoning Internals paired with lower reasoning Externals (HID) ($p < .05$).

10. higher reasoning Externals paired with lower reasoning Internals (HED) differed significantly from higher reasoning Internals paired with lower reasoning Internals (HIS) ($p < .05$).

11. higher reasoning Externals paired with lower reasoning Internals (HED) differed significantly from higher reasoning Externals paired with lower reasoning Externals (HES) ($p < .05$)

Table 6

Duncan's New Multiple Range Test of Multiple Comparisons for 3-Way Interaction: Difference Between Ordered Means

	LES	LED	LIS	LID	HES	HIS	HID	HED
Means	15.73	14.82	14.73	8.82	-7.18	-7.55	-8.36	-15.82
LES		.91	1.00	6.91	22.91*	23.28*	24.33*	31.55*
LED			.09	6.00	22.00*	22.37*	23.18*	30.64*
LIS				5.91	21.91*	22.28*	23.09*	30.55*
LID					16.00*	16.37*	17.18*	24.64*
HES						.37	1.18	8.64*
HIS							.81	8.27*
HID								7.46*

* $p < .05$

These results are pictured graphically in Figure 4.

Overall, level of reasoning had the greatest impact on amount of change in that low reasoners of both Internal and External locus of control evinced the greatest amount of change. Being paired with a person of same or different locus of control differentially affected changes in the P-score also. Locus of control was important only

Figure 4. A graphic presentation of the three-way interaction effect of Reason X Locus of Control X Same/Different.

when that reasoner was a High External paired with an Internal. When that combination occurred, Externals changed significantly more.

The Omega-Squared procedure was applied to assess the magnitude of the experimental effect on P-score changes. For P-change a total of 68% of the variance was attributable to treatment effects. Specifically, 65% was attributable to the main effect of Reason; 2% was attributable to the main effect of Same/Different and 1% was attributable to the interaction effect of Reason by Locus of Control. The remaining 32% was attributable to error.

Analysis of D-Scores

D-scores were calculated according to standardized DIT scoring instructions. Table 7 contains the means and standard deviations of original (Pre-test) scores and of consensus (Post-test) scores for individuals in each of the eight groups. To determine which groups changed significantly, t-tests, using Sandler's A-statistic, were performed on each group's pre and post-test scores (Runyon & Haber, 1980). Because of multiple comparisons an alpha level of .01 was used. (See Table 7).

The four groups included in Different Pairing (HID, HED, LID, LED) changed significantly. In the groups of Same Pairing only the low internal group (LIS) changed significantly.

Some groups changed positively and some changed negatively. Both groups of higher reasoning Internals, as well as both groups of higher reasoning Externals moved in a negative direction. All lower reasoning groups, two of Internal locus of control and two of External locus of control, changed in a positive direction.

Table 7

Means and Standard Deviations of Pre-tests and Post-tests and the A-Statistic for Groups with 2 Levels of Locus of Control, 2 Levels of Moral Reasoning and 2 Levels of Pairing ($N = 11$ per group).

Group	M_1	SD_1	M_2	SD_2	$A^\wedge$
Different Pairing					
High Internal	26.09	5.92	21.18	5.21	0.123***
Low Internal	11.72	3.82	17.54	6.31	0.161**
High External	22.09	5.41	17.54	6.31	0.145**
Low External	13.90	5.04	21.18	5.21	0.145**
Same Pairing					
High Internal	25.81	8.23	23.00	6.41	0.631
Low Internal	16.72	5.10	23.00	6.41	0.154**
High External	23.63	5.33	22.90	4.61	2.187
Low External	17.72	4.26	22.90	4.73	0.225

$^\wedge$ Sandler's A-Statistic

** $p < .01$

*** $p < .001$

Note: Experimenterwise error rate = .07

Analysis of D-Score Changes

D-score changes were obtained on each individual by subtracting the D-score originally obtained by the subject working independently (Pre-test) from the consensus D-score (Post-test). Table 8 contains the means and standard deviations of change scores for individuals in each of the eight groups, separated by locus of control, by level of moral reasoning and by type of pairing ($N = 11$ per group).

Table 8

Means and Standard Deviations of D-Score Changes for Individuals with 2 Levels of Locus of Control, 2 Levels of Moral Reasoning and 2 Levels of Pairing ($N = 11$ per group).

		Paired with Same Locus of Control		Paired with Different Locus of Control	
		Moral Reasoning Higher of Pair	Lower of Pair	Moral Reasoning Higher of Pair	Lower of Pair
<hr/>					
Internals		M -2.82	6.27	-4.91	5.82
SD		7.21	5.52	3.08	5.37
<hr/>					
Externals		M -0.73	5.09	-4.55	7.27
SD		3.66	6.50	3.70	5.93
<hr/>					

Hartley's F -maximum test was performed to test the homogeneity of variance. The null hypothesis was not rejected, $F(10, 8) = 1.47$, $p > .05$, indicating that variances were homogeneous.

To determine significant changes in moral reasoning a $2 \times 2 \times 2$ analysis of variance was performed on changes in the D-scores, with two levels each of locus of control, of moral reasoning and of type of pairing. Table 9 presents a summary of the results of the ANOVA.

Table 9

Summary of $2 \times 2 \times 2$ ANOVA of D-Score Changes for 8 Groups with 2 Levels of Locus of Control, 2 Levels of Moral Reasoning and 2 Levels of Pairing ($N = 11$ per group).

<u>Source</u>	<u>SS</u>	<u>df</u>	<u>ms</u>	<u>F</u>
Reason	1928.909	1	1928.909	68.511*
Locus	10.227	1	10.227	0.363
Same/Diff.	24.045	1	24.045	0.854
Reason X Locus	6.545	1	6.545	0.232
Reason X Same/Diff.	80.182	1	80.182	2.848
Locus X Same/Diff.	1.136	1	1.136	0.040
ReasonXLocusXSame/Diff.	26.182	1	26.182	0.930
Error	2252.364	80	28.155	
Total	4329.591	87	49.765	

* $p < .05$

Only the main effect of reasoning level was significant, $F(1, 80) = 68.511$, $p < .001$, indicating that D-scores for low reasoners increased more than D-scores for high reasoners. All other main effects and interactions were not significant at the .05 level.

The Omega-Squared procedure was applied to assess the magnitude of the experimental effect on D-change scores.

For D-change 44% of the variance was attributable to the main effect of Reason and 56% of the variance was attributable to error.

CHAPTER V

Discussion

The purpose of this study was to examine the relationship between an individual's locus of control and changes in that person's moral reasoning in a situation where external pressure is present in an effort to influence that person to change his/her moral reasoning. Consistent with the theories of Kohlberg and Rest, the first hypothesis was that change in moral reasoning would be toward higher levels of reasoning. It was predicted that those exposed to moral reasoning above their own would change more than those exposed to lower levels of reasoning.

The second hypothesis considered subjects' locus of control as an intervening variable in a person's resistance to change moral reasoning in a situation where pressure to change that reasoning is exerted. It was predicted that, if presented with moral reasoning that is above their own, subjects with an internal locus of control would not be as likely as externally controlled subjects to change in moral reasoning.

Summary of Results: Hypothesis One

The first hypothesis that those exposed to moral reasoning above their own level would change more than those exposed to lower levels of reasoning and that the

greater change would be towards higher levels of reasoning was supported by the results of the study. The main effect of level of moral reasoning indicated a significant difference between low reasoners and high reasoners in both P-score changes and D-score changes. Regardless of the subjects' locus of control low reasoners were affected dramatically and their movement upward was statistically significantly different from changes in moral reasoning among the higher reasoners.

Implications and Limitations. Support for this prediction is consistent with Kohlberg's theory. As stated earlier, Kohlberg's primary theoretical definition of structural moral development is that of an organism passing through invariant sequential stages (Kohlberg, 1969). Over time subjects naturally tend to change upward (Kohlberg & Kramer, 1969).

The findings which support the first prediction are also consistent with Rest's theory of moral judgment development. While Rest (1979) challenges the notion of "step by step" development (p. 64), he supports the upward directional movement principle. In Rest's complex model a subject may advance in several organizations of thinking simultaneously and accept and endorse reasoning at several advanced levels of moral judgment. Subjects in this study who moved upward in moral reasoning scores did so in varying increments.

Confirmation of the first hypothesis is also commensurate with the findings of Turiel who set out "to subject Kohlberg's hypotheses to an experimental test" (Turiel, 1966, p. 612). In his experimental design all subjects of a given dominant stage were randomly assigned to a control group or to three experimental groups. In the three experimental treatments, subjects - in individual role-playing situations - were exposed to reasoning one stage above their initial dominant stage (+1 treatment), to one stage below (-1 treatment), or to reasoning two stages above (+2 treatment). As hypothesized, the influence of the +1 treatment was significantly greater than that of the other two treatments. In the Turiel study there was some downward movement in some subjects. In the present study also there was some downward movement, but the greater movement was toward higher levels of reasoning. Both this study and the Turiel research support the theory that movement is directional toward higher levels of reasoning. However, both studies reveal that certain social interactions relative to moral reasoning may affect some downward changes in moral choices.

Rest, Turiel and Kohlberg (1968) attempted to replicate the Turiel findings. In addition to assessing subjects' preference for higher moral reasoning, the study investigated subjects' comprehension, assimilation, and recapitulation of moral reasoning. In their study,

subjects' preference for higher moral reasoning was significant. Preference, assimilation, and recapitulation were all tied to comprehension.

Movement upward in this experimental condition is consistent with Kohlberg's early formulation of his theory of moral development that offers a "horizontal" perspective of the logical, moral and social development of the individual. He depicts a parallel between Piaget's stages of cognitive development and the stages of moral development. While logical reasoning is a necessary condition for moral development, it is not a sufficient condition. Studies suggest that in the Kohlberg paradigm many are at a higher logical stage than moral, but essentially none are at a higher moral stage than their logical stage (Colby & Kohlberg, 1976).

After development of logical stages comes development of what Kohlberg calls stages of social perception or role-taking. This he defines as the level at which one sees other people, interprets their thoughts and feelings and sees their role or place in society. Kohlberg declares that it is obvious that moral stages are primarily products of the child's interaction with others (Kohlberg, 1969). He is not suggesting that an individual simply "swallows" and assimilates values taught by another. Such moral values will be internalized when the individual can relate these values to a comprehended social order and to his/her own goals as a social self.

The fundamental factor causing such a structuring of a moral order is the social participation and role-taking opportunity referred to earlier. In the present study subjects were exposed to the "role-taking" and reasoning of another individual and asked to "participate" in that role-taking and reasoning.

The evidence for stage mixture in subjects is clear (Kohlberg, 1969; Colby, 1979; Lawson, 1986) with usage distributed around the mode in decreasing fashion as one moves farther away from the modal stage. The Rest (1973) study demonstrated that "the increasing difficulty of the stages sets upper limits on what kinds of moral judgments are conceptually possible for a subject, and preference for greater structural adequacy sets lower limits on what kinds of moral judgments the subject would be satisfied with" (p. 105). Within the individual's cognitive structure there is room for movement in either direction, but that movement is limited. Of the 88 subjects in the present study 4 Internals who were in the high reasoning groups moved even higher than their original principled reasoning scores. Response variability lends further support to Rest's complex stage model as opposed to Kohlberg's "structured whole" theory (Rest, 1976; Plummer, 1983).

A question the present study did not address is how clear or comprehensible the higher reasoning subjects may have made their arguments in trying to persuade the lower

reasoners to accept their choices for moral issues. The general result was in the predicted direction, but the question could be asked if any downward movement was in part due to compromise because the lower reasoning partner could not comprehend the argument for higher choices. Flavell and Wohlwill (1969) suggest that response variability in subjects may stem from such factors as the manner in which relevant information is presented and from the amount of information overload placed on the individual. Or, in keeping with the findings of the Rest, Turiel and Kohlberg study, the higher reasoner may not have been able to explain his preferred moral reasoning at that level of choice. As Rest argues, a subject's comprehension and preference often surpasses his/her level of "production" of moral reasoning (Rest, 1973).

In considering these scores, one has to allow that these subjects, all college students, may be in transition. Previously Kohlberg had written that there is often evident a "retrogression" in the college years (Kohlberg & Kramer, 1969). This retrogression has been reinterpreted as a transition - the break-up of conventional morality without the consolidation of a more principled morality (Rest, 1979). However, the generalized effect is one of upward movement. Lack of consolidation may have contributed generally to change in the direction predicted, consistent with the theory. It

may also have contributed to the downward movement expressed by some subjects.

Summary of Results: Hypothesis Two.

The main effect of locus of control was not significant for either P-score changes or D-score changes. The lack of statistical significance does not lend support to earlier studies which offer evidence to indicate that persons holding an internal locus of control withstand pressures to respond to instructions, suggestions or manipulations that run contrary to their ideas or beliefs (Jolley & Spielberger, 1973; Algire & Murray, 1974; Sherman, 1973).

Implication and Limitations.

Some studies suggest that certain factors make a difference in whether or not Internals allow themselves to be influenced. Crowne and Liverant (1963) revealed that when the "stakes" are of greater value to the individual, Internals are more trusting of their own judgments than are Externals. In this interaction, Internals may have "resisted" less, thereby compromising because they did not see much "at stake." Lefcourt contends that "if the expert or experimenter ... offers a more collegial atmosphere, the internal should not then be as resistant to influence as when he perceives himself as a target of manipulation" (1982, p. 49).

Several other studies (James, Woodruff & Werner, 1965; Platt, 1969; Mausner & Platt, 1971) prompt another consideration. These investigations reveal that Internals do not simply resist any influence but discriminate which influences they will accept. When Internals accept and believe the information presented to them, they are more easily influenced to change. In the present study a lower reasoning External may have provided lucid, acceptable arguments for his/her choice. In keeping with the results of the Turiel study cited above, an Internal may have changed a higher reasoning preference that he/she could not explain for reasoning that was within his/her reasoning "profile."

While the main effect of locus of control was not significant in the ANOVA, the patterns of change indicate greater amount of change on the part of Externals and, therefore, more resistance on the part of Internals.

For P-score changes the interaction of Reason x Locus demonstrated a significant effect in the ANOVA, but the Newman-Keuls follow-up tests failed to locate the source of the effect. While the F-test was sensitive and powerful enough to detect a significant difference in population means, the Newman-Keuls lacked the power to determine where the interaction occurs. Even if the effect is minimal, that effect cannot be dismissed. Lack of power in a follow-up test cannot be equated with lack of interaction. The ANOVA provides enough of a hint to

warrant a replication of the study. A larger sample of subjects, better instruments of measure and greater heterogeneity of subjects would decrease the probability of error and strengthen the test statistic.

Because of the probability level ($p < .07$) for the three-way interaction in the analysis of P-score changes and because of the "teasing" effect of the significant but elusive two-way interaction, tests for multiple comparisons for three-way interaction means were applied. The Duncan Multiple Range procedure, a less conservative test, indicated significance in the pattern of change revealed in the means. The pattern manifested that Same/Difference pairing denoted effects that are consistent with the predictions.

Lower reasoning Internals changed more when paired with higher reasoning Internals. One can question if their resistance was lessened by more convincing discussion. Internals are reported to be more certain of and cohesive to their own beliefs. A combination of higher moral reasoning - usually the preference - and an Internal conviction may have affected the change.

Lower reasoning Internals changed significantly less ($M = 8.82$) than lower reasoning Externals ($M = 14.82$) when paired with a different locus of control. The greatest amount of change came in higher reasoning Externals ($M = -15.82$) who were paired with lower reasoning Internals ($M = 8.82$). Here the cited "resistance" of the

Internals would seem to be a factor in the downward movement of the Externals.

The results of the study support the basic tenets of the cognitive-developmental theory of moral judgment; the results also support a major finding in the Locus of Control research, namely, that Internals are more resistant to outside influences to change. A consequent implication for the theory of moral development is whether or not the theory allows for locus of control as a moderating variable. Should the theory include a personality factor that qualifies the process if change is influenced by locus of control?

Implications for Education

Of practical consideration in these results are the implications for education - both in content and in technique - and its role in providing appropriate "opportunities" for social participation and role-taking that enhance the developmental process.

A common reaction among subjects who participated in the post-test session was that the experience was "good," "great," "exciting" and "fun." Several subjects remarked that they never "sat around" and discussed issues like this. The experience forced them to think about how the other person thought and whether or not they could agree with that thinking. The latter consideration led them to think about why they could or could not agree. One of the

many criticisms of American education today is that students are not taught to think. More opportunities for role-taking and for social participation would help to remedy this deficit while enhancing the cognitive-developmental process involved in attaining higher levels of moral reasoning.

Many school systems have introduced programs to promote moral development. To maximize the effects of programs concerning the cognitive-developmental theory of moral judgment, these efforts must take into account the concept of levels of moral reasoning and the concept of locus of control; and programs that influence levels of moral reasoning and locus of control have to be included.

Future Directions

Again, the data suggest that replication studies are warranted. In addition to the benefits derived from a larger sample, clearer results may be obtained with more carefully constructed instruments of measure.

Considerable research in assessing the psychometric properties of the DIT P-score has been completed. Rest (1979) reports test-retest reliabilities for the P-index ranging from .71 to .82 and an internal consistency measure of .77. The D-index test-retest correlations reported by Rest (1979) range from .67 to .92. However, Rest (1986) states that in most recent studies (after 1979) results of studies using the D-index have generally

not been as reliable as those using the P-index. He insists that the P-index has shown consistent reliability and validity.

Test-retest reliability with individual stage scores is generally lower than that of the P-index, in the range of .50 to .60.

Lawson's study (1986) demonstrated that certain dilemmas consistently elicited the same stage level of reasoning across subjects. One of her conclusions was that stage scores on the DIT are more a function of the dilemma issues than of any personality variable of the subject. Additional research on the psychometric properties of the DIT stage scores is essential. The D-score, as an overall index of moral judgment development, uses information from items of all stages rather than from Stage 5 and 6 items only. Since stage score reliabilities have not been systematically investigated, further research into the psychometric properties of the D-index are necessary to strengthen the reliability of the overall DIT.

Numerous critical evaluations and reconceptualizations of the construct of locus of control and of its measurement have been published (Joe, 1971; Lefcourt, 1981; Palenzuela, 1984). Joe (1971) concluded that, while findings were not remarkably consistent, studies of the internal-external control concept evinced significant evidence for construct validity. Palenzuela (1984)

concluded that recent investigations of the locus of control concept "rather than bring coherence to the area seem to create greater confusion" (p. 686).

Various studies of the dimensionality of locus of control have been reported (Lefcourt, 1981). Rotter (1975) argued that such factor analyses do not reveal the true structure of the construct. He explained that factor analyses were done in the early development of the I-E scale and these showed that most of the variance was accounted for by one general factor. Palenzuela (1984) demonstrated that "the dimensionality of locus of control is something which is still somewhat ambiguous and confused in spite of the studies being carried out. Both the number of dimensions and their meaning is somewhat arbitrary" (p. 697). Thus, despite the popularity of the construct and the plethora of research involving it, there is little agreement about the validity of the instruments purported to measure the construct.

Results of this study warrant future replication. In addition to a larger number of subjects and improved scales for measurement, greater heterogeneity in the pool of subjects would give more range in scores on the DIT and on the Rotter Locus of Control Scale. Conclusions from this study were based on a New England community college population who derived mainly from the working class and

lower middle class. Most of the subjects' ages were 18-21. Studies should be conducted with populations that vary in their demographic characteristics.

As a replication this researcher would like to have the influence situation again be one in which each pair discussed their original answers and the reasons for their choices. Each subject would try to convince his/her partner of the validity of that choice. In a change in procedure, subjects would then individually take the DIT a second time after the shared discussion. At the de-briefing session some subjects explained that they compromised on some answers even though they still believed their choice was best. Taking the DIT alone for the second time may eliminate changes resulting from a spirit of or need to compromise. At the same time that it may reveal more or different change patterns, it can certainly suggest something about the effect of influence relative to the maintenance of changes in reasoning in a post-test situation.

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Appendix A

June 13, 1986

Ms. Jane K. Carey
26 Mountain Avenue
East Providence, RI 02915

Dear Ms. Carey:

The proposal "Locus of Control and Changes in Moral Reasoning Under Coercion" meet the criteria for expedited review and has been approved. It is my understanding that the subjects will be volunteers 18 years old or over and have the right to withdraw from the study without penalty.

Sincerely,

A black rectangular box redacting the signature of Janet I. Hirsch.

Janet I. Hirsch, Ed.D., R.N.
Chair
Institutional Review Board

JIH:nt

Appendix B

INFORMED CONSENT FORM: ATTITUDES and OPINIONS

I understand that:

1. I will be asked to discuss my opinions about six social problems with one other person.
2. Together we will be asked to come to agreement on the questions concerning the six social problems.
3. Discussion and completion of the questionnaire will take approximately one hour.
4. I will be given the results of the study when the questionnaires have been analyzed by a standard computer scoring system.
5. I realize that my honest answers to the questions are essential. I understand that there may not be any direct benefits to me, but that this research could yield important information about the attitudes and opinions of students.
6. I am participating freely and may withdraw at any time. I can refuse to answer any questions that I do not wish to answer. There will be no penalty to my grade and withdrawal will in no way affect my standing as a student.

CERTIFICATE of ASSENT

I understand each of the above items relating to the participation of _____ in the research
(Name of Subject)

of "Attitudes and Opinions" under the direction of

Jane Carey and I hereby agree to my participation in
Investigator

the research project.

*

Signature of Volunteer

Appendix C

INSTRUCTIONS

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered "a" or "b". Please select the one statement of each pair (and only one) which you more strongly BELIEVE to be the case as far as you're concerned. Be sure to select the one you actually BELIEVE to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief: obviously there are no right or wrong answers.

Please answer these items CAREFULLY but do not spend too much time on any one item. Be sure to find an answer for EVERY choice. Find the number of the item on the answer sheet and black-in the space under "a" or "b" which you choose as the statement more true.

In some instances you may discover that you believe both statements are neither one. In such cases, be sure to select the ONE you more strongly believe to be the case as far as you're concerned. Also try to respond to each item INDEPENDENTLY when making your choice: do not be influenced by your previous choices.

1. a. Children get into trouble because their parents punish them too much.
b. The trouble with most children nowadays is that their parents are too easy with them.
2. a. Many of the unhappy things in people's lives are partly due to bad luck.
b. People's misfortunes result from the mistakes they make.
3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
b. There will always be wars, no matter how hard people try to prevent them.
4. a. In the long run people get the respect they deserve in this world.
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.
5. a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a. Without the right breaks one cannot be an effective leader.
b. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a. No matter how hard you try some people just don't like you.
b. People who can't get others to like them don't understand how to get along with others.
8. a. Heredity plays the major role in determining one's personality.
b. It is one's experience in life which determine what they're like.
9. a. I have often found that what is going to happen will happen.
b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11.
 - a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
 - b. Getting a good job depends mainly on being in the right place at the right time.
12.
 - a. The average citizen can have an influence in government decisions.
 - b. This world is run by the few people in power, and there is not much the little guy can do about it.
13.
 - a. When I make plans, I am almost certain that I can make them work.
 - b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14.
 - a. There are certain people who are just no good.
 - b. There is some good in everybody.
15.
 - a. In my case getting what I want has little or nothing to do with luck.
 - b. Many times we might just as well decide what to do by flipping a coin.
16.
 - a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
 - b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17.
 - a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
 - b. By taking an active part in political and social affairs the people can control world events.
18.
 - a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
 - b. There really is no such thing as "luck".
19.
 - a. One should always be willing to admit mistakes.
 - b. It is usually best to cover up one's mistakes.
20.
 - a. It is hard to know whether or not a person really likes you.
 - b. How many friends you have depends upon how nice a person you are.
21.
 - a. In the long run the bad things that happen to us are balanced by the good ones.

- b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. a. With enough effort we can wipe out political corruption.
b. It is difficult for people to have much control over the things politicians do in office.
23. a. Sometimes I can't understand how teachers arrive at the grades they give.
b. There is a direct connection between how hard I study and the grades I get.
24. a. A good leader expects people to decide for themselves what they should do.
b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.
b. It is impossible for me to believe that chance or luck plays an important role in my life.
26. a. People are lonely because they don't try to be friendly.
b. There's not much use in trying too hard to please people, if they like you, they like you.
27. a. There is too much emphasis on athletics in high school.
b. Team sports are an excellent way to build character.
28. a. What happens to me is my own doing.
b. Sometimes I feel that I don't have enough control over the direction my life is taking.
29. a. Most of the time I can't understand why politicians behave the way they do.
b. In the long run the people are responsible for bad government on a national as well as on a local level.

Appendix D

OPINIONS ABOUT SOCIAL PROBLEMS

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

Please give us the following information:

Name _____ female
 Age _____ Class and period _____ male
 School _____

* * * * * * * * * *

Parent's Occupation:

Father _____

Mother _____

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

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

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

PART A. (SAMPLE)

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

GREAT importance
MUCH importance
SOME importance
LITTLE importance
NO importance

_____	1. Whether the car dealer was in the same block as where Frank lives.
_____ ✓ _____	2. Would a <u>used</u> car be more economical in the long run than a <u>new</u> car.
_____ ✓ _____	3. Whether the color was green, Frank's favorite color.
_____ _____ ✓	4. Whether the cubic inch displacement was at least 200.
✓ _____	5. Would a large, roomy car be better than a compact car.
_____ _____ ✓	6. Whether the front connibillies were differential.

PART B. (Sample)

From the list of questions above, select the most important one of the whole group. Put the number of the most important question on the top line below. Do likewise for your 2nd, 3rd, and 4th most important choices.

Most important	<u>5</u>
Second most important	<u>2</u>
Third most important	<u>3</u>
Fourth most important	<u>1</u>

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that the doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid \$200 for the radium and charged \$2000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about \$1000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug? (Check one)

- ☐ Should steal it
- ☐ Can't decide
- ☐ Should not steal it

HEINZ STORY

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

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

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

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

STUDENT TAKE-OVER

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

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

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

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

- ☐ Yes, they should take it over
- ☐ Can't decide
- ☐ No, they should not take it over

GREAT importance
MUCH importance
SOME importance
LITTLE importance
NO importance

STUDENT TAKE-OVER

_____	1. Are the students doing this to really help other people or are they doing it for kicks.
_____	2. Do the students have any right to take over property that doesn't belong to them.
_____	3. Do the students realize that they might be arrested and fined, and even expelled from school.
_____	4. Would taking over the building in the long run benefit more people to a greater extent.
_____	5. Whether the president stayed within the limits of his authority in ignoring the faculty vote.
_____	6. Will the takeover anger the public and give all students a bad name.
_____	7. Is taking over a building consistent with principles of justice.
_____	8. Would allowing one student take-over encourage many other student take-overs.
_____	9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative.
_____	10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.
_____	11. Are the students following principles which they believe are above the law.
_____	12. Whether or not university decisions ought to be respected by students.

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

Most important	_____
Second most important	_____
Third most important	_____
Fourth most important	_____

ESCAPED PRISONER

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

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

- ☐ Should report him
- ☐ Can't decide
- ☐ Should not report him

ESCAPED PRISONER

GREAT importance
 MUCH importance
 SOME importance
 LITTLE importance
 NO importance

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

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

Most important	_____
Second most important	_____
Third most important	_____
Fourth most important	_____

NEWSPAPER

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

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

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

Should the principal stop the newspaper? (Check one)

- ☐ Should stop it
- ☐ Can't decide
- ☐ Should not stop it

GREAT importance
 MUCH importance
 SOME importance
 LITTLE importance
 NO importance

NEWSPAPER

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

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

Most important _____
 Second most important _____
 Third most important _____
 Fourth most important _____

WEBSTER

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

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

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

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

GREAT importance
 MUCH importance
 SOME importance
 LITTLE importance
 NO importance

WEBSTER

_____	1. Does the owner of a business have the right to make his own business decisions or not?
_____	2. Whether there is a law that forbids racial discrimination in hiring for jobs.
_____	3. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.
_____	4. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.
_____	5. What individual differences ought to be relevant in deciding how society's roles are filled?
_____	6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.
_____	7. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudice?
_____	8. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.
_____	9. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?
_____	10. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?
_____	11. Whether the Christian commandment to love your fellow man applies to this case.
_____	12. If someone's in need, shouldn't he be helped regardless of what you get back from him?

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

Most important	_____
Second most important	_____
Third most important	_____
Fourth most important	_____

THE DOCTOR'S DILEMMA

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

What should the doctor do? (Check one)

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

GREAT importance
 MUCH importance
 SOME importance
 LITTLE importance
 NO importance

DOCTOR

1. Whether the woman's family is in favor of giving her the overdose or not.
2. Is the doctor obligated by the same laws as everybody else if giving an overdose would be the same as killing her.
3. Whether people would be much better off without society regimenting their lives and even their deaths.
4. Whether the doctor could make it appear like an accident.
5. Does the state have the right to force continued existence on those who don't want to live.
6. What is the value of death prior to society's perspective on personal values.
7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.
8. Is helping to end another's life ever a responsible act of cooperation.
9. Whether only God should decide when a person's life should end.
10. What values the doctor has set for himself in his own personal code of behavior.
11. Can society afford to let anybody end their lives when they want to.
12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live.

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

Most important _____
 Second most important _____
 Third most important _____
 Fourth most important _____