MORAL REASONING STRATEGIES AND HEALTH BELIEFS OF HIGH SCHOOL STUDENTS

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We hereby recommend that the thesis prepared under our supervision by Cheri Defoyd Reynolds, B.S., B.S.N., R.N. entitled Moral Reasoning Strategies and Health Beliefs of High School Students

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CHAPTER 1

THE PROBLEM AND ITS SETTING

Rationale of the Study

Health education, as well as education in general, is undergoing rapid changes in the United States. Health education, in particular, is in flux because of educational restructuring and its youth as a discipline. Health education, due to its nature, finds itself often confused with biology, physical education, sociology, and psychology. At times, health education lacks individual status as a high school course and is not taught by a trained health educator (Balog, 1978; Burgess, 1980; Cunningham, 1979; Faulkenberry, 1979; Fawole, 1979; Kadejo, 1979; Martz, 1980; Willgoose, 1977).

Faulkenberry (1979) found health education teachers and health curricula to be inadequate in South Carolina schools. This same finding was reported throughout the United States (Balog, 1978; Burgess, 1980; Cunningham, 1979; Martz, 1980; Nazaritean, 1978; Willgoose, 1977).

Health education is further described as a field divided and in need of unification (Balog, 1978). Balog stated that health education should emphasize self-rule

and promote self-care. Health education should also give more information on healthful life actions, and impart knowledge to develop powers of reasoning and judgment for making healthful life choices. The last suggestion, dealing with moral reasoning, has been dealt with by other researchers, who found that teaching moral reasoning and decision-making skills increases maintenance of good physical and mental health (Preston & Gray, 1979).

Similarly, Kohlberg (1966, 1971a, 1980a) and his associates integrated the teaching of health topics using moral reasoning and decision-making skills. These researchers stated emphatically that one cannot effectively indoctrinate people, but one can present people with a set of critical moral issues which will help the individual make mature judgments about personal behavior (Gailbraith & Jones, 1976).

Presenting knowledge to students to promote change has been called the knowledge-attitude-practice syndrome in health education (Bruess & Gay, 1978). It is widely thought in the health education field that the professional must deal with the cognitive domain (knowledge), the affective domain (attitudes or beliefs), and the

action domain (practice) in order to be effective (Bruess & Gay, 1978). In so doing, the ultimate goal of the health educator is to promote healthful practice in high school students. Healthful beliefs are not commonly acted on by a majority of the present teenage population in America (American Heart Association, 1980; Birch, 1972; Briggs, 1977; Farquhar, 1978; Hegsted, 1976; National Center of Health Statistics, 1974; U.S. Department of Health Education, and Welfare, 1972, 1981). Health education, therefore, often meets resistance in its attempts to change individuals toward healthful beliefs by conveying health information (Hochbaum, cited in Newman, 1976; Lammers, 1980; Nazaritean, 1978; Newman, 1976; Robertson, cited in Newman, 1976).

Some of the goals of health education and those of Kohlberg are similar. Thus, the use of Kohlberg's methods of teaching moral reasoning to achieve results in the affective domain, or beliefs, is of particular interest to health educators. Many studies have already been completed to test the validity of Kohlberg's work. The present study presents a descriptive consideration of the use of Kohlberg's moral reasoning strategy as part of a health education unit and its effect on health

attitudes of high school students. In so doing, the study has as its goal the addition of information to the present body of knowledge concerning the teaching of health information and the promotion of healthful beliefs or attitudes.

The Purpose of the Study

It was the general purpose of the present study to determine the usefulness of Kohlberg's moral reasoning strategy in selected aspects of health education of high school students. The study included the consideration of three research questions. The questions dealt with the relationship between decision making (moral reasoning) and health beliefs, changes in health beliefs, and affective responses of students during discussions of health dilemmas.

The Statement of the Problem

The study was designed to ascertain, through teacher observations, the effects of incorporating moral reasoning strategies on expressed health beliefs of high school students. The study determined whether or not the health beliefs of the students changed, if students became actively involved in dilemma discussion, and the relationship between the level of reasoning and

health beliefs of students after the study period. Observations of health classroom activities took place in two high schools in the Dallas area in the Fall semester of 1982, from September 13 to October 30, 1982. One teacher observed students for a 6-weeks period. The second teacher observed students for a 3-weeks double class period.

The Subproblems

The following subproblems were noted in the study:

1. What methods and materials are necessary to teach moral reasoning in a health education classroom?

2. What will the analysis of observations indicate concerning the relationship of moral reasoning and health beliefs?

Research Questions

There were three research questions asked in connection with the study:

1. Did the level of moral reasoning determined by teacher observation have any relationship with expressed health beliefs of students (Appendix A)?

2. Did the use of Kohlberg's moral dilemmas in a classroom change the expressed health beliefs of students during the study period?

3. Did the students respond affectively, as observed by the SOLER Scale, to the dilemma discussions (Appendix A)?

The Assumptions

The following assumptions were held true for the study:

1. The first assumption stated that the use of different dilemmas does not affect the process of decision making (moral reasoning strategies).

2. The second assumption stated that the time frame (6-weeks single period, 3-weeks double period) in which dilemmas were presented to the classes did not make a significant difference.

3. The third assumption stated that there was no significant difference in the ability of the teachers to judge levels of moral reasoning.

4. The fourth assumption stated that a response rate of over 50% on the SOLER Scale is indicative of student involvement in dilemma discussion.

5. The fifth assumption stated that the two groups of students in the sample were not significantly different.

The Limitations

The following limitations defined the study:

1. The investigator recognized the fact that variation in class size affected the ability of the individual to respond to dilemmas.

2. The investigator acknowledged the limited skill of teachers in using Kohlberg's scale for observation.

3. The investigator was aware of the criticism of some authorities in regard to Kohlberg's methodology.

4. The investigator was aware that there was no stated reliability and validity for the Health Belief Scale or the SOLER Scale.

The Delimitations

The study had the following delimitations:

1. The study was limited primarily to subjective analysis and interpretation of the data on which the conclusions were based.

2. The study was limited to students of health education classes in the selected schools.

3. The study was limited to those beliefs stated on the Health Belief Scale.

4. The study was limited to the presentation of standard dilemmas on health education topics including human development, sex roles, values clarification, disease, and death and dying (Appendix B).

5. The study was limited to the presentation of decision-making skills and methods as described by Kohlberg and administered by the classroom teachers (Appendix A).

Definition of Terms

The following definitions were applied to terms used in the study:

1. Critical moral issues are those included in dilemmas which students are asked to discuss in terms of "should do" alternatives open to the central character in the story. Moral issues may deal with social norms, civil liberties, life, sex, personal conscience, contracts, property, roles and issues of acceptance, authority, punishment, or truth (Gailbraith & Jones, 1976).

2. Decision-making skills are those deliberative and rational processes employed to determine a course of action, to find an answer, or to choose an appropriate alternative from among several possible options in

a problem situation confronting an individual or a group of individuals (Bross, 1953).

3. Dilemmas are the critical moral issues presented to the student through the reading of a story or role-playing. The story deals with specific course content, current issues, and direct life situations of the students (Gailbraith & Jones, 1976).

4. Health beliefs are convictions or a mental acceptance in the actuality or truth of something, especially a tenet or body of tenets accepted by a group of persons (American Heritage Dictionary, 1973). These beliefs were expressed by the student on the Health Beliefs Scale. Responses of students were interpreted according to the wellness continuum, as defined by Hettler and modified by the researcher.

5. Maturity signifies the level or stage at which the student functions in decision making. The stages range from 1 to 6, as defined by Kohlberg.

6. Moral reasoning represents a decision-making process which integrates each person's experience and perspective on specific moral issues (Gailbraith & Jones, 1976). It is not behavior, emotion, or social institution. Moral reasoning is of three modes (Kohlberg,

1971a): (a) it deals with duties and rights (deontological); (b) it deals with ultimate aims or ends (teleological); (c) it deals with personal worth or virtue. Despite all of the work done on moral reasoning, no concise definition of the value of moral reasoning exists. Sociologists, psychologists, and educators continue to attempt to find a definition of moral reasoning (Wonderly & Kupfersmid, 1973).

7. SOLER scale is a model that is used to evaluate a person's body language and to validate or negate verbal responses. Affective responses are recorded on the SOLER scale (Egan, 1977). An "S" refers to a posture of involvement facing the other person or group members squarely. An "O" refers to an open posture or not crossing extremities. Crossing extremities indicates a posture of lessened involvement. An "L" is leaning toward the group or an individual. An "E" refers to maintaining eye contact. An "R" refers to being relaxed while attending to the group (Egan, 1977).

8. The Health Belief Scale includes three stages. A person in stage "A" defines wellness as a personal responsibility and as optimal physical, mental, and emotional functioning. A person in stage "A" seeks medical assistance to prevent less than optimal

functioning. A stage "B" person defines wellness as the responsibility of self and others and not being sick. Stage "B" people seek medical assistance to prevent serious illness. Stage "C" people believe that wellness is not being sick, and they depend on others for being well (modified from Hettler's model of High Level Wellness, 1980).

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Historical Overview

For decades educators, psychologists, and philosophers have tried to discover the mechanisms by which children develop a sense of "moral maturity" (Archambault, 1964; Mead, 1934; Piaget, 1932). Psychologists have explored those aspects of morality, such as ego development (Atkins, 1972) and interpersonal relationships (Selman & Jacquette, 1978) which might ultimately influence moral development. Some of the work in sociology, psychology, and education attempts to explain stages of development (Kohlberg & Turiel, 1971; Sprinthall & Sprinthall, 1977) and form a structural basis from which educators may teach more effectively (Appendix C)(Atkins, 1972; Kohlberg, 1967; Piaget, 1969; Turiel, 1971). Some theories take into account time, space, and causality (Piaget), while others focus on aspects of social justice, fairness, and ethics (Kohlberg). In so doing, the educators hope to learn how to assist the child to develop moral maturity and cope with life situations in a more socially accepted manner.

Plato acknowledged the need for teaching morality in saying that justice is the "good within" and needs to be drawn out of the individual. Socrates' development of steps for educating the individual is much the same. The Socratic method creates dissatisfaction in the student about present knowledge, with no ready solution being offered. The teacher then exposes the student to disagreement and argument about the situation with peers in dilemma discussion. This allows the student to see things not previously seen (Kohlberg, 1970b). John Dewey took these ideas further in concluding that true education is not teaching but supplying conditions for development which occurs through invariant ordered sequential stages. The ultimate touchstone of education is moral development of a free and powerful character, not internalization of cultural norms (Kohlberg, 1973). Dewey's 1934 work suggests a need for a totally developed person, including moral development, to exist from the school. Dewey (cited in Archambault, 1964) stated:

> Where then is education when we find actual satisfactory specimens of it in existence? In the first place, it is a process of development or growth and it is the process and not merely the result, that is important . . . an educated person is the person who has the power to go on and get more education. (p. 10)

The desire for teaching moral education was revived in the 1960s with campus upheaval and the Vietnam War. The 1970s saw a decline in the standards of public and personal conduct, for example the Watergate incident, breakdown of the family unit, sexual experimentation, drug exploitation, youth crime, destruction of school property, and assaults on teachers. A 1975 Gallup Poll showed that 79% of those questioned favored instruction in the schools that would deal with morals and moral action (Atkins, 1972; Muson, 1979).

Into this arena Kohlberg presented his methods of teaching moral reasoning or judgment, as an alternative to the "bag of virtues" and industrial models which had not been working to stimulate moral development (Combs & Cooley, 1968: Hartshorne & May, 1928; Havighurst & Tabe, 1949; Kohlberg, 1973; Kohlberg, cited in Combs & Cooley, 1968; Kohlberg & Mayer, 1972; Little, 1967). In a review of predictive and longitudinal studies, Kohlberg and Mayer (1972) said school achievement is not a predictor of later success in students. Kohlberg and Mayer (1972) have stated that advocates in schools have confused success in schools with success in life. These researchers pointed out that high school dropouts do as well as graduates who never attend college.

> High school graduates with poor achievement scores and grades do as well as those with good scores, and college graduates with poor grades do as well as those with good grades. (Kohlberg & Mayer, 1972, p. 11)

The educational system therefore promotes injustice in the form of arbitrary academic education to all students and the division of students to a superior academic track and an inferior vocational track (Kohlberg, 1972).

Such a system has encouraged what Kohlberg (1969) called "moral privatism" in youth. Kohlberg in an early 1969 study, asked students in high school to resolve the Heinz dilemma. Most responses supported conventional norms pertaining to love, law, life, and property. In the last decade, student responses have changed. Responses indicate moral relativism exists; i.e., students were reluctant to make any judgment about moral conflict, saying there is no right answer. This philosophy promotes mindless disobedience, supports failure to think (Gilligan, 1980), and results in adolescent fixation at preconventional levels (Blatt & Kohlberg, 1973).

Teaching and Moral Development

Kohlberg's alternative to present situations is teaching moral reasoning and decision making through presentation of dilemmas. The dilemmas promote a

movement to higher stages, from 1 to 6. Kohlberg (1974) suggested that

> if the school is to have regard for the principles of justice, it must also take some responsibility for seeing that a sense of justice develops in children. To respect the rights of children is to be involved in developing their recognition of the rights of others. (p. 5)

Critics of Kohlberg say that such teaching reflects a liberal, Ivy League emphasis on social conscience that has nothing to do with the way people view the world (Muson, 1979). Constitutional lawyers will also argue that the constitution as interpreted by the Supreme Court's Schemp Decision, prohibits moral education in the public schools by classifying it as a religion or an articulated credo or value system (Ball, 1967).

Kohlberg insists that moral education which stimulates development violates no constitutional rights. He concludes that development to higher stages is constitutional, and is not indoctrination of beliefs, but changing a way of reasoning. The aim of Kohlberg's teaching methods is not convergence to a common stage. Kohlberg's aim is to aid the individual movement from a present stage to a higher stage. Teachers' opinions are not stressed, but are one of many opinions. The philosophy is justified in that moral stages are

universal and not simply middle class values. Development is socially useful in that people at higher stages reason better and are more likely to act on their judgments (Kohlberg & Turiel, 1971).

Kohlberg suggested that the school needs to help the adolescent develop responsibly, not through the teaching of a "bag of virtues," or indoctrination, but more by providing the adolescent with many options. He suggested that only in such a manner can reorganization and development progress in the adolescent. He stated that as a result of restructuring the central core of morality in each individual, and through experience,

> a more differentiated and integrated moral structure [in the individual] handles more moral problems, conflicts, or points of view in a more stable or self-consistent way. (Kohlberg, 1971a, p. 47)

Kohlberg further suggested the school cannot be value neutral, as it is attempting to do in present society, for the school always contains a "hidden moral curriculum" which the adolescent recognizes (Kohlberg, 1967, 1976). Public schools in America that do not teach moral values for fear of impinging on the rights of minority groups do moralize in a negative way. The moralizing activities of the teacher

and school are not explicit and revolve around no formulated goals or methods (Kohlberg, 1971a).

Kohlberg's methods of teaching are based on the cognitive developmental theory of learning. The theory suggests that individuals often make different decisions and yet have the same basic moral values. Individual values tend to originate inside the self as there is a processing of social experience. In every culture and subculture of the world, some basic moral values are found, and the same steps to moral maturity exist cross-culturally. Basic values are different largely because people are at different levels of thinking about basic moral and social issues and concepts. Exposure to others who are more mature, helps stimulate maturity in value processes. Persons are, however, selective in responses to others and do not automatically incorporate the values elders and authority imparts (Kohlberg & Turiel, 1971).

Kohlberg in his developmental stages, describes six stages of moral reasoning. Through the preconventional, conventional, and postconventional stages, the child develops a sense of abstract thinking, enabling the child to function more responsibly in society. Kohlberg's philosophy ties together psychological and sociological facts of moral development. His educational methods

involve stimulating moral change in accordance with the constitutional system and guarantees freedom of belief (Kohlberg, 1971a).

Kohlberg further distinguishes his stages. Stages imply that young children's responses represent not ignorance or error, but spontaneity of thinking about the world, which is qualitatively different from adults, and yet it has a structure or logic of its own. The notion of different developmental structures of thought implies consistency of level of responses from task to task. If a child's response represents a general structure rather than a specific learning, the child should demonstrate the same relative structure levels in a variety of tasks. Stages imply invariant sequences regardless of cultural teaching or circumstances. Cultural teaching and experience can speed or slow development, but cannot change the order of sequence (Kohlberg, 1966, 1972).

The stage or structure of a person's moral judgment defines: (a) what he finds valuable in every moral issue, and (b) why he finds it valuable (Kohlberg, 1980b). Every stage is described in terms of content in judgments and values such structures generate (Kohlberg, 1980b). Moral stages constitute "principles" in the sense that

they represent major consistencies of moral evaluation within the individual not directly due to factual beliefs but to role taking (Kohlberg, 1971a). Stages incorporate a justice structure which is progressively more comprehensive, differentiated, and equilibrated than the previous structure (Kohlberg, 1971a, 1971b). Progress to higher stages is preceded by cognitive dissonance or disequilibrim (Kohlberg, 1969; Turiel, 1966, 1969).

Higher stages include lower stages as components reintegrated at a higher level (Kohlberg, 1971a; Rest, 1968; Rest, Turiel, & Kohlberg, 1969). Progress to higher stages can be achieved by teaching moral dilemmas. Blatt and Kohlberg (1972) showed that teaching moral dilemmas resulted in progress to one higher stage of moral reasoning in a majority of the experimental group. In the 1 year follow-up studies, subjects remained at the posttest level. Similar studies yielded the same results (Hickey, 1972).

Kohlberg's teaching methods attempt to assist the individual in moving to a higher level from a lower level. Adolescence is a time when almost all persons can learn to function at a high level in any of the theoretical sequences of cognitive, moral, ego, or interpersonal

growth. Growth or stagnation depends on the general education experience of the individual (Atkins, 1972).

Overall, it seems that children lagging behind in critical transition times never fully recover the loss and are unable to attain the highest levels of adulthood (Kohlberg & Turiel, 1971). Preconventional children who do not move to conventional stages by 15 years of age seem to remain preconventional. Conventional adolescents who do not develop principled stages by 19 years of age do not usually develop in the next 6 years (Gilligan, 1980).

It is further postulated that a specific issue may be a point of entry into each stage. This point of entry then spreads to other issues and generalizes to all issues. The following entry points were proposed:

Stage 2 - - - - - property and economy (dyadic)

Stage 3 - - - - - family affiliative system

Stage 4 - - - - - political or governance rule

Stage 5 - - - - - civil rights, social justice, and life

Stage 6 - - - - - Unknown (Gibbs, Kohlberg, Colby, Speicher-Dubin, 1976).

Erikson (cited in Archambault, 1964) summarized the developmental stages as follows:

> Between the development in childhood of man's moral proclivity and that of his ethical powers in adulthood, adolescence intervenes when he perceives the universal good in ideological terms. The joint development of cognitive and emotional powers enables the individual to realize the potentialities of a stage. Then youth becomes ready to envisage the more universal principles of a highest human good. The adolescent learns to grasp the flux of time, anticipate the future, to perceive abstract ideas and to assert to ideals, to take in short an ideological position for which the younger child is cognitively not prepared. In adolescence, then, an ethical view is approximated . . . . In adolescence an ethical view is approximated, but, it remains susceptible to an alteration of impulsive judgment and odd rationalization. (pp. 224-225)

Teaching with Kohlberg's moral dilemmas creates a sense of dissatisfaction in the adolescent's concept of good and bad. Further engaging the adolescent in discussion in an open and trusting atmosphere with peers allows the adolescent to see different interpretations for situations (Higgins, 1980). If the child is challenged to perceive contradictions in his or her own thinking, he or she will try to generate new and better solutions to moral problems (Turiel, 1969).

Discussion also attempts to promote conflicts which invite role playing (Kohlberg & Turiel, 1971). Conflicts should be contextually relevant (Higgins, 1980). Such conflicts when used in all subjects can stimulate moral development (Atkins, 1972; Dowell, 1971; Greenspan, 1974;

Grimes, 1974; Kohlberg, 1980b; Paolitto, 1975; Sprinthall & Sprinthall, 1977; Sullivan, 1975). Discussion should be attempted at one or two levels above the level of the adolescent's present level of function. Focus is on the reasoning behind the solutions offered by students and not on the content of moral choices. Kohlberg suggests that under these conditions adolescents see aspects not seen before. Thus, the adolescent can incorporate the new information into a progressively higher level of reasoning (Kohlberg, 1970a).

Kohlberg presents a number of dilemmas to accomplish such teaching, along with lesson plans (Gailbraith & Jones, 1976). Other materials for moral discussion range from filmstrips for first and second grades to manuals for use in high school social studies classes, to undergraduate courses on moral and political choices. All resources focus on moral judgment, which is a necessary condition for moral action (Kohlberg, 1973; Blatt, Colby, & Speicher, 1974).

Action as a Reflection of Moral Development

Moral action has been studied extensively by moral reasoning or judgment researchers. Researchers have attempted to define action and pinpoint those factors

affecting action, as there appears to be no concrete link between verbal responses and action (Haan, 1978; Hartshorne & May, 1928; Muuss, 1976; Wonderly & Kupfersmid, 1980).

Moral action depends on the person and the context. The person must understand the higher stage levels to be able to act upon them (Haan, Smith, & Block, 1968; Kohlberg, 1969; Kohlberg & Turiel, 1971, 1973). The person also acts within the context of the situation (Brown & Herrnstein, 1975; Gibbs, Kohlberg et al., 1976) and social system. Social systems involve rules or guides to conduct or action. Social systems also involve roles; a subset of rules applied to the person. Before making a decision, the person must: (a) select and apply the moral rule, (b) test the rule and moral obligation and right, and (c) test the right or obligation and higher rules or principles (Kurtines, Note 1). After making the decision the person's action depends on ego strength (Kohlberg, 1964), moral sensitivity to dilemmas (Gilligan, 1977), and personal regulation of action. Personal regulation of action may take one of three courses. The person may use self-manipulation or strategies of bribes and rewards set by the agent in a self-administered program of desire modification. The

person may use attention-selecting actions to strategically divert, concentrate, or reshape ordering processes of attention so that first order desires are directed to objects of the person's attention. A third action is reason giving or internalized speech action. The two modes are: (a) aertaic-virtue judgments (ideals), and (b) deontological-duty oriented judgments (Wren, Note 2). Such forces act under the conscious (conscious-reflective) and the operative (unreflective) control. Thus, verbalization and action are not always linked (Kuhmerker, Methowski, & Erikson, 1980; Piaget, 1932).

Studies were conducted in which children were asked to describe a fair way to distribute candy bars. The children did so, but when asked to actually distribute the bars, action differed from verbal responses (Damon, 1977). Bystanders in emergency situations were surveyed to determine why they did not act to assist victims. Action occured because of confusion, inability to define and appraise the situation and determine a personal action, and not because of apathy (Kohlberg, 1980b). Krebs and Rosenwald (in press) experimented with students who were asked to complete and return a questionnaire. The female experimenter paid subjects in advance to fill out a questionnaire and mail it back to her in a

self-addressed, stamped envelope she provided. She told the participants that unless she received the questionnaires in the mail in 1 week, she would fail her course. Kohlberg's stages were determined for each subject. Results were:

Stage 1 or 6 - - - - - neither stage existed in sample

Stage 2 and 3 - - - - - 30% returned on time

Stage 4 - - - - - - - - 70% returned on time

Stage 5 - - - - - - - - 100% returned on time.

The world cannot be divided into "good" or "bad" people. Studies of cheating behavior that were carried out on children showed a majority cheated at some point (Hartshorne & May, 1928; Lehrer, 1967). Persons respond to composite moral reasoning, moral action, and institutionalized rules as a whole in relation to their moral stage (Kurtines, Note 1). At conventional stages, choices are made by reference to conventional rules, stereotypes, and sentiments. When ambiguities or gaps in rules exist, decisions are based on benevolence and justice (Kohlberg, 1971a). Aristotle concluded:

> virtue is of two kinds, intellectual and moral. While intellectual virtue owes its birth and growth to teaching, moral virtue comes about as a result of habit. The moral virtues we get by first exercising them; we become just by doing just acts, temperate by doing temperate

> acts, brave by doing brave acts. (Aristotle, cited in Kohlberg, 1971a, pp. 74-75)

Action has been described as a monotonic or one track relationship with moral judgment which increases with stage action. Moral structures interpret morally relevant features of a situation and influence action through two judgment types. Deontic, should or right, judgments are classical types of judgments. A judgment of responsibility, or a judgment to commit or follow through, is a practical judgment. Moral action is right in the sense that it is consistent with the person's deontic decision and is carried through on a "B" level, or a level which intuits higher principles (Candee & Kohlberg, 1981).

Comparisons of deontic judgment versus responsibility judgments have been carried out to test the effectiveness of Kohlberg's hypothetical dilemmas. Standard dilemmas using prescriptive and descriptive reasoning were compared to real life dilemmas using prescriptive and descriptive reasoning. Sixty children in the 7th and 12th grades were rated in four categories on three standard and three real life dilemmas. Deontic choices rated lower than responsibility judgments in using dilemmas. Deontic judgments were based only on what one should (prescriptive) do. Judgments of responsibility

were based on what one would do (descriptive) (Lemming, 1973, 1976). In conclusion, practical judgments were less effectively measured by standard dilemmas than theoretical judgments. However, deontic judgments have been correlated with and predictive of moral action in some naturalistic and experimental situations (Higgins, Power, & Kohlberg, Note 3).

Milgram's classic study illustrates a discrepancy in should-would decisions as related to moral stage. Subjects were ordered by the experimenter to give a large electrical shock to a stooge victim. Results indicated that as subjects went from lower to higher stages, they refused to shock victims (Kohlberg, 1970b).

A 1964 Free Speech Movement of 200 students was conducted in California. In the study Berkeley students were interviewed after a free speech demonstration to discover the relationship of "sitting-in" and moral stage. As stage increased, action was more consistent with verbalization. In other words, students who said they believed in "sitting-in" actually "sat-in." In the stage 3 group, 36% thought "sitting-in" was right. In stage 3 and 4, 50% said "sitting-in" was the right thing to do. In the stage 4 group, 62% said "sitting-in" was

right. In stage 4 and 5, 83% thought "sitting-in" was right (Haan et al., 1968).

One study noted a distinction in the type of reasoning used by the adolescent (Haan, 1978). The adolescent used more commonly interpersonal morality than formal morality in action situations. Interpersonal processes were contextually responsive to the dilemma at hand and to the personal needs and characteristics of self and others. Formal and abstract reasoning predicted only verbal responses (Haan, 1978). The adolescent, therefore, has developed the abstract, formal level of reasoning in many cases (Mahler, 1972). Mahler (1972) quoted Piaget as saying that the adolescent represents:

> the birth of a man as a moral being. The adolescent discovers the possibility and necessity of choice, so he becomes aware of passing beyond the impulses and vaguely conscious of interests determined by action in the past and turns to a value system consciously evolved and freely chosen. He passes from heteronomy to autonomy, obedience to self-determination, self-awareness to awareness of others, duty to liberty conceived as an understood necessity, from imitation of models to projection of ideals, from education to self-education. (Piaget, 1957, p. 291)

Mahler's study indicated that as the adolescent increased in age, the development of an ideal and acting on the ideal became more stable. Mahler concluded that as development of reasoning, based on an ideal, passes

through stages of: self-knowledge, interest in knowledge of others, and correlating all knowledge,

> a form of education of choice must be devised which will enable the adolescent to choose his/her values and modes of behavior for himself. (Mahler, 1972, p. 300)

It has been noted that there are possible defects in teaching "good behavior." Definitions of good behavior may be relative to standards and biases of the teacher. A teacher would thus be required to initially understand what action is good or bad from the child's viewpoint (Kohlberg & Turiel, 1971).

Another difficulty in advancing the individual from preconventional to conventional thinking and above is a consideration of reality and real life situations. Conventional thinking and action may place the individual in opposition to society, and society has been known to execute postconventional thinkers such as Christ, Abraham Lincoln, and Martin Luther King.

Therefore, should people be encouraged to higher levels if they cannot live in a protected circumstance (Brown & Herrnstein, 1975)? Rest suggests a solution of two types of teaching: (a) the development of the moral philosopher, and (b) shaping action as noncoercively as possible to equip the individual with

socially useful skills and routines (Kuhmerker et al., 1980).

Analysis of the Stages of Moral Reasoning

Some questions have been raised as to the reliability of Kohlberg's scale of moral reasoning and moral behavior (Kurtines & Grief, 1974; Rest, Casper, Coder, & Coder, 1973; Turiel, 1974; Wonderly & Kupfersmid, 1980). It is said that Kohlberg's procedures introduce subjectivity and bias due to the nature of the dilemmas and scoring (Kurtines & Grief, 1974). Another concern voiced is that although research repeatedly confirms the preconventional stages, postconventional stages have not been reliably and validly tested (Gibbs, 1977; Murphy & Gilligan, 1977; Simpson, 1974; Sullivan, 1977). Behind the concern is the fact that regression versus step progression has been noted in studies (Kohlberg & Kramer, 1969).

In more recent studies, Kohlberg has revised the scale for measuring moral judgment in hopes of providing a more reliable and valid instrument. The new scale takes into account substages of the original six levels and recognizes that stage 6 is an "ideal" stage which has not been proven to exist. The new scale considers

the level of sociomoral perspective and perspective taking underlying moral stages. Sociomoral perspectives are the characteristic point of view from which the individual forms moral judgments. Perspective-taking is considered intrinsically moral rather than logical or social (Colby, Kohlberg, Gibbs, & Lieberman, 1981). Substage A refers to orientation to external considerations or to actual or literal interpretations of role, duties or rules; it is unilaterally related to particular rules and not generalized or universal in orientation. Stage B has the same sociomoral perspective but its focus is on fairness not rules or roles. There is a developed reversibility and universality and deeper comprehension of the "spirit" not the letter of the law (rules and roles). It consolidates and equilibrates Substage A (Colby & Kohlberg, 1981).

The resulting scale is, therefore, more valid than the old scale in structure and content, more objective and reliable in scoring by specifying clear and concrete stage criteria, and defines developmental sequences of specific moral concepts within each stage as well as sequences of global or general stage structures (Colby & Kohlberg, 1981).

As suggested, Kohlberg's testing methods have been challenged in several instances. Recently, Kohlberg was criticized for changing to a new scoring system. Such a system decreases comparability of studies done at different times, but makes the tool more sensitive than the old tool (Brown & Herrnstein, 1975).

CHAPTER 3

METHODOLOGY

This chapter includes a description of the methodology of the present study. It is divided into six major areas: design, site, teacher participants, subjects, instruments, and data. The divisions define criteria for: (a) selection of site, (b) participants, (c) subjects, and (d) instruments.

Design

Nature of the Study

The present study used a descriptive design to answer the stated research questions. The data consisted of the observations made by two teachers during the discussion of health related dilemmas. The discussions took place during a 6-weeks period from September 13 to October 30, 1982. The two teachers from the two Dallas area schools recorded data (observations) on checklists provided by the researcher. Written responses to the Health Belief Scale were completed on the first day of the study period and again on the last day of the study period, and the student responses were tallied by the teachers (Appendix A).

The teachers selected particular dilemmas which they presented in one of their regular health education classes. By giving the teachers a number of dilemmas from which to choose, they were able to select those dilemmas most relevant to the topic of discussion.

The dilemma discussions focused on the health topics of disease, human development, sex roles, values clarification, and death and dying. Both teachers used four dilemmas, and each dilemma was discussed for 20-30 minutes. The dilemmas chosen were: Heinz's dilemma, the Leukemia dilemma, the Abortion dilemma, Donovan's Disco, Sharon's dilemma, and a mini dilemma (Appendix B).

The dilemmas were presented to the entire class, then students were divided into small groups for discussion of the presentations. The teacher focused attention on only one small group in each class to accurately detail observations of the student reponses. The teachers used Kohlberg's critiera for development of moral reasoning to assess the student's stage of reasoning.

A minimum of four observations was made of each child in both of the study groups. One teacher observed students during a 6-weeks period, and the second teacher observed students during a 3-weeks double class period.

The researcher visited one of the classes during the study period and made observations to verify teacher use of the dilemmas and checklists.

Site

Criteria For Site Selection

The following criteria were used to determine the schools with an appropriate setting:

1. The schools must have health education classes taught by a professional health educator.

2. The schools must be in the Dallas Independent School District and include students in grades 9 to 12.

3. The schools must be located in close proximity to the researcher.

Site Description

Two Dallas area schools were chosen which met the above criteria. At the schools' request, the specific schools are not named. One of the schools was a liberal arts school, and the other school was a health careers school. Both of the schools had a predominately black student population, were located in downtown and East Dallas, and had a combined population of 1,213 students.

Teacher Participants

Criteria For Selection of Teacher Participants

The following criteria were used in the selection of teachers as participants in the study:

1. Teachers must be professional health educators with at least half of their classes being health education classes.

2. Teachers must be willing to participate in the study as defined in the design for the stated period of time.

3. Teachers must be available to receive background information on Kohlberg's methods in a session with the researcher and through reading Gailbraith & Jones' book, Moral Reasoning.

Teacher Description

Teachers who were selected for the study included one Ph.D. in Health Education and one Bachelor of Arts in Physical Education and Health. Teachers were chosen after discussion with the Instructional Specialist of Health Education for the Dallas area schools. Fifty percent of each teacher's load was in health education, and both of the teachers stated their desire to participate in the study. The teachers indicated they had been

exposed to Kohlberg's methods, i.e., training sessions which focused on Kohlberg's theory and methods. Each teacher also attended a session with the researcher. The teachers had already reviewed the book Moral Reasoning and were able to discuss Kohlberg's procedures. Examples of dilemmas were discussed and all instructions and explanatory notes were explained in detail. The teachers were encouraged to ask questions pertaining to the information covered in the session.

Subjects

Criteria For Selection of Subjects

The following critiera were used in subject selection:

1. Students must be in health education classes.
2. Students must be chosen with no regard to sex ratio.
3. Students must be in the Dallas area schools.
4. Students must be in grades 9 to 12.

Description of Subjects

The students chosen were in Health Education classes in Dallas area schools in grades 9 to 12. The teachers randomly selected one group of students in each class during the first discussion period. This same small

group was then followed throughout the remainder of the study period. The total number of students chosen by the two teachers was 36.

Instruments

Criteria For the Selection of Instruments

The following critiera were used in the selection of the instruments:

1. an easily understood instrument.
2. an easily accessible instrument.
3. an instrument that could be assessed with relative ease.
4. an instrument that defined health beliefs in basic terms.
5. an instrument that defined nonverbal responses.

Instrument Selection and Description

The instruments chosen were the Health Belief Scale, modified by the researcher, Teacher Perception of Student on Kohlberg's Scale, and the SOLER Scale. All instruments were supplied to the teachers in handout form before the study began. Teachers stated their understanding of the instruments in the preliminary session with the researcher. All instruments were limited in reliability

and validity by the subjective nature of data collection and analysis. There was no stated reliability and validity for the instruments used in the study.

The Health Belief Scale was modified from Hettler's continuum of high-level wellness to premature death. Signs and symptoms of decreased wellness are shown on the end of the continuum toward premature death. Education, awareness, attitude clarification, and self actualization are indications of total wellness (Appendix A). The Health Belief Scale, modified by the researcher, met the stated critiera. The modified scale emphasizes awareness and self responsibility for total wellness and was used as a pre-assessment and post-assessment tool.

The students were asked to indicate their opinion of health, as defined by the researcher's tool. The students read the Health Belief question from the blackboard, wrote their answers, and returned them to the teachers. There were three possible answers: "A", "B", or "C". An "A" indicated the belief that health is a personal responsibility, while "B" indicated the belief that the student would assume some responsibility for their health, and "C" indicated a lack of personal responsibility for health.

The SOLER Scale, which defines nonverbal responses, was chosen to meet the stated criteria. The SOLER Scale indicates five things an individual may do with their bodies to validate or negate verbal responses. The letters SOLER mean the following: An "S" refers to a posture of involvement facing the other person or group members squarely. An "O" refers to an open posture or not crossing extremities. Crossing extremities indicates a posture of lessened involvement. The "L" is leaning toward the group or an individual, "E" refers to maintaining eye contact, and "R" refers to being relaxed while attending to the group. The teacher was asked to observe these responses in the students and record the observations on the sheet provided in the teachers packet.

Data

Preliminary Procedures

The following procedures were carried out in preparation for data collection:

1. A pilot study was conducted in six Dallas area schools using one of the same teachers as in the present study. However, the classes and students in the present study were not a part of the pilot study. The teachers were instructed to have students respond in writing to

the Health Belief Scale at the beginning and the end of the study period. Students were observed during dilemma discussion to determine the level (Kohlberg) of reasoning.

At the end of each session, teachers completed summaries of the observations. At the end of the study period, a final summary of results was completed by the teachers.

The teachers concluded from the pilot study that the students were in the preconventional and conventional stages. No postconventional stages were recorded. More than one-half of the students remained at the same stage on the Health Belief Scale at the end of the 6-weeks pilot study.

The researcher learned from the pilot study that teachers were able to determine and record levels (Kohlberg) of reasoning on the provided checklists. However, the teachers in the pilot study did not like or did not respond adequately to the essay type questions required by the researcher. Therefore this information was not requested for the present study. Only the checklists and short answers were included as data.

It was noted also that the teachers needed more explicit directions in order to provide the needed data (observations). Prior to the pilot study the teachers

had been given instructions for data collection. Additional information was given to the teachers preceeding the present study to clarify teacher's questions concerning the interpretation of levels (Kohlberg's) and other aspects of the study.

2. The book, Moral Reasoning, by Gailbraith and Jones, was located in the Learning Resource Center of the school district used in the study. Two copies were checked out by the researcher for the teacher participants.

3. The Instructional Specialist for Health Education for the schools was contacted, as were the teachers named by the specialist. Teachers were informed of the nature of the study and asked if they would participate in the study.

4. The two teachers who consented to the study were given the Moral Reasoning book for review.

5. Folders including an introductory letter, moral dilemmas, the Health Belief Scale, notebook paper, an instruction sheet, the SOLER Scale, and explanatory notes were prepared for the teachers (Appendix D).

6. Both teachers met with the researcher to discuss the study and its implementation. Information on

Kohlberg's methods was discussed, and the packets were distributed.

7. The researcher's telephone number was given to each teacher, and they were instructed to contact the researcher if any questions arose concerning the implementation of the study.

Data Collection Procedures

Data were collected by the individual teachers and given to the researcher at the end of the study period. The teachers recorded observations each week and drew conclusions at the end of the study period. Data included the teacher observations recorded on the checklists and teacher summaries (Appendix E). Interpretation of the student level of functioning was based on Kohlberg's scale. Student beliefs about health and their nonverbal responses were recorded on the Health Belief Scale and the SOLER Scale, respectively.

Treatment of Data

The analyses of the data collected were used to answer the research questions posed in the study. The data were subjective in nature, as previously noted. The first question was answered by comparing the level of reasoning of the student and the health belief of the

student. The number of students in each of Kohlberg's levels was tallied. The percentage of students at stage "A", "B", or "C" on the Health Belief Scale was calculated. A chi-square and Post Hoc Pairwise Comparison was performed on the data to determine any relationships in health belief and reasoning level. The level of significance was $p \leq .05$.

The second question was answered by comparing the students' scores on the preassessment and post-assessment Health Belief Scale. A paired sample and McNamara's test were used to indicate changes in health beliefs, from the first to the last day of the study.

The third question was answered by tallying the data from the SOLER Scale and obtaining a mean and standard deviation. An analysis of this data indicated response rates of the students. A check mark on the SOLER Scale indicated that a student was attending to the discussions in some manner. No check marks for a student indicated no response on any of the five categories of the SOLER Scale. A response rate of 50% on the SOLER Scale for the total study group was arbitrarily chosen to indicate active involvement.

CHAPTER 4

ANALYSIS OF DATA

This study was concerned with a descriptive analysis of moral reasoning as it related to health beliefs of high school students in health education classes. Three research questions were addressed. The questions dealt with the relationship between health beliefs and moral reasoning levels, change in health beliefs, and affective responses of students during discussions of health dilemmas.

The data were analyzed in this chapter to provide answers to the research questions. The data collection was completed by two high school teachers in two schools in the Dallas, Texas area. The subjects were 36 high school students in health education classes who were randomly chosen by their teachers.

Data were collected during a 6-weeks period of time from September 13 to October 30, 1982. One teacher in a health careers school observed 16 students during a 3-weeks double class period, and a second teacher in a liberal arts school observed 20 students for a 6-weeks period.

The data consisted of: (a) pre and post responses on the Health Belief Scale (Appendix A), (b) the student reasoning levels on the Teacher Perception of Students on Kohlberg's Scale, and (c) the affective responses of the student on the SOLER Scale. These data were collected by the two teachers, and one teacher also completed an optional detailed observation form for viewing dilemma discussions (Appendix E).

The first research question was concerned with the relation of moral reasoning and expressed health beliefs of students. The pretest and posttest responses of students to the Health Belief Scale are presented in Table 1. On the posttest, 14 (38.89%) of the students marked the statement relating to Health Belief "A", which affirms the belief that health is a personal responsibility. Ten students (27.78%) marked the statement relating to Health Belief "B", which indicated that they would assume some responsibility for their health. Eleven students (30.56%) marked the statement relating to Health Belief "C", which indicated a lack of responsibility for their health.

Table 1

Pretest and Posttest Scores of Students on the Health Belief Scale

Belief	Pretest	Posttest
A	12	14
B	9	10
C	15	11

Note. One student was absent during the posttest.

The students' level of reasoning was determined by teacher observation during the dilemma discussion. The teachers perceived 27 (75%) of the 36 students to be at the preconventional level. Seven students (19.44%) were checked at the conventional level, and 2 students (5.56%) were checked at the postconventional level.

A chi-square analysis was performed on the data to compare the level of reasoning to the health beliefs. Table 2 shows the results of the comparisons. The figures in Table 2 indicated a significant difference existed between the preconventional, conventional, and postconventional levels of reasoning and the three

Table 2

Chi-Square Analysis for Reasoning Level and Health Belief

Reasoning Levels	Health Beliefs		
	A	B	C
Preconventional	13	4	9
Conventional	0	5	2
Postconventional	1	1	0

$p = .031$; $X^2 = 10.635$.

Note. One student was absent during the post-test.

categories ("A", "B", "C") of health beliefs. To account for the differences, a post hoc pairwise comparison was performed on the data. Tables 3, 4, and 5 show the results of the comparisons for all three levels.

Table 3 indicates that there was a significant difference between health beliefs "A" and "B" at the preconventional level. At the conventional level, a significant difference was also noted in the comparison of health beliefs "A" and "B". Table 4 shows the results of the post hoc comparison for the conventional level. Table 5 indicates the post hoc comparison of the

Table 3

Post Hoc Pairwise Comparisons of Reasoning Level and Health Belief

Comparison	Upper Limit	Lower Limit	Significance*
Preconventional:			
A vs. B	1.051	.006	Significant
A vs. C	.527	-.306	Not significant
B vs. C	.179	-1.015	Not significant

*$p \leq .05$.

Table 4

Post Hoc Pairwise Comparisons of Reasoning Level and Health Belief

Comparison	Upper Limit	Lower Limit	Significance*
Conventional:			
A vs. B	-.013	-.987	Significant
A vs. C	.176	-.540	Not significant
B vs. C	.923	-.286	Not significant

*$p \leq .05$.

Table 5

Post Hoc Pairwise Comparisons of Reasoning Level and Health Belief

Comparison	Upper Limit	Lower Limit	Significance*
Postconventional:			
A vs. B	.332	-.390	Not significant
A vs. C	.283	-.141	Not significant
B vs. C	.392	-.192	Not significant

*$p \leq .05$.

postconventional level, in which there were no significant differences among the three categories of Health Beliefs ("A", "B", "C").

The second research question was posed to consider if the use of moral dilemmas in the classroom changed the health beliefs of the students during the study period. Results indicated that only 5 or 14% of the students changed beliefs. This was not significant, but indicated a tendency for change to occur. Table 6 shows the change in student response from the pretest to the posttest on the Health Belief Scale. Two students moved from Health Belief "B" to belief "A" (a move toward more responsibility for their health). Also, three students moved from Health Belief "C" to belief "B" (a move toward more responsibility for their health).

The third research question dealt with the affective response rate of students, as indicated on the SOLER Scale, during dilemma discussion. Student scores on the SOLER Scale were tallied and a mean and standard deviation were obtained. A total of 381 affective responses was recorded (Appendix F). The mean response rate for the total group was 10.58, and the standard deviation was

Table 6

Change in Student Response from Pretest to Posttest on the Health Belief Scale*

Response--Posttest	Response of Pretest		
	A	B	C
A	12	2	0
B	0	7	3
C	0	0	11

$\underline{X}^2 = 3.2$.

*Note. The significance of change according to McNamara's formula was: $.05 \leq \underline{p} \leq .10$.

4.36. On the 95% confidence index, the range of responses for all students was 45.6% to 60.3%. This indicated that students became actively involved in the dilemma discussion.

To describe the difference in response rate, the five categories of responses on the SOLER Scale were tallied separately for the total group. The most frequently observed response, which one-third of the students checked, was the 'R factor' of the SOLER Scale (R refers to being relaxed while attending to the group). The next most frequently observed affective responses were

"O" (open posture), "S" (sitting facing the other persons in the group), "L" (leaning forward toward the other persons in the group), and "E" (maintaining eye contact), in that order of frequency.

One teacher completed a detailed observation form in addition to the previously discussed data. This self-rating form scored the discussions of the dilemmas as good or excellent overall (Appendix E).

CHAPTER 5

SUMMARY, RESULTS, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The purpose of this study was to determine the usefulness of Kohlberg's moral reasoning strategy in selected aspects of health education of high school students. Specifically, the study included the consideration of three research questions. The questions dealt with the relationship between health beliefs and moral reasoning levels, change in health beliefs, and affective responses of students during discussions of health dilemmas.

Data were collected for the study by two Dallas area teachers in their health education classes. The data consisted of the expressed health beliefs of the students and the observations made by the teachers on student level of reasoning, and affective responses of the students on the SOLER Scale. The observational data were collected during dilemma discussion (as defined by Kohlberg), which addressed particular health issues.

The dilemmas were concerned with disease, human development, sex roles, values clarification, and death and dying.

The study was conducted from September 13 to October 30, 1982, using 36 students from two Dallas area high schools in the grades 9 to 12. The students attended health education classes in a health oriented high school or a liberal arts high school.

The teachers were health education professionals whose teaching assignments were at least 50% in the area of health education. Both teachers stated that they were familiar with Kohlberg's strategy. The teachers also were required to attend an orientation session which focused on Kohlberg's theory and methods.

The instruments used in the study were the Health Belief Scale, the Teacher's Perception of Student on Kohlberg's Scale, and the Soler Scale (Appendix A). The Health Belief Scale was the pre and post assessment tool, and the SOLER Scale assessed the affective responses of the students during the dilemma discussion.

Results

The following results were obtained:

The level of moral reasoning determined by teacher observation did have a significant relationship (inverse) with health beliefs of students (Research Question 1).

The use of Kohlberg's moral dilemmas in a Health Education classroom did not change the expressed health beliefs of students during the study period (Research Question 2).

Students did respond to the use of moral dilemmas, as observed by the Soler Scale (Research Question 3).

Discussion

The present study reflected the responses of 36 students on a Health Belief Scale and an affective scale. The level of reasoning was also determined for the group. Even though this was a small sample, differences were found in some aspects of the study.

The data indicated a significant difference in some of the reasoning levels and health beliefs. However, those at the preconventional level marked Health Belief "A", while those that marked Health Belief "B" were at the conventional level of reasoning. This means that students who believed that their personal health was

their responsibility (Health Belief "A") were observed to function at the lowest level of reasoning. Those students who indicated that health was a shared responsibility and involved taking care of oneself only to avoid symptoms of illness (Health Belief "B"), were observed to function at a higher level of reasoning. This is an inverse relationship between Kohlberg's levels of reasoning and the Health Beliefs Scale.

It should be noted that one teacher evaluated two students at the postconventional level. This datum contradicts studies by Kohlberg and associates. These researchers indicated that the postconventional stage is an adult stage rarely achieved before 19 years of age (Gilligan, 1980; Kohlberg, 1972). The findings also contradict the pilot study, which indicated no postconventional levels. There is a possibility that these students were actually conventional adolescents, and perhaps more thorough preparation of teacher observers is necessary for accurate determination of reasoning levels.

The second research question concerned the comparison of the pretest-posttest health beliefs of the students. The data revealed only a 14% change during the study

period, which was not significant. This confirmed the findings of the pilot study, in which more than one-half of the students remained at the same level of belief. Even though there was no significant change in belief, the movement that was noted was in the upward (positive) direction, from Health Belief "C" (an unhealthy belief) to Health Belief "A" (positive health belief).

Research Question 3 was related to the response rate of the students on the affective scale (SOLER Scale). Results showed that of 720 possible affective responses, the students responded 381 times, or 52.9% of the time. The 52.9% response rate indicated that students were involved in dilemma discussion, and involvement is a necessary ingredient in learning decision-making skills. Kohlberg's work suggests that only those students who become involved in role-playing during dilemma discussion benefit in stage (level) progression. The student who does not become actively involved in the discussion tends to remain at their present stage (Gailbraith & Jones, 1976).

Of the total number of student responses, the most frequent response for the group on the SOLER Scale was

being "relaxed", or not displaying tension or anxiety in the group. The next most frequent response was being "open", or not crossing extremities.

Both teachers remarked that the dilemma discussions enhanced the quality of class participation. This quality of class participation was also noted by the teachers in the pilot study. The teachers in the present study stated that they would incorporate the use of dilemmas in future lesson plans.

Conclusion

An inverse relationship was found between level of reasoning and health beliefs. The response rate on the SOLER Scale, which was over 50%, indicated that students did respond affectively to dilemma discussions.

Recommendations

The following recommendations were made to assist future studies in this area of research:

1. The study should be replicated using a larger sample.

2. An individual thoroughly trained in Kohlberg's method should observe the students in the classrooms.

3. All observations should be made by one individual.

4. The study should be carried out on a homogeneous (by grade level) group of students.

APPENDIX A

Kohlberg's Scale of Moral Reasoning

Preconventional

1. Punishment and obedience orientation. Behavior occurs to avoid conflict with others or punishment.

2. Instrumental relativist orientation. Behavior is in terms of, "what do I get out of the deal."

Conventional

3. Interpersonal concordance or "good boy-nice girl." Behavior occurs to earn approval of others.

4. Law and order orientation. Behavior shows respect for the system. "Do your duty."

Postconventional

5. Social contract-legalistic orientation. Behavior reflects a realization of personal rights in light of the good of the majority. Values and opinions are relative to consensus.

6. Universal ethical principle orientation. Behavior reflects the right of the individual to decide according to conscience. Behavior reflects understanding of the universal principles of justice, equality, and respect for humans as individuals. This is an ideal stage (Gailbraith & Jones, 1976)

Kohlberg's Methodology for Using the Scale:

1. Present the dilemmas to the class as a whole.

(a) Each teacher will present 4-6 dilemmas to the class as a whole, and (b) the dilemma will be read.

2. Form students into small groups for discussion.

(a) The teachers will form students into groups after presenting; i.e., reading the dilemma.

(b) The teacher will answer any student questions before forming the students into groups.

3. Teachers are to circulate through the room and encourage discussion by asking probe questions.

(a) Teachers will at this time record observations on the suggested forms.

(b) Forms were on a single sheet of paper.

4. Bring the class together for discussion and closure.

(a) The teacher may continue to observe students.

(b) The teachers record information related to the observations.

Gailbraith & Jones, 1976

HEALTH BELIEF SCALE

*HEALTH IS. . . . . .

A . . . . . my responsibility. It is doing all I can to be the best I can be in mind, body, and spirit.

B . . . . . trying to take care of myself so I don't get sick. It is seeing a doctor when I don't feel good.

C . . . . . when the doctor says you're o.k. and when you don't have to go to the hospital to be taken care of.

Healthful _____ Not Healthful

A B C

*Modified from Hettler's Model of High Level Wellness.

Teacher Perception of Student on Kohlberg's Scale

	Preconventional	Conventional	Postconventional
Student:			
Tom			
Jane			
Alice			
Jack			

Teacher Analysis of Student Involvement

	S	O	L	E	R
Student:					
Tom					
Jane					
Alice					
Jack					

SOLER SCALE

S--refers to a posture of involvement facing the other person or group.

O--refers to an open posture or not crossing extremities.

L--refers to leaning toward the group or individual.

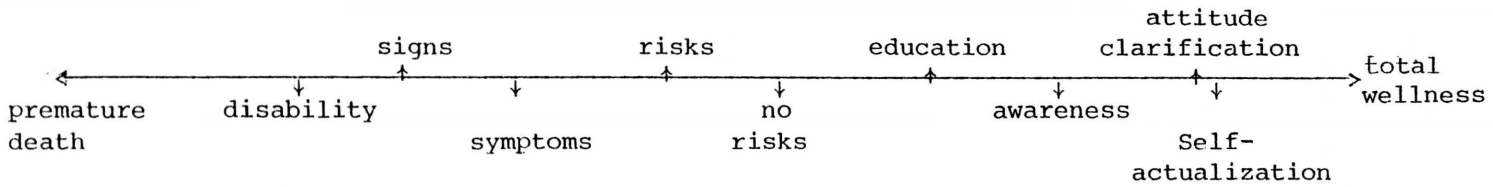
E--refers to maintaining eye contact.

R--refers to being relaxed while attending to the group.

Egan, 1977

CONTINUUM OF HIGH-LEVEL WELLNESS

TO PREMATURE DEATH



Hettler, 1980

APPENDIX B

Abortion

Helen and Carl had been seeing each other on and off for about a year. Helen was crazy about Carl, but he wasn't interested in getting married or seeing only Helen even though he liked her very much and really cared about her. Helen thought that Carl might agree to marry her if she had a child by him so she quit using birth control without telling him about it. Helen did become pregnant and when she told Carl he was very upset. He felt that neither of them was mature enough to be a parent. He didn't want to get married and felt that Helen was too unstable and childish to raise the baby by herself. Carl wanted to be a good father to any children he might eventually have but didn't want any child of his to have to grow up in a situation as bad as the present one. He wouldn't want to turn his back on this child, but he wouldn't want to be responsible for it, either.

1. Should Carl try to convince Helen to have an abortion? Why:

2. If Helen won't agree to an abortion, should Carl try to pressure her or force her to have one? Why?

3. Should her level of maturity and stability make any difference in his decision whether or not to force her? Why?

4. If she has the child, should he be required to pay child support?

5. Should Helen have an abortion? Why?

6. Is it all right for a woman to become pregnant without telling the man if she intends to raise the child without help from him? Why?

7. If the woman becomes pregnant accidentally and wants to have an abortion but the father of the baby doesn't believe in abortion, should he be able to prevent her from having the abortion? Why?

Blatt et al., 1974

Mini Dilemma

You are a married woman and have three children. Because your husband has developed a serious heart condition and is unable to work, you have taken a job to support the family. There is terrific pressure on you because of the family's current financial needs and a pile of past-due bills. Your boss offers to double your salary if you will agree to a more intimate relationship. He also implies you might lose your job unless you go along with his suggestion. It is a good, high-paying position, and you know you will have a hard time getting another like it. He is an attractive, discrete man--no one will know about the situation unless you yourself choose to disclose it. What would you do?

Lande & Slade, 1982

Donovan's Disco

Suppose you are Fred, a high-school senior doing a little shopping with your friend Peter. You are browsing through Donovan's Disco, a vast establishment with rows of tables filled with records and tapes, hard rock pounding from speakers around the room. Both of you are carrying backpacks filled with school books. Peter spots a special tape of the BeeGees--its $12.95, and he only has about $7.00 with him. When he asks you to loan him the money, you tell him you're really sorry but you only have $5.00 with you. Anyway, it's money you've been saving for an album you really crave--Crab Grass' latest LP. You stoop down to look under a counter to see if there are any other Crab Grass titles on the lower shelf. Just as you stand up, you see Peter slip the BeeGees tape into his back pack. You open your mouth, but before you can say anything Peter cuts you off: "Gotta split. I'll call you tonight."

You're still standing in amazement when the store manager approaches and asks you to step into the office. The manager tells you one of the clerks is sure he saw Peter pick up a tape, but before he could catch up with him, Peter had disappeared. The clerk says he's pretty sure you and Peter came in together. The manager asks you who Peter is and where he lives. "We'll find him anyway, but if you can help us it'll save a lot of trouble. We'll give you a free single."

You shake your head. You don't want a free single. You have the money--you just want to buy that Crab Grass album. The manager persists. If you helped Peter steal the tape, you're an accomplice. The police might want to talk to you. What about it?

OPTIONAL ENDINGS

A. You tell the manager you just happened to be standing with Peter in the store and you don't know his last name or where he lives. You might need a favor from Peter some day--it's not your business to be responsible for what Peter does.

B. You deny you know Peter, because he's your friend and you don't rat on a friend. You'd feel terrible if the guys at school heard you'd turned Peter in and gotten him in trouble.

C. You're a little nervous and don't want to be involved with the police, so you decide to tell the manager Peter's name and address. Stealing is wrong, it's against the law, and if you're going to steal you should expect to be punished.

D. You tell the manager Peter's name because you don't believe anyone has a right to steal, to take what doesn't belong to him. The world would be in a mess if everybody did things like that.

ASSESSMENT OF OPTIONS. A. Stage Two B. Stage Three C. Stage One D. Stage Four

Lande, N. & Slade, A., 1982

Sharon's Dilemma

Sharon and her best friend Jill walked into a department store to shop. As they browsed, Jill saw a blouse she really liked and told Sharon she wanted to try the blouse on. While Jill went to the dressing room, Sharon continued to shop.

Soon Jill came out of the dressing room wearing her coat. She caught Sharon's attention with her eyes and glanced down at the blouse under her coat. Without a word, Jill turned and walked out of the store.

Moments later the store security officer, salesclerk, and the store manager approached Sharon. "That's her, that's one of the girls. Check her bags," blurted the clerk. The security officer pointed to a sign over the door saying that the store reserved the right to inspect bags and packages. Sharon gave him her bag. "No blouse in here," he told the manager. "Then I know the other girl has it," the clerk said. "I saw them just as plain as anything. They were together on this." The security officer then asked the manager if he wanted to follow through on the case. "Absolutely," he insisted. "Shoplifting is getting to be a major expense in running a store like this. I can't let shoplifters off the hook and expect to run a successful business."

The security officer turned to Sharon. "What's the name of the girl you were with?" he asked. Sharon looked up at him silently. "Come on now; come clean," said the security officer. "If you don't tell us, you can be charged with the crime or with aiding the person who committed the crime."

Question: Should Sharon tell Jill's name to the security officer? Why or why not?

The Leukemia Dilemma
(As reported in the Boston Globe, March 3, 1978)

Massachusetts General Hospital (MGH) officials decided last night to fight a Brockton probate judge's ruling that two-year old Chad Green be returned to the legal custody of his parents, who plan to discontinue conventional medical treatment for his leukemia and seek unorthodox "dietary" therapy.

Plymouth County Probate Judge James Lawton ruled yesterday morning that Gerald and Diane Green of Scituate are "not unfit" to retain custody of Chad merely because they wish to abandon the conventional chemotherapy that medical experts say is the child's only hope of survival.

MGH spokesman Martin Bander said yesterday evening that hospital officials feel "morally obligated" to pursue other legal avenues to ensure Chad's continued treatment. "To stop treatment now," Bander said in a prepared statement, "would be not only to abandon Chad but also in a sense to abandon thousands of future Chads whose parents unwittingly wish to condemn their children to a painful death--children too young to decide for themselves."

The boy's father said after the Brockton hearing that he and his wife would fight further attempts by the hospital to continue chemotherapy.

The MGH's decision to pursue its legal battle makes it likely that Chad's case will become a landmark confrontation between established medical opinion and adherents of unorthodox cancer therapies as well as a test of who should decide about the treatment of a minor.

Dr. John T. Truman of the MGH, who has managed the boy's care, said yesterday, "If treatment is discontinued at this point, it can be said with 100 percent confidence that the disease will recur and he will die within a period of one to six months." With treatment, Truman said, his chances of survival are less than 50 percent but still substantial.

Diane Green said after the hearing, "For my husband and me, quality of life is more important than quantity. We would rather see Chad have a short, wonderful life as himself than to have a life extended by poisonous drugs and needles."

Truman said that the two-year-old, who is at home with his parents, has so far suffered "minimal side effects" from the anti-cancer drugs he took last fall and again this month. The Greens, who moved to Boston from Nebraska to find the best available treatment for their son, contradicted Truman, saying that the therapy has terrified the child and has been physically and emotionally exhausting.

"Have you ever seen a child turn into a mad dog?" the father said, "That's what our child does because of the poisons they have been giving him . . . . There has to be a better way than to poison the human system in order to cure it."

Last November, the Greens discontinued Chad's chemotherapy without informing the doctors, substituting a regimen of organic foods, vitamins, and distilled water. Though the boy had been in remission, he suffered a recurrence of his blood cancer in February, when the Greens admitted they had stopped the prescribed treatment.

In ruling in favor of the parents' motion to regain legal control over their son, Judge Lawton agreed with the recommendation of Chad's temporary guardian, Attorney John H. Wyman of Plymouth, who was appointed by the court to represent the boy's best interests.

Wyman told the judge that the parents' decision to forego further chemotherapy is "a rational parental decision, perhaps one that I might not personally make, but one that I can respect."

Without taking further testimony from doctors or from parents of children who have been successfully treated for leukemia, Lawton announced that "there is no way we are going to be able to establish that the parents of Chad Green are unfit. I am satisfied that they are not."

Dilemmas

This true story is used as a teaching dilemma, one of those presented in Moral Education, a classroom workbook by Thomas and Muriel Ladenburg and Peter Scharf.

Since their book was published, another chapter has been added to the story. As indicated in the Boston Globe account, the hospital officials did pursue the matter further in the courts. Supreme Court Judge Guy Volterra, in a 46-page opinion, said, "If treated, this child will run, play, and go to school. Untreated, he will lapse into pain and death. The agony of death from leukemia is far more painful to this minor than the minimal side effects and pinpricks caused by chemotherapy." Judge Volterra ordered the boy's treatment continued at Massachusetts General Hospital and said he saw no evidence of side effects. He held that the parents' fear of chemotherapy "is not supported by the evidence of the case."

Under interim court order, the Greens had been taking Chad almost daily to the hospital for chemotherapy. The ruling left Chad in his parents' custody but made the state department of public welfare his legal guardian to ensure that they complied with the Judge's order.

After Judge Volterra's decision, the Greens left their home in Massachusetts and flew Chad to a laetrile clinic in Tijuana, Mexico, to continue the treatment they felt was best for him. The Massachusetts Appeals Court upheld Judge Volterra's findings and ordered the Greens not to give their son laetrile therapy.

Would you side with Judge Lawton or with Judge Volterra? Do parents have the right to decide what is best for their child, even if it is contrary to the consensus of expert medical opinion?

ASSESSMENT OF OPTIONS

The argument that parents have the right to treat Chad as they wish because he is their child is indicative of Stage Two reasoning--people may do whatever they wish with what belongs to them.

Reasoning on the basis of whether the doctors or the parents have the best interests of the child at heart would be a Stage Three concept, dealing with interpersonal relationships and care for others.

Dilemmas (Continued)

At Stage Four, the important factors are the legal concepts--whether the child's or the parent's legal rights are being violated.

A Stage Five approach would consider the prospects for Chad's recovery under both types of treatment, weighing the harm done to him by chemotherapy against his chances for cure or remission with unorthodox methods.

Judge Lawton believed the parents had their child's best interests at heart and had the right to accept or reject the treatment proposed. This is primarily a Stage Three concept.

Judge Volterra weighed the evidence for both kinds of therapy and was convinced that Chad would die without the chemotherapy. Seeing Chad's life as the most important issue, he ordered the treatment continued. This would fit more closely with Stage Five reasoning.

Lande & Slade, 1982

HEINZ'S DILEMMA

In Europe, a widow was near death from a particularly severe form of cancer. There was one drug that might save her. A druggist in the town had recently developed it, and it was still in the experimental stages. The drug was expensive to make, but the druggist still charged ten times what it cost him. He paid $200 for the ingredients and charged $2000 for enough of the drug to cure a patient.

The widow had no children and no close family in the town. Her neighbors, Mr. and Mrs. Heinz, knew her, but she was not one of their closest friends. It soon became clear, however, that no one else would help her. The Heinzes were poor and could get together only half of the $2000 it took to buy the drug. The druggist refused to lower his price, claiming that he had worked hard for many years to invent the drug and deserved to make money from it. But without the drug, the widow seemed sure to die.

Question: Should Heinz steal the drug to save the dying woman? Why or why not?

APPENDIX C

PIAGET'S STAGES OF COGNITIVE DEVELOPMENT

Stage 1 (Birth to 2 Years) SENSORI-MOTOR Stage

During this stage, learning is based primarily on immediate experience through the five senses. The child has perceptions and movements as his only tools for learning. Lacking language, the child does not yet have the ability to represent or symbolize thinking and, thus, has no way to categorize experiences. One of the first sensori-motor abilities to develop is that of visual pursuit (i.e., the ability to perceive and hold a visual object with the eye). Later, the child develops the capacity of object permanence (i.e., the ability to understand that an object can still exist, even though it cannot be seen). Lacking vision during this period prevents the growth of mental structures.

Stage II (2 to 7 Years) PRE-OPERATIONAL or INTUITIVE Stage

During this Stage the child is no longer bound to the immediate sensory environment, and it builds upon abilities (such as object permanence) from the sensori-motor stage. The ability to store mental images and symbols (e.g., words, and language is a structure for words) increases dramatically. The mode of learning is a freely-experimenting, intuitive one that is, quite generally, unconcerned with reality. Communication occurs in collective monologues, in which children talk to themselves more than they do to each other. Use of language during this Stage is, therefore, both ego-centric and spontaneous. Although use of language is the major learning focus at this Stage, many other environmental discoveries are made by the child, who uses a generally free-wheeling, intuitive approach to the environment.

Stage III (7 to 12 years) CONCRETE, OPERATIONAL Stage

During this Stage there is a dramatic shift in the child's learning strategy from intuition to concrete thought. Reality bound thinking takes over, and the child must test out problems in order to understand them. The difference between dreams and facts can be clearly distinguished, but that between an hypothesis and a fact cannot. The child becomes overly logical and concrete, so that once its mind is made up new facts will not change it. Facts and order become absolutes during this Stage.

Stage IV (12 years and older) FORMAL OPERATIONAL Stage

At this Stage, the child enters adolescence, and the potential for developing full, formal patterns of thinking emerges. The adolescent is capable of attaining logical-rational (or abstract) strategies. Symbolic meanings, metaphors, and similies can now be understood. Implications can be drawn, and generalizations can be made.

Sprinthall & Mosher, 1978

LOEVINGER'S "MILESTONES" OF EGO DEVELOPMENT

Stage	Code:	IMPULSE CONTROL, and/or CHARACTER DEVELOPMENT
Presocial	1 - 1	
Symbiotic		
Impulsive	1 - 2	Impulsive, fear of retaliation.
Self-Protective		Fear of being caught, externalizing blame, opportunistic.
Conformist	1 - 3	Conformity to external rules, shame, guilt for breaking rules.
Conscientious	1 - 4	Self-evaluated standards, self-criticism, guilt for consequences, long-term goals, and ideals.
Autonomous	1 - 5	(In addition to Level 1 - 4, add) Coping with conflicting inner needs, toleration.
Integrated	1 - 6	(In addition to Level 1 - 5, add) Reconciling inner conflicts, renunciation of unattainable.

Sprinthall & Mosher, 1978, p. 10.

DEFINITION OF MORAL STAGES

I.
STAGE 0: PREMORAL STAGE

Neither understands rules nor judges good or bad in terms of rules and authority. Good is what is pleasant or exciting, bad is what is painful or fearful. Has no idea of obligation, should, or have to, even in terms of external authority, but is guided only by can do, and want to do.

II.
PRECONVENTIONAL LEVEL

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

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

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

III.
CONVENTIONAL LEVEL

At this level, maintaining the expectations of the individual's family, group, or nation is perceived as valuable in its own right, regardless of immediate and obvious consequences. The attitude is

not only one of conformity to personal expectations and social order, but of loyalty to it, of actively maintaining, supporting, and justifying the order and of identifying with the persons or group involved in it. At this level, there are two stages:

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

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

IV.
POST-CONVENTIONAL, AUTONOMOUS, OR PRINCIPLED LEVEL

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

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

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

Kohlberg & Turiel, 1971, p. 415.

APPENDIX D

Dear teacher:

I would like to thank you for your assistance in carrying through this study. I realize it is quite a task to teach classes without added responsibilities.

In the following pages, please find the checklists and explanatory notes you will need to conduct the observation. As we discussed, you will need to fill in the short answer sheet, the checklist, and make summaries of the sessions. At the end of the session, I will contact you to collect the materials. If in the meantime you have any questions, please contact me at 324-7191 or 270-9121.

I would also like to visit in the classroom during one discussion. If this is a possibility, please let me know within the next week. I will call you at the end of the first week to determine the progress of the study.

The study should begin September 13 and end October 30. At the end of this health unit, I will call at your school to collect the short answer sheets, summaries, and checklists. If this is an inconvenient date, please let me know the next most convenient time. I will call you on the last day of the study to set a specific time to collect the papers.

Thank you again for your time and effort in this observation. I look forward to working with you this 6-weeks.

INSTRUCTIONS

1. On the first day of the study period please present with an introduction the following question to the students. Health is . . . (note answers on the next page). Ask for written response A, B, or C from each student. This will serve as a baseline for student responses on healthful beliefs. Ask the same question on the last day of the study period. Obtain student responses from each student being observed.

2. Begin presentation of dilemmas to the students of the large group. Next break students into smaller groups for discussion. Circulate in the room to encourage discussion, but focus attention on one small group each time. A minimum of four responses should be marked on the checklists for each student in the selected small group.

3. Bring students back to the large group for closing comments.

4. At the end of each session, please make comments of your impressions about class response. At the end of the study period, please answer the questions on the following page.

5. Please find included in the folder the checklists mentioned. The first checklist has Kohlberg's levels of reasoning noted across the top of the page. The SOLER symbols are noted across the top of the second scale. Check the spaces as appropriate. The SOLER Scale is explained below the second scale for your convenience.

Teacher's name: _____

Date started: _____ Date completed: _____

Number of students in the classes taught: _____

Topic or topics discussed this study period: _____

_____

_____

Number of dilemmas presented in the study period: _____

Name of dilemmas used: _____

_____

_____

_____

_____

_____

Approximate time spent on each dilemma: _____

Did you benefit from the use of the dilemmas? _____

Did your classes benefit from the use of the dilemmas? _____

Will you use dilemmas in future lesson plans? _____

On the following pages, please give your impressions of changes in students' beliefs as observed in the classroom. The impressions should include a summary of the checklist and the personal observation you made during the study period.

Teacher Perception of Student on Kohlberg's Scale

	Preconventional	Conventional	Postconventional
Student:			
Tom			
Jane			
Alice			
Jack			

Teacher Analysis of Student Involvement

	S	O	L	E	R
Student:					
Tom					
Jane					
Alice					
Jack					

SOLER SCALE

S--refers to a posture of involvement facing the other person or group.

O--refers to an open posture or not crossing extremities.

L--refers to leaning toward the group or individual.

E--refers to maintaining eye contact.

R--refers to being relaxed while attending to the group.

Egan, 1977

HEALTH BELIEF SCALE

*HEALTH IS. . . . . .

A . . . . . my responsibility. It is doing all I can to be the best I can be in mind, body, and spirit.

B . . . . . trying to take care of myself so I don't get sick. It is seeing a doctor when I don't feel good.

C . . . . . when the doctor says you're o.k. and when you don't have to go to the hospital to be taken care of.

Healthful _____ Not Healthful

A B C

*Modified from Hettler's Model of High Level Wellness.

LEVELS AND STAGES OF MORAL DEVELOPMENT

The Preconventional Level
(Stages 1 and 2)

At this level, the power of authority figures or the physical or hedonistic consequences of actions, such as punishment, reward, or exchange of favors determine moral judgment. The level has the following stages:

Stage 1: The Punishment and Obedience Orientaton. At this stage, the physical consequences of doing something determine whether it is good or bad. People at Stage 1 think about avoiding punishment or earning rewards, and they defer to authority figures with power over them.

Stage 2: The Instrumental Relativist Orientation. At Stage 2, moral judgment leads to action that satisfies one's own needs and sometimes meets the needs of others. Stage 2 thought often involves elements of fairness, but always for pragmatic reasons rather than from a sense of justice of loyalty, it a matter of "you scratch my back and I'll scratch yours."

The Conventional Level
(Stages 3 and 4)

People at this level value maintaining the expectations of their family, group, or nation for their own sake and regardless of immediate consequences. people at the conventional level show loyalty to the social order and actively maintain, support, and justify it. This level has the following two stages

Stage 3: The interpersonal Sharing Orientation. At this stage, people equate good behavior with whatever pleases or helps others and with what others approve of. Stage 3 people often conform to stereotypical ideas of how the majority of people in their own group behave. They often judge behavior by intentions, and they earn approval by being "nice."

Stage 4: The Societal Maintenance Orientation. Stage 4 thought orients toward authority, fixed rules, and the maintenance of the social order. Right behavior consists of doing one's duty, showing respect for authority, or maintaining the given social order for its own sake.

The Principled Level
(Stages 3 and 4)

At this level, people reason according to moral principles which have validity apart from the authority of the groups to which the individuals belong. This level has the following two stages:

Stage 5: The Social Contract, Human Rights, and Welfare Orientation. People at Stage 5 tend to define right action in terms of general individual rights and standards which have been examined critically and agreed upon by the society in a document such as the Declaration of Independence, rather than unquestioningly accepting authority as in Stage 4. Stage 5 thinkers stress the legal point of view, but they emphasize the possibility of changing laws after rational consideration of the welfare of the society. Free agreement and contract bind people together where no laws apply.

Stage 6: The Universal Ethical Principle Orientation. At Stage 6, poeple define the right by the decision of their conscience guided by ethical principles such as respect for human personality, liberty compatible with the equal liberty of all others, justice, and equality. These principles appeal to logical comprehensiveness, universality, and consistency. Instead of being concrete rules, they are abstract ethical principles.

OBSERVATIONS FORM 2 FOR VIEWING DILEMMA DISCUSSIONS

Presenting the Dilemma

	Excellent			Poor	N/A
Were the protagonists identified?	4	3	2	1	
Were the facts and circumstances brought out?	4	3	2	1	
Were the alternative choices clarified?	4	3	2	1	

How much time was devoted to the Presenting the Dilemma? _____ minutes

Taking A Position

Was each student asked to take a position?	4	3	2	1
Did the teacher poll the class?	4	3	2	1
Did the teacher choose an appropriate strategy?	4	3	2	1

How much time was devoted to Taking a Position? _____ minutes

Small Group Meetings

Was the task for the groups clearly stated?	4	3	2	1
Was the task understood?	4	3	2	1
Did the students concentrate their discussion on issues?	4	3	2	1
Did students listen to each other?	4	3	2	1
Did students respond to each other?	4	3	2	1
Were all group members involved?	4	3	2	1
Did the teacher visit groups and assist with the discussion?	4	3	2	1

How much time was devoted to Small Group Meetings? _____ minutes

Large Group Discussion

Was the seating arrangement appropriate?	4	3	2	1
Was student-to-student interaction employed?	4	3	2	1
How well did students listen to each other?	4	3	2	1
Did the teacher use probe questions from the lesson plan?	4	3	2	1
Did the teacher develop good spontaneous probes?	4	3	2	1
How well did the teacher handle substantive distractors?	4	3	2	1
Did the discussion focus on issues?	4	3	2	1
Did most of the students participate?	4	3	2	1
Was the classroom atmosphere non-threatening?	4	3	2	1

How much time was devoted to the discussion? _____ minutes

Closing Exercise

Was the closing exercise appropriate?	4	3	2	1

How much time was devoted to a closing exercise? _____ minutes

Teacher Training in Values Education: A Workshop.

A Typology of Questions Useful In Moral Discussions

Good discussion leaders adapt quickly to the special demands of moral discussions. In the course of the school day, teachers often use the first three types of questions described below--perception-checking questions, interstudent-participation questions, and clarifying questions. The remaining four types of questions may not be so familiar to teachers. They are designed for Socratic discussion of reasoning which should be the focus of most moral discussions. The seven types of questions are:

1. Perception-checking questions determine whether or not other students understand a statement that an individual has made: "Mary, will you tell me in your own words what Sheila said?"

2. Interstudent-participation questions ask one student to respond to the position of another student: "Mary, what do you think of what Charles said?"

3. Clarifying questions ask students to make the meaning of their own statements clear: "What do you mean by justice?"

4. Issue-related questions focus attention on one or more moral issues: "Is it ever all right to break a law?"

5. Role-switch questions ask a student to look at a situation from the point of view of another character in the dilemma: "Jill would want her to lie, you say. Would the storeowner want her to lie?"

6. Universal-consequences questions ask a student to imagine what would happen if everyone behaved in a certain way: "What would our lives be like if everyone broke laws when it pleased them to do so?"

7. Seeking-reason questions ask for the reasoning behind the statement of a position: "Why?"

APPENDIX E

Teacher in the health oriented school:

"Students were very interested and involved in the discussion of the abortion dilemma. They did not finish the discussion on the first day. The discussion held the interest and attention of all students.

In the Leukemia dilemma, students brought some issues of the dilemma into discussion. More students were at level 2. One student now at level 3, and one at level 4.

In the Heinz dilemma students were at level 2 reasoning. Many issues were discussed.

In Donovan's Disco, student's changed moral reasoning stages. Approximately 1/3 selected a level 1 response, 1/3 selected level 2, and 1/3 selected level 4. This was an unusual discussion. More issues and argumentative discussion were evident.

Those who have moved beyond level two find it difficult to explain their positions to others so that their thinking changes."

Teacher in the liberal arts school:

"Many of the students changed very little in their concepts. I believe that if they did, it was due more to the fact that they became more relaxed in their group setting, allowing their true identities and feelings to come through. The interfacing between each other and sharing ideas was their biggest gain and mine as well. It helped in other areas of class discussion and class participation as a whole.

However, they became disenchanted toward the end of this exercise. I believe that this may be linked to the fact that they were not going to advance further in their thought development in this period of their personality growth."

OBSERVATION FORM 2 FOR VIEWING DILEMMA DISCUSSIONS

Presenting the Dilemma

	Excellent			Poor	N/A
Were the protagonists identified?	4	3	(2)	1	
Were the facts and circumstances brought out?	4	(3)	2	1	
Were the alternative choices clarified?	4	(3)	2	1	

How much time was devoted to the Presenting the Dilemma? 05 minutes

Taking A Position

Was each student asked to take a position?	(4)	3	2	1
Did the teacher poll the class?	(4)	3	2	1
Did the teacher choose an appropriate strategy?	4	3	2	1

How much time was devoted to Taking a Position? 50 minutes

Small Group Meetings

Was the task for the groups clearly stated?	(4)	3	2	1
Was the task understood?	(4)	3	2	1
Did the students concentrate their discussion on issues?	(4)	3	2	1
Did students listen to each other?	4	(3)	2	1
Did students respond to each other?	4	(3)	2	1
Were all group members involved?	4	(3)	2	1
Did the teacher visit groups and assist with the discussion?	4	(3)	2	1

How much time was devoted to Small Group Meetings? 10 minutes

Large Group Discussion

Was the seating arrangement appropriate?	4	3	(2)	1
Was student-to-student interaction employed?	(4)	3	2	1
How well did students listen to each other?	4	(3)	2	1
Did the teacher use probe questions from the lesson plan?	(4)	3	2	1
Did the teacher develop good spontaneous probes?	4	(3)	2	1
How well did the teacher handle substantive distractors? NA	4	3	2	1
Did the discussion focus on issues?	(4)	3	2	1
Did most of the students participate?	(4)	3	2	1
Was the classroom atmosphere non-threatening?	(4)	3	2	1

How much time was devoted to the discussion? 15 minutes

Closing Exercise

Was the closing exercise appropriate?	4	3	2	1

How much time was devoted to a closing exercise? 5 minutes

APPENDIX F

Mean and Standard Deviation

Observation	Score
1	7
2	10
3	7
4	7
5	9
6	4
7	5
8	7
9	9
10	9
11	5
12	8
13	8
14	7
15	7
16	9
17	4
18	8
19	6
20	5
21	14
22	17
23	15
24	13
25	16
26	16
27	15
28	13
29	13
30	16
31	19
32	14
33	16
34	14
35	16
36	13

Sample size: 36
Mean: 10.5833
Standard Deviation: 4.3581
95% C.I. on the population mean: 9.109 to 12.06 or 45.6% to 60.3%

APPENDIX G

September 1, 1982

Dear Principal,

My name is Cheri Reynolds. I am completing graduate study at Texas Woman's University. As part of my program in Health Education, I am asking teachers to observe students in small group discussion. The small groups would discuss health problems which are normally addressed in the health classroom. I would also like to come to one class and observe the discussion. From observation during a six weeks period, I am hoping to discover the success of such small group discussion in conveying health information.

I have talked with Greg Timberman and he has agreed that this would fit in well with his class program. He has also stated it may be possible for me to visit the classroom. If this is acceptable with you, I would like to pursue the study I have explained.

Thank you,

Cheri Reynolds, RN

Cheri Reynolds, R.N.

9/3/82

September 1, 1982

Dear Principal,

My name is Cheri Reynolds. I am completing graduate study at Texas Woman's University. As part of my program in Health Education, I am asking teachers to observe students in small group discussion. The small groups would discuss health problems which are normally addressed in the health classroom. I would also like to come to one class and observe the discussion. From observation during a six weeks period, I am hoping to discover the success of such small group discussion in conveying health information.

I have talked with Phyllis Simpson and she has agreed that this would fit in well with her class program. She has also stated it may be possible for me to visit the classroom. If this is acceptable with you, I would like to pursue the study I have explained.

Thank you,

Cheri Reynolds RN

Cheri Reynolds, R.N.

approved [illegible] 9-3-82

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