

A STUDY OF THE EFFECTS OF ETHICS EDUCATION ON
MORAL JUDGMENT USED IN PROBLEM SOLVING
OF ADULT BUSINESS STUDENTS

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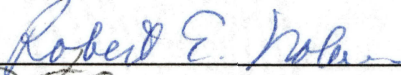
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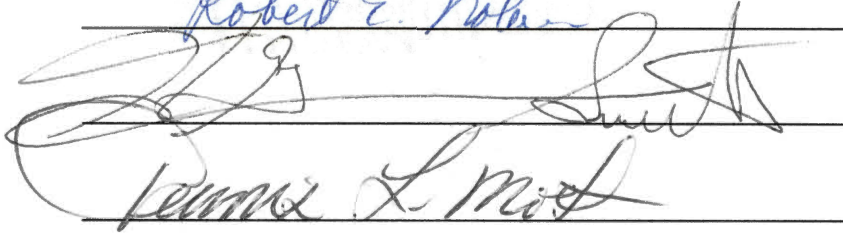
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CHAPTER I

INTRODUCTION

Ethics has once again emerged as a critical issue among American business leaders. The impact of the human rights movement and reaction to sociopolitical conflicts (i.e. Watergate and Vietnam), as well as current dialogue regarding the crisis in the Persian Gulf, have revitalized a public focus on the "American Conscience" (The Oklahoman, 1990). The question, "which course of action is the morally correct one to take?" has become an increasingly prominent focal point in decision making efforts among American business leaders (Stoner and Freeman, 1989).

Ethics involves more than business. Ethics influences and reflects the values of society as a whole (Johnson, 1989). Recently, a series of scandals involving manipulation of gasoline prices, insider trading, illegal political contributions, and questionable banking practices have received national media coverage (Berenbiem, 1987). At a time when these socially irresponsible practices continue to tarnish the image of American business, ethics in the free enterprise system is emerging as a vital public issue.

Surveys of business managers have confirmed the existence of daily unethical practices in management (Bowman, 1981; Berenbiem, 1987). Public opinion polls indicate a dramatic drop in confidence in business institutions during the 1980's in direct response to

these business practices (Berenbiem, 1987). A New York Times survey (April 29--May 1, 1986) suggests far more suspicion toward businesses as a whole. Fifty-three percent stated white-collar crime in business is committed "very often". The sample used in the New York Times study revealed that attitudes toward business honesty appear to affect the public's perception of corporate contributions to communities and effectiveness in maintaining environmental and product safety and quality.

CEOs and top managers are concerned about potential public mistrust of business. They allude to five general perceptions that contribute to this climate: (1) the equation of size with power, along with the fear that "power corrupts"; (2) concern over the potential social impact of actions taken by large institutions; (3) the belief that the activities of major companies are so complex that, despite top management's best intentions, they are impossible to control; (4) the apparent disparity of power between big corporations and their critics (Berenbiem, 1987); and (5) that levels of moral judgment are determined by early adulthood and cannot be significantly advanced (Krietner, 1983).

A corporation as a part of society develops ethical standards in response to the societal issues confronted in pursuit of business objectives. Viewed in this light, a profile of a company's ethical concerns sheds light on how to reconcile management and business priorities with public opinion. For many companies ethical principles help define corporate mission, determine obligations to various constituencies, and set guidelines for the organization's

policies and practices. Business leaders agree that ethical concepts are an important unifying force for companies confronting an intensely competitive environment and involved in diverse global business enterprises (Stoner and Freeman, 1989).

The idea of universal corporate concern was evidenced in a recent international survey of 300 CEO's and senior executives (Berenbiem, 1987). Of these 300 respondents, 76% reported that their companies had promulgated codes of ethics to raise the standard of ethical performance by demonstrating the company's full commitment to stated standards by asking employees to incorporate this corporate policy into their daily activities and decision-making. (Berenbiem, 1987.)

Communication of codes of ethics to employees is a dynamic process. It requires attention to compliance and occasional code amendments in light of corporate experience and environmental change. Among 227 companies polled with codes of ethics, 44% (101) have ethics educational programs in the forms of workshops and discussion groups (Berenbiem, 1987). Companies report that the dyadic communication between management and employees involved in these programs help to sensitize employees to ethical issues, broaden and deepen employee awareness of code directives, and underscore the commitment of the company to its ethical principles. By these means corporate ethical values are imbued in employees' decision-making (Stoner and Freeman, 1989).

Adult development theory can be applied to societal moral dilemmas and ethical issues such as those faced by business today.

Lawrence Kohlberg (1958) focused on the concept of life cycle development and the potential for adult moral progression. This potential for adult moral growth involves not only intellectual, interpersonal, and vocational competence, but also expands to moral/ethical development within a hierarchical stage structure.

Kohlberg's levels of moral judgment range from the preconventional or immature conception of morality to the more adult conventional and postconventional levels. These steps lead toward an increased morality judgment which can be correlated directly with maturity and education (Kohlberg, 1981).

Managers today are concerned about the potential for increasing moral growth in adults since, in contrast to adult development theory, it is generally believed that levels of moral judgment are determined by early adulthood (Krietner, 1983).

Statement of Problem

The problem of this study was that in business and educational organizations there are numerous short term programs in ethics being offered, yet there is no evidence regarding their effectiveness.

Purpose of Study

The purpose of this study was to investigate the impact of an ethics educational program on levels of moral judgment used in problem solving by adult business students.

Hypotheses Tested

The following hypotheses were tested:

Hypothesis One. There is no significant difference in moral judgment between the treatment and non treatment groups pretest scores as measured by the Defining Issues Test (DIT).

Hypothesis Two. There is no significant difference in growth of moral judgment between treatment and non treatment students due to an ethics educational program as measured by the Defining Issues Test (DIT) posttest scores.

Hypotheses Three. There is no significant difference in moral judgment pretest scores among age categories in the experimental group as measured by the Defining Issues Test (DIT).

Hypotheses Four. There is no significant difference in growth of moral judgment among age categories in the experimental group due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

Hypotheses Five. There is no significant difference in moral judgment pretest scores between males and females in the experimental group as measured by the Defining Issues Test (DIT).

Hypothesis Six. There is no significant difference in growth of moral judgment between males and females in the experimental group due to an ethics educational program as measured by the Defining Issues test (DIT) pre/posttest scores.

Nature of Population

The population of general interest in this study was undergraduate students in educational programs designed to prepare students for future leadership roles in business.

Significance of Study

There is a distinct lack of substantive data regarding the degree to which ethics educational programs influence employee moral decision making (Rest, 1986). Investigating this sample of business management students' degree of growth in moral judgment will add to a "new vision" in the field of human resource development pertaining to the degree to which ethics educational programs can be a substantial causal factor in the development of today's business leaders and employees moral decision-making and problem solving abilities (Rest, 1986). Furthermore, this study could contribute data to adult development literature by exploring the relationship between growth in the levels of moral judgment and ethics educational programs.

Definition of Terms

Terminology used in this study is defined as follows:

Ethics. Ethics is the study of rules governing moral conduct of the members of an organization or society (Dunn, 1983).

Business Ethics. Business ethics refers to conduct that is fair, just, and right within the world of business (Evans, 1981).

Moral. Moral refers to an act, a moral judgment, or a judgment of "ought" by the actor (Colby and Kohlberg, 1983); a type of judgment or decision-making process, not a type of behavior, emotion, or social institution (Kohlberg, 1971).

Moral Judgment. Moral judgment is a determinant of action by way of concrete definitions of rights and duties in a situation (Kohlberg, 1971); a mode of prescriptive valuing of the socially good and right (Colby and Kohlberg, 1983).

Moral Reasoning. Moral reasoning refers to the content of one's moral judgment in a given situation. Individual reason about a choice defines the structure of moral judgment (Colby and Kohlberg, 1983).

Moral Problem Solving. Moral problem solving is the course of action chosen to solve an ethical dilemma. Moral judgment and moral reasoning serve as a guide to moral choice (Colby and Kohlberg, 1983).

Ethics Educational Programs. Ethics educational programs are measures taken in order to increase growth in moral reasoning (Rest, 1983).

P Score. The P score is derived through the scoring of the defining issues test (DIT) (Rest, 1986). (Detailed scoring procedures resulting in a P score are found in Appendix F.)

Organization of Study

The report of this research problem consists of five chapters, a list of references, and the appendices. Chapter I includes the

Introduction, Problem of Study, Purpose of Study, Hypothesis Tested, Significance of Study, Definition of Terms, and Organization of Study. The review of literature which is relevant to this study is presented in Chapter II. A detailed description of the procedures used in this experiment is described in Chapter III. Chapter IV presents the results found in the study. Chapter V presents the summary, conclusions, and recommendations from this research.

CHAPTER II

REVIEW OF LITERATURE

This literature review addresses foundations for the study in adult moral development theory in relation to business ethics education. The literature includes research studies, surveys, articles, brochures, newspaper articles, and books related to adult moral judgment as related to business ethics training.

An important issue in business ethics today involves the issue of ethics education programs on employee moral judgment used in decision-making practices. Business ethics like morality addresses the rightness or wrongness of human behavior and morality in the business setting.

Material was selected for review on the basis of relevance to this study. The related literature is categorized under the following headings: Adult Moral Development Theory, Kohlberg's Theory of Moral Development, Moral Educational Programs, Ethics, and Current Studies in Business Ethics Educational Programs.

Adult Moral Development Theory

Adult moral development theory is characterized by progressive stages of life cycle development that focus on how a person cognitively responds to moral issues. It is essential that an individual accomplish the developmental tasks of an earlier stage

prior to advancing to the next stage. Although one may discontinue growth at any given stage at any age, advancement continues one step at a time (Lande and Slade, 1979). Piaget (1932, 1948) first introduced the empirical study of moral development as part of cognitive developmental theory. He observed the different logic of children's thinking and subsequently investigated their moral judgment. Piaget studied the nature of children's consciousness and practice of rules through games. He concentrated on the game of marbles and noted interactions of children from preschool to middle childhood. As a result of this study, Piaget advanced two distinct development realities in childhood thought; the moralities of constraint and cooperation. He described the morality of constraint as heteronomous, that is, a rather mystical respect for rules with an independent regard for duty. The second morality of cooperation he designated as autonomous. The autonomous stage was associated with a focus on rules which evolved through mutual agreement. Piaget theorized that a child develops a concept of justice as one attains individual autonomy.

Initially justice is confused with obedience to authority. As a child becomes more autonomous, justice is defined as equality and reciprocity. These concepts evolve from childhood cooperative play. Piaget indicated that children assume more mature logical thought and moral judgments through such democratic social relationships. Thereby the morality of cooperation is formed advocating the concept of justice as fairness.

Although Piaget's findings are applicable to childhood moral development, his contribution is important to this study because Kohlberg advanced Piaget's original research by initially investigating adolescent moral thought in the formal operations stage. These findings in turn provided the basis for Kohlberg's moral development theory.

William Perry (1968) investigated intellectual and ethical development during the early adult years. Perry particularly described how cognitive processes change through transitions from a belief that knowledge is absolute, that clearly answers questions of right and wrong to an understanding of the contextual relativity of both truth and choice. He identified nine transitions positions from what he called Dualism to Commitment in Relativism.

In a 1979 study by Gilligan and Murphy, this schema was further investigated in the study on moral understanding of men and women five years out of college. Contrary to past research, it was found that although both sexes moved from absolutes, their selection of choices differed. This investigation provided the basis for a number of generalities about moral differences between sexes. For women the absolute of care initially focuses on not hurting others. In response to a need for personal integrity, a woman recognizes a claim for quality in the concept of right. This changes her understanding of relationships and alters the definition of care. As a result, for both sexes the existence of two contexts for moral decision-making does affect judgments regarding responsibility and choice.

In the same way, during Jane Loevinger's fifth autonomous stage of ego development, moral dichotomies are relinquished and replaced by a "feeling for the complexity and multifaceted character of real people and real situations" (Loevinger, 1970). Within the context of human relationships, this autonomy regulates the female sense of responsibility by recognizing that individuals are responsible for their own destiny.

Kohlberg's Theory of Moral Development

The structural developmental approach formulated by Kohlberg (1958) is primarily derived from Piaget's major thesis (1932) that the individual is a creator of meaning. Kohlberg believed in the ability of one person to take the role of the other--that is, to perceive things from another's viewpoint--in order to describe a given stage. His approach is relational in that it examines connection between ideas in the mind of an individual. His primary interest lies in the advancement of man in search for relationships and meaning. Moral judgments refer to moral meaning in the world: rules, laws, and states of justice (Kohlberg, 1981).

Kohlberg's stages represent an increased differentiation of moral values and judgments from other types of values and judgment. For example, responses of lower stage subjects will not be moral for the same reasons that response of higher stage subjects are moral. As each stage progresses, the obligation to preserve human life becomes more categorical, more independent of the aims of the actor, or of the opinions of others (Kohlberg, 1971).

Stages refer to distinct, qualitative differences in structures (e.g. different modes of moral judgment), which serve the same basic function (e.g. moral judgment or decision) at various points in an individual's development. Therefore, a qualitatively new pattern of response, one which differs in form and in organization and is age related, is called a "stage" (Colby and Kohlberg, 1983). Stage theory claims that every individual progresses only one step at a time in order through the stage sequence resulting in problem solving at the highest level (Kohlberg, 1973, 1975).

Stages are defined by responses to a set of verbal moral dilemmas classified according to an elaborate scoring system. Kohlberg's findings (1975) indicated that 50% of an individual's thinking is always at one stage with the remainder at the next adjacent stage.

In summary, moral stages are structures of moral judgment or moral reasoning. The choice endorsed by an individual refers to the content of one's moral judgment in a given situation. Individual reasoning about the choice defines the structure of moral judgment. This reasoning centers on the following universal moral dilemmas: punishment, property, life, truth, affiliation, authority, law, contract, and conscience (Colby and Kohlberg, 1983). A moral choice involves choosing between two or more of these values as they conflict in concrete situations of choice. Thus, the stage or structure of an individual's moral judgment defines what one finds valuable in each of these moral concerns (i.e., how one defines the value) and why one believes it is valuable (reasons given for

valuing it (Kohlberg, 1975).

Since moral reasoning is cognitively related, advanced moral reasoning depends upon advanced logical reasoning. Logical reasoning is a necessary but not mandatory condition for mature moral action (Colby and Kohlberg, 1983). An individual can reason in terms of principles and yet not live up to those principles. Variables affecting moral action include the unique situation, motives, emotions, sense of will, and pressures. For example, 75% of a national opinion research survey answered that it is wrong to steal although most of the individuals would, in fact steal under certain circumstances (Kohlberg, 1981).

Kohlberg's next levels of social perspective fall between logical and moral development. In this respect they are closely related to moral stages. These levels determine how one views another's thought and feelings. Social perspective precedes or is congruent with the moral development stage.

Building upon logical reasoning and social perspective, the final stage of this horizontal sequence involves moral behavior. As previously mentioned, a high stage of moral reasoning is a prerequisite for acting in a morally mature manner. However, principled moral thought does not necessitate principle moral action.

Kohlberg conducted research in six different Eastern and Western cultures to support his cross-cultural claims. He believes all cultures and subcultures use the same basic moral concepts (i.e., love, respect, liberty, authority). Thus all individuals,

regardless of culture, pass through the same stages of moral reasoning about these concepts (Kohlberg, 1976).

Kohlberg's assertion of universal moral stages relies upon a critical theoretical construct, the distinction between structure held to be universal and to abide by laws of development, and content, hold to the specific patterns of experience and to follow the laws of learning (Kohlberg, 1969). Content, or what a person believes, depends upon culturally variable experiences, whereas structure refers to how an individual thinks about the content of one's beliefs. This latter reasoning alone is universal.

An individual's susceptibility to "content influences" varies with developmental stage (Gibbs, 1976). The greatest susceptibility occurs at the conventional levels when an individual relies upon the group for a moral definition of that particular situation. Kohlberg and Turiel (1971) reported that most people function at the conventional levels, or are situationally influenced. Only 25% of American adults tend to achieve postconventional or principled levels (Kohlberg and Turiel, 1971).

Notion of Morality

The definition of "moral" according to Kohlberg is a type of judgment or a type of decision-making process, not a type of behavior, emotion, or social institution" (Kohlberg, 1971). He concurs with most deontological moral philosophers since Kant in defining morality in terms of the formal character of a moral judgment, method, or point of view rather than in terms of content.

According to deontological reasoning, moral judgments are categorical imperatives. The maxim of respect for human personality and the maxim of universalization comprise Kant's categorical imperatives. The first states, "Act always toward the other as an end, not as a means;" and the second maxim states "Choose only as you would be willing to have everyone choose in your situation" (Kohlberg, 1976).

Kohlberg defines moral principles as a individual's general guide to choice instead of a rule of action. One may decide upon a given course of action and never implement the choics. Therefore, principles become considerations in moral choice, or reasons justifying moral action (Kohlberg, 1971). In his detailed coding of categories of moral judgment, the following categories of "Principles " are included: prudence; welfare of others; respect for authority, society, or person; and justice. All of the principles exist in one form or another from stage 1 through stage 6.

Stages of Moral Development

Kohlberg's cognitive developmental theory conceptualizes moral judgment or moral reasoning (See Appendix A) . As a result of Kohlberg's dissertation study of 50 boys (ages 1 to 16 years) and his subsequent research, he differentiated stages of moral development based upon his subjects' responses to hypothetical moral dilemmas (Kohlberg, 1958).

Kohlberg's research generated three general levels of moral thought. Each level consists of two stages of development, with a total of six stages. The preconventional level includes stages 1 and 2; the conventional level stages 3 and 4; and the postconventional or principled level stages 5 and 6 (Kohlberg, 1958). The preconventional level is used by most children under the ages of ten years and some adolescents and adults. At this point, the individual does not possess an understanding of conventional rules and authority.

"Conventional" means conforming to and upholding the rules and expectations of social conventions and authority, simply because they belong to the society in which one lives (Kohlberg, 1976). This level is the modal point for most adolescents and adults. Here the individual upholds rules and expectations because of their function in society.

The postconventional or principled level is reached by a minority of adults, usually after age 20 or 25. These individuals not only understand society's rules but go beyond them. They accept society's rules if based on general moral principles of their own. At this level individuals believe these principles ought to underlie or guide society's rules. If society's rules come in conflict with these principles, an individual judges by principle. "Principled" thinking refers to stages 5 and 6 reasoning (Kohlberg, 1976, 1982).

Each of these three levels of moral judgment has a different view of what is right and reasons for upholding what is right. Differences in social perspective in the relationship between

oneself and society are relative to these differences in moral judgment levels. For example, persons at the preconventional levels uphold rules and social expectations external to themselves. At the conventional level, persons identify themselves with these rules and expectations. Finally, principled persons differentiate a rational moral self from rules and expectations of theirs. These individuals define values in terms of self-chosen or internal principles (Colby and Kohlberg, 1983).

At the preconventional level an individual focuses on ones own interest or the interest of loved ones. At the modal or conventional level the self associates with society or the groups and its rules. The individual point of view at the principled levels can be "universalized" to all individuals. This is the perspective a rational moral person could assume. An individual's commitment to basic moral principles is prior to or necessary for taking society's perspective or accepting society's laws and values (Colby and Kohlberg, 1983). This is the perspective of an individual who has made the moral commitment or holds the standards upon which a good or just society must be based.

There are two stages within each of the three levels of moral judgment. During stage 1 reasoning, the social perspective centers on physical consequences to the self. Right and wrong are hardly distinguished from physical consequences. Stage 2 is described as the "instrumental exchange" stage of moral development. At this level, the individual becomes more aware of reciprocal points of view of others and gains a pragmatic understanding of another's

interest.

The conventional levels comprises stages 3 and 4. Being a "good role-taker" signifies the hallmark of stage 3 (e.g., being trustworthy and/or grateful). At this stage the member of society relies upon a dyadic relationship--son and father, for example. In contrast, the social system perspective classically underlies stage 4. Here the concern focuses on social institutions and practices such as property and law, as well as an appreciation of their value in maintaining society.

Characteristically, a stage 5 orientation entertains the distinction between a moral view and a legal/institutional perspective. Moral rights and values assume priority of the legal institutions that protect them. In the culmination, stage 6, obligation is analogous to universal ethical principles of justice from which basic legal arrangements are devised (Colby and Kohlberg, 1983).

In a culturally universal sense Kohlberg's steps lead toward an increased morality of value judgment. Kohlberg (1958) makes the following claims with regard to the issue of universality and the existence of universal moral ideals:

1. Individuals may often make different decisions and still have the same moral values.

2. Values begin within an individual as one perceives one's own social experience.

3. The same basic moral values and the same steps toward moral maturity exist in every culture and subculture (i.e.

the consideration of the welfare of others).

4. Basic values differ when people are at different levels of maturity in thinking about fundamental moral and social issues.

5. Exposure to education stimulates maturity in one's value processing (Kohlberg, 1981).

Meta and secondary analysis conducted by Thoma, (1984) on sex differences indicate that gender differences on moral judgment scores actually favor females. Females score slightly higher than males.

One of the strongest and most consistent correlates of development in moral judgment other than education has been proven to be chronological maturity. Meta analysis results revealed that over 38% of the variance in DIT scores can be accounted for by age and/or educational level. Thoma (1984) compared the magnitude of effects due to age with gender. His findings estimated that age/education is over 250 times more powerful than gender in accounting for variance in moral judgment scores.

Moral Educational Programs

Over the past decade, considerable interest and investment have been devoted to devising moral education programs in the expectation that development in moral judgment would be facilitated. Educators influenced by cognitive developmental theories have attempted to facilitate the natural progression of moral judgment development by providing various types of enriched and stimulating educational experiences. Previous reviews of moral educational programs

(Lapsley, Sison, and Enright, 1976; Leming, 1981; Lockwood, 1978; Lawrence, 1976; Rest 1979) have suggested that some moral educational programs (roughly half of those reviewed) have been effective in promoting moral judgment development, particularly if the program lasts longer than a few weeks and if the intervention involves the participant in discussion of controversial moral dilemmas. This active practice in moral problem-solving buttressed by interactive exchanges with peers seems to speed up the natural development of moral judgment. In the few studies with delayed follow-up testing, the gains seem to be maintained.

Analysis of Intervention Studies

Several tests have been devised to measure levels of moral judgment. Among the most prominent of these is Kohlberg's Moral Judgment Interview Test (Colby and Kohlberg, 1983) which consists of three standard and hypothetical moral dilemmas (life versus law, punishment versus conscience, and contract versus authority) given in interview context. Embedded in these dilemmas are basic conflicts in opposition to one another these basic conflicts between nine normative issues are considered central to Kohlberg's classification system. These issues and norms include life, property, truth, affiliation, authority, law, contract, conscience, and punishment. Used in conjunction with this test Standard Issue Moral Scoring assigns stage scores to moral judgments based upon these hypothetical moral dilemmas.

Based on Kohlberg's Adult Stage Moral Development Theory the Defining Issues Test (DIT) is a widely applied objective test of moral judgment. The DIT's validity and reliability has been proven in over 500 studies (Rest, 1979). The range of reliability has been .70 to .80. The particular advantages of the DIT are: ease of administration, objective scoring, standardization, and minimal dependence on verbal expressiveness. The particular problems with any objective test like the DIT are the possibility of subjects' filling out the test in random fashion, the problem of misinterpreting the items or projecting subjects own thinking idiosyncratically onto stage-prototypic statements, and the problem of selecting items on the basis of irrelevant cues, such as the apparent complexity of an item or its lofty language. For each of these potential difficulties a consistency check can be utilized. The long form of the DIT is based on Kohlberg's Standard Interview Test, consists of seven short stories presenting controversial social issues. The participants are asked to read them and complete a questionnaire which measures judgment responses.

Effects of many different types and durations of intervention programs have used the DIT test. While every program is different in some ways from every other, there are some categorical similarities that can be drawn across the studies. Four major groupings seemed to capture the resemblances (Rest, 1986). These four groupings are:

1. There are programs that emphasize peer discussion of controversial moral dilemmas according to the suggestions of

Kohlberg. These labels are: "dilemma discussions" and give concentrated practice in moral problem solving, stimulated by peer interaction.

2. There are programs that emphasize personal psychological development and involve some experiential activity and intense self-reflection. Initiated by Mosher and Springhall (1970) these programs are intended to promote personality and social development in general (Rest, 1986).

3. There are programs that emphasize the academic content of humanities, social studies, literature, or contemporary issues. Emphasis is placed on learning bodies of information and the basic tenets of an academic discipline (Rest, 1986).

4. In the last group are programs where the duration was short-term, three weeks or less. These programs are characterized not by a type of activity in the intervention but by the shortness of the intervention. In previous reviews of educational studies using the DIT, short-term educational programs have not been effective regardless of the type of treatment (Rest, 1986).

Treatment effects have been shown to be the most powerful for the adult age groups (24 and older). As noted above short-term treatment effects are ineffective, however, the duration of treatments in the total set of educational studies varied from one hour to one-half year. After some minimum period, treatments of longer duration have no more effect than the medium-duration treatment of 3-12 weeks (Rest, 1986).

Contrasting Views

A number of individuals have raised issue with Kohlberg's theory. The key issues involve his claim of universality with regard to cultural and gender-related differences. Simpson (1974) was the first to significantly criticize the cultural universality of the theory by stating that significant differences existed across class and culture regarding implementation of abstract concepts like "justice" and "equality". Simpson believed that enacted meanings of a moral principle were perhaps more variable and culturally determined than expressed meanings. In expanding this thesis, Simpson suggests that women have an increased tendency to remain at the conventional moral level of functioning due to cultural conditioning. This tendency transpired in response to a strong cultural message received by women to be nice and to meet the expectations of others rather than contending with the more encompassing moral issues of justice and social equality.

Kohlberg (1973) still claimed universality for each moral stage sequence, even though sample groups not included in his original research rarely achieved higher stages of moral development (Gilligan, 1982; Holstien, 1976; Simpson, 1974). Prominent among those deficient in moral development according to Kohlberg's schema were women, whose judgment exemplified stage 3 moral reasoning. At this stage morality is conceived in terms of interpersonal relationships, and goodness is equivalent to helping and pleasing others. Kohlberg and Kramer (1969) indicated stage 3 reasoning as quite functional for mature women who remain in the home

environment. Their inference extended to the position that only if women were to enter the tradition male-dominated work environment would they progress to high stages of moral development. At this level relationships are subordinated to rules (Stage 4) and rules to universal principles (stages 5 and 6).

Gilligan (1982), a former colleague of Kohlberg's reported a gender difference in perception of morality, a difference which caused a lower moral judgment score for women when using Kohlberg's instrument. She reported on two specific studies, the college student study and the abortion study. In order to add women's experiences to adult moral development literature, Gilligan's college student study investigated identity and moral development in the early adult years. This study focused on the perception of self and morality with regard to one's experiencing moral conflict and making life choices. The sample was comprised of 25 students selected randomly from a sophomore class on moral-political choice. These students were interviewed as seniors and five years after graduation. Sixteen of the 20 students who dropped the course were women.

The abortion study evaluated the relationship between thought and moral action. Abortion represents one of the issues in which a woman is in control and has the power to choose. Twenty-nine women, ages 15 to 33, of diverse ethnic backgrounds and social class were interviewed during their first trimester of pregnancy. Some women were single and some married. However, all subjects were contemplating abortion. Both of these studies expanded the

boundaries of the usual moral judgment research design by investigating how people defined moral problems and identified perceived moral conflicts, instead of concentrating on thinking about problems presented for resolution. They concluded that gender results in different modes of thinking about morality and its effect on moral judgment.

Gilligan's 1982 study further examined the hypotheses which evolved from the two prior studies with regard to different modes of thinking about morality. This study involved 144 people, 8 men and women from each age category (6 to 60). These subjects were matched for age, intelligence, education, occupation, and social class at the nine points across the life cycle. Gilligan investigated conceptions of self and morality, experiences of moral conflict and choice and judgments of hypothetical moral dilemmas. She reported that "the morality of right is predicated on equality and centered on the understanding of fairness, while the ethic of responsibility relies on the concept of equity, the recognition of difference in need (Gilligan, 1982, p. 164). Gilligan concluded that the reappearance of selfishness and responsibility in women confirmed a different understanding of moral development from men in Kohlberg's studies. The results of the abortion study indicated a developmental sequence to the ethic of care. Initially the women concentrated on caring for the self to ensure their survival in abortion. Then a transitional phase occurred whereby this position was seen as being selfish. Care was seen as an exclusion of oneself.

Gilligan (1982) reported that women consistently demonstrated a morality of care regardless of profession. Lyons (1982) further indicated that women used characterizations of connected self. She noted that after age 27 women showed an increased consideration of right in conceptualization of moral problems while still relying upon considerations of response over rights in moral conflict resolution. These studies show that a woman's perceptions of morality concentrate on understanding responsibilities and relationships, in contrast to a man's conception of morality based on rules and fairness. This morality of responsibility differed from the morality of rights in its emphasis on connection and consideration of interpersonal relationships thereby questioning Kohlberg's universality issue. Kohlberg's rights conception of morality (stages 5 and 6) claimed an objectively fair or just resolution to moral dilemmas under which all rational persons would concur. Gilligan's responsibility conception of morality focuses on limitations of any particular resolution and described conflicts that continue to exist. This different construction of moral dilemmas by women became the critical reason for their failure within Kohlberg's system (Gilligan 1982).

In the absence of extensive longitudinal data on females, the question of whether Kohlberg's moral stage concept and measure is applicable to women's development had focused on studies of sex differences in mean stage scores reported from the use of the Standard Form Interview. Higgins (1983) reported that an equal number of studies showed no sex differences in mean stage of level

to counteract those scoring males higher than females (Holstien, 1976).

Developmentally, as explained by Gilligan (1982), a paradox exists. Women define self in the context of human relationships but judge self in terms of the ability to care. Gilligan (1982) suggested that since femininity is defined by attachment, a women's failure to separate becomes by definition a failure to develop. Piaget (1948) attributed girls with the quality of having a more pragmatic attitude toward rules. This results in a lack of "legal sense," a greater willingness to make exceptions to the rules, and a comparative ease in reconciling oneself to innovations (Gilligan, 1982). This sensitivity and caring for the feelings of others that girls develop through play, however, has little market value and can possibly impede professional success.

Kohlberg (1969) believed that lessons were most effectively learned through opportunities for role-taking that arose in the course of resolving disputes. Instead of elaborating a system of rules for resolving disputes, girls subordinated the continuation of the game to the continuation of relationships. Lever (1976) extended this concept. Boys learned independence and organizational skills necessary for coordinating the activities of large and diverse groups of people through their games whereas girls played in smaller, more intimate groups than boys. According to Lever, this fosters a more cooperative environment and a sense of empathy, as well as sensitivity toward others.

When the focus on individuation extended into adulthood maturity was equated with personal autonomy, a concern for relationships appeared as a distinct weakness in women (Miller, 1976; Stewart, 1978). Women come to know themselves through relationships with others (Gilligan, 1982). In contrast, men underwent identity formation prior to intimacy and generativity in the developmental cycle of separation and attachment. This difference in perception of self and its effect on morality forms the basis of Gilligan's claim that further research on women's experiences is necessary to give a total picture in adult developmental literature.

Factors other than gender are related to the moral judgment maturity level: education, I.Q. socioeconomic status, and work experience. Education experience is related to moral judgment maturity beyond the association of education to socioeconomic status and I.Q. No subject achieved even stage 4 moral judgment without attending college. Likewise, no subject from either social class ever achieved stage 4 or 5 reasoning without finishing college (Kohlberg, 1983). No one has yet reached stage 4 reasoning before the age of 20 or stage 4 or 5 before the age of 24.

Higgins (1983) indicated that the moral complexity of work experience was a better predictor of moral stage than mere job status. In fact, the development from stage 4 to stage 5 was stimulated by a work experience. The current correlation of moral judgment stage with job status is .78 (Higgins, 1983).

When the rules of a system or an institution conflicted with the welfare or rights of an individual within that system and the person was in a position of responsibility for solving that conflict, it became necessary for one to formulate ideas or principles that recognize just or fair claims of both to resolve the issues and act responsibly (Blasi, 1980). The higher the moral stage, the more likely an individual will make a judgment consistent with a deontic choice (should and right) and act responsibly on this judgment (Kohlberg and Candee, 1981).

Ethics

Ethics, like morality, addresses the rightness or wrongness of human behavior (Silva, 1980). Ethics is the study of standards by which people live. The four points of entry into ethical study involve values guiding human conduct, the obligations and responsibilities of agents and situations, predictable outcomes in cost and benefits and character traits and disposition (Troy and Jones, 1982). All of these underlie the promotion of human welfare and support Kohlberg's principled thinking. Ethics is just as concerned with policies, planning and organization as it is with individual behavior.

In the United States ethical issues are addressed on two levels, that of personal or internal issues and social or external issues. Personal ethics concerns the rightness and wrongness of individual behavior in interaction with other people (Evans, 1981). The second area of social ethics attends to actions of social

institutions and organizations.

Human well-being and personal dignity are fundamental ethical concepts "Ethics is conduct that is fair, just and right" (Evans, 1981, p. 132). Ethical theories comprise two broad categories, teleological or consequential (no rules) and deontological or non consequential (one or more rules).

Ethics in Business

Morality in the business world has been primarily addressed under the topic of business ethics. Business ethics involves examining what an individual feels ought to be done and how one makes such a decision within the business world. The focus on management in business ethics is relatively new. Its role evolved in response to academicians and business managers alike to meet a distinct need. A more refined, intellectually rigorous, and practical application of ethics to business was required because the traditional means of ethical governance, the market, and the law ceased to effectively guide business decision making in a large number of new and complex areas (Hayes, 1989; Troy and Jones, 1982).

The universality of ethics in business focuses on one fundamental assumption that a human being has a purpose for existing and one ought to behave accordingly in order to realize his purpose (Thiroux, 1977). This search for a purpose in life involves an individual's attempt to discover a relationship between oneself in a larger social context. This extends to daily activities within the work environment where an individual strives to believe that what

one is doing is worthwhile. An irreconcilable conflict results when a business person ceases to believe in the goodness of the firm or its product. Thus, conflict resolution is a vital part of the normal day-to-day routine. Conflicts always involve choices, whenever an individual faces a dilemma and strives for a state of equilibrium by choosing the "right thing" for that particular situation at the time (Donaldson, 1980).

There are many conflicts that managers face with the world of business. The broad areas of concern include honesty versus tact, competition versus cooperation, and success versus the abuse of society (Greenleaf, 1980). Current issues under ethical scrutiny include product quality and safety; fairness in hiring; promotion and firing; just prices and profits; disclosures and client loyalty in accounting; workplace quality and safety; truthfulness in advertising; bribery; whistle blowing; the impact of multinational firms on host countries; the complex set of tradeoffs involving environment, energy, employment, and inflation; and the larger issues of wealth and distribution in a market economy (Troy and Jones, 1982; Rudelius and Buccolz, 1979).

The acme of amorality in the mid-1970s (i.e. bribes, kickbacks, and other illegal practices) generally declined in the 1980s. In fact, the business credo of 1982 conveyed an emphasis on protecting businesses from wrongdoing (Cullather, 1983).

The current view holds that an ethical act is also a socially just act and that individual actions occur in an organizational context (Boling, 1978). "A socially just act is defined as behavior

which promotes social equity" (Evans, 1981, p. 132). "Moral judgments reflect group norms; the organization itself is a moral community." (Bowman, 1981, p. 60.)

To assure ethical behavior, standards are devised by individuals, institutions, and organizations. Although social mores change, the general utilitarian theme prevails, doing the greatest good for the greatest number. The written standards imply that no person is to seek private gain at another's expense (i.e. misrepresentation, bribes, kickbacks, payoffs, exploitation of others, opportune investments, etc. (Evans, 1981).

Because of the rapid growth and diversification in business organizations today the individual's sense of responsibility has decreased. Thus, many individuals work in an industry or a business where no one is effectively in charge to set the necessary standards (Bowman, 1981; Cleveland, 1974). In addition, many business managers perceive the organizational environment to be less ethical than individual values (Bowman, 1976; Brenner and Molander, 1977; Newstrom and Ruch, 1975).

This implies that both organizations and individuals are responsible for ethical conduct. The individual makes a decision based upon personal standards but does so within the context of organizational structure (Bologna, 1980; Bowman, 1981).

The literature review reveals that many authors address the need for some type of institutions basis for professional ethical conduct (Bowman, 1981; Drucker, 1981; Evans, 1981). Without this standard, American businesses cannot begin to ethically support the

human dignity of employees or consumers. Responsibility in a democratic society imposes an ethical obligation on the individual and on the organization as a whole (Bowman, 1981).

Three surveys report the majority of managers felt "pressured" to compromise personal standards of conduct for organizational goals. Besides, these respondents indicated a supervisor's interests are only focused on results and not in "how the task was accomplished" (Bowman, 1976; 1982; Brenner and Molander, 1977; Zemke, 1977).

Ethics in Management

The current understanding of management ethics is relatively undeveloped as compared to other business areas such as budgeting, marketing, or delivery of service. Presently, little consensus exists regarding the nature of ethics and its application to management. In fact, one researcher indicated that there are as many definitions of ethics as there are business people (Bowman, 1981). Available evidence demonstrates that managers are indeed interested in ethics issues and identify these as being related to rules/standards morals, right and wrong and values of honesty (Berenbiem, 1986; Krietner, 1989; Stoner and Freeman, 1989).

Management Style

Powers and Vogel (1980) advance the distinction between professional and managerial ethics. The profession is an instrument of the practitioner (who directly contributes to human welfare). On

the other hand, a manager is an instrument of the organization who indirectly contributes to the social good. He believes the challenge lies not only with knowing what ought to be done, but also in indicating who is responsible for doing it.

It is the professional manager of today as a generalists who with thorough organizational ability transforms knowledge power in order to serve the needs of society (Drucker, 1981; Fasching, 1981; Riger and Galligan, 1980). In this highly technological society, the role of a professional manager extends to planning, organizing, staffing, controlling, leading or directing oneself, other people, or organizations (Drucker, 1981; Halaby, 1982; Peters and Waterman, 1982; Silver, 1981).

Today's manager perceives business as a "system of systems within a larger social system" (Cooper, 1982; Zullinger, 1979). Profitability still exists as the core concern, but it is integrated with social and economic concerns. Managers with this kind of perception have a highly sophisticated awareness of the total ecology (i.e. environment, economy, culture, politics) which sustains the business enterprise. Managers recognize that sustaining the health of the total ecology is essential to the health of business itself (Fasching, 1981, p. 67). A manager must be educated to sort out moral issues involved in everyday decision making processes, to create the organizational equivalent of conscience by modifying organizational structures, and to build in function analogous to the individual conscience.

The Business Week "Special Report" of April 1983 discussed a new balance of power in management today. Operations managers are beginning to assume mid-management positions. This trend toward decentralization allows for fewer levels of management and more direct lines of communication. Presently, marketplace and manufacturing decisions are being made by first line managers. These supervisors serve in pivotal roles managing better-educated, more demanding workers and combining maintenance, engineering, and personnel managers into fully integrated operations.

Ethical Business Behavior

A group of researchers from Yale University developed a position on ethical business behavior in our society (Simons, Owens, and Gunnemen, 1972). Ethical meaning was divided into two categories. The first involved all behavior related to the "moral minimum" of not harming others, of accepting the "negative indication," and of avoiding or correcting social injuries that accompanied personal activity. The second category referred to the "affirmative duty" of attacking the social problems of poverty, discrimination, or urban decay. Business managers were confronted by the "moral minimum" to reduce injuries caused by processes they managed (Johnson, 1981). Therefore, business behavior was deemed ethical if managers reduced adverse impacts of production upon groups and individuals harmed by business activity. "This in business would be relatively simple if the manager were always confronted with choices between good and evil, but most business

decisions involve choices between two or more goods or two undesirable options" (Johnson, 1981, p. 54). A primary example involves the issue of minority/female hiring versus seniority rights.

Business choices would be less complex if decided in the context of single one-to-one relationships. However, choices usually affect different people in different ways. Managers become involved with stockholder, suppliers, employees, competitors, dealers, consumers, fellow executive, and the community at large. It is unavoidable that the moral decision made from one perspective would cause hardship to others (England, 1978; Lawrence, 1976). "Difficult choices arise partly from the diversity of counter-pulling individuals and group-diversity which reflects the strength and flavor of a democratic system based on free individual action (Johnson, 1981, p. 55). The manager's dilemma reflects the independence of free persons.

Individual managers also make decisions within the corporate structure of roles, rules, and organizational anonymity. Often managers resort to actions they would not take elsewhere in response to group influences on decision making. Individual responsibility often gets lost within the context of committee decision-making.

In addition to the complexity of managerial decisions, a sense of team loyalty interferes often with expressing individual morality. Employees who "blow the whistle" are considered "disloyal" to the organization. Another significant variable is the

individual motivation to climb the career ladder regardless of ethical practice.

Several studies indicate that the best companies have participatory management practices with emphasis on fair treatment of minorities and human rights (Drucker, 1981; Mosowitz, 1975; Peters and Waterman, 1982; Sturdivant and Ginter, 1977). The best managers reflected a greater concern for human rights and a greater responsiveness to demands in the social and economic system (Davis, 1980; Dunlop and Chandler, 1979).

Research concluded that managers ranking high in social responsiveness worked for firms which had increasing industrial growth earning per share for 1985 to 1974 (Johnson, 1981). The Mosovitz survey showed Standard of Indiana and Dow Chemical as "best" companies according to the criterion. Peters and Waterman (1982) identified McDonald's as an ideal example of one of America's best-run firms.

A review of the business ethics literature disclosed two potential solutions to curbing immoral practices: the academic offering of business ethics courses and the establishment of ethical codes of practice in business. Drucker (1981) critically disclaimed the "quality" of business ethics courses now offered. He suggests that these courses teach students to "justify almost any act if it can be shown that the act will result in "benefits" for a number of people. Such courses are teaching students "a set of ethics for those is power" which differs from the "ordinary demands of ethics which apply to them as individuals" (Drucker, 1981, p. 22).

Interest in teaching and research in business ethics began in the beginning of the 1970s and has continued to develop since. Although deans and professors in business schools differ regarding placement of ethics in the curriculum, recent studies agree on four points:

1. academic deans strongly agree the study of ethics is essential preparation for future managers;
2. the preferred methodology involves integrating ethics in other business courses, especially policy studies;
3. no consensus attained regarding conceptual framework for studying socioethical issues;
4. this underdeveloped field indicates potential growth (Buchholz, 1979; McMahon, 1975; Powers and Vogel, 1980).

Four characteristics underlie the future of teaching business ethics:

1. avoid defining ethics in theological terms;
2. refrain from meaningful discussions of historical evolution of major moral issues and organization dealing with them;
3. combine text-case treatment;
4. view issues generally in terms of past verdicts (i.e. business or government (Walton, 1980)).

Powers and Vogel (1980) and Beauchamp and Bowie (1979) recommend the case method of teaching business ethics. Beauchamp and Bowie address the notion of procedural justice in business situations. They relied on court cases to enlighten students regarding ethical responsibilities and implications. These authors

confirmed the dichotomy that business ethics problems become anti-business, according to how they are developed (Hansen and Solomon, 1982).

Codes of Ethics

Since ethics is described as "the rules governing moral conduct of the members of the organization or management profession", individual ethics is a necessary but not sufficient condition for honest organizational behavior (Fulmer, 1978). A need exists for an ethics of managerial action (Bowman, 1981). This process would facilitate the making of ethical decisions by managers.

Organizations need to provide appropriate ethical standards for their managers. A recent national survey of 650 major firms discovered most companies (73%) had a code of ethics, 50% of which were developed since 1978. The majority of respondents reported such codes as beneficial to management. Approximately 83% believed that employees were acquainted with their codes. It has been recommended that organization devise individual procedures specific to their needs. If the formulation of a code of ethics precludes professionalism, then the imprint for management as a profession has been established (Bowman, 1981).

Managers are particularly concerned with the ethical tone of the internal environment and the role this plays in maintaining work standards and interpersonal relationships (Godfrey and Zashin, 1981). The fundamental issue with work standards is integrity and in determining quality and quantity of work. Since interpersonal

relationships are all-encompassing, primary areas of concern include impartial procedures for hiring, promotion, and fairness in daily work situation. A generally accepted concept by managers concerning ethical decisions is that they take into account not only one's personal interests, but also the interest of others equally affected by the decision (George, 1980).

Paul Ramsay, ethicists for the Department of Religion at Princeton University has long criticized philosophical thinkers whose practical ethics is basically an "ethics of consequences." He believes this approach to moral judgment involves a process of assessing the values at issue and then determining which action produces the greatest "quality of benefits" or the greatest net good (Hegarty and Sims, 1979; Williams, 1982).

In the Lockheed bribe, for example, protecting the quality of life for Lockheed's employees along with its financial health undermined social welfare such as loss of trust, quality and efficiency in the marketplace. This would indicate that bribery accompanies a disproportion of evil to good (Horovitz, 1980).

Williams (1982) studied the Cummins Engine Company in Columbus, Indiana. He interviewed 23 managers for an average of one hour each. The Cummins policy existed on ethical standards, questionable payments, meals, gifts, discounts, financial representations, international distribution accounts customs declarations, supplier selection, employee participation in political campaigns and employee participation in noncorporate political activities.

Managers from Cummins itemized the following list of ethical problems: nepotism, illegal money transfers, safety engineering design issues, dishonest job evaluations, deceptive expense accounts, acceptance of gifts, determination of fair price/fair warranty expenses, level of honesty with the media, kickbacks in claims processing, difficulties with confidentiality in compensation cases, confidentiality about employees, determination of "fair" profit and the hiring of executives from the outside (Williams, 1982).

In 1978, besides their code of ethics, Cummins Department of Corporate Responsibility developed a training course for senior and mid-level managers. The course aimed to help managers determine what was right in complex situations. Cummins believed the key to ethical management involved a healthy business environment with processes that promote and protect essential values, as well as careful personnel selection (William, 1982).

In summary, the managerial aspect of business ethics is becoming increasingly important. Since individual actions occur within an organizational context, moral judgments of business managers tend to reflect these group norms. Therefore, an individual and organizational component exists with ethical decision making. Research in this field has indicated current areas of concern, types of ethical infractions, and pressures experienced by the individual and the organization, as well as the need for a standard ethical code within each organization. Business looks toward such codes and the integration of ethical content in training

curriculum as the future answer to lack of ethical conscience in business today. Currently, little if any attention has been directed toward measuring levels of moral judgment among this population. This data needs to be provided before a correlation between moral judgment and the effective enhancement of moral reasoning within the business arena can begin to be established.

Current Studies In Business Ethics Educational Programs

One of the most significant issues in business ethics today involves the influence of senior management and organizational ethics training programs on employee decision making practices. If moral judgment is a distinctive domain of development, then experiences which focus on the enhancement of moral reasoning ought to increase the level of moral decision making. Progress in stimulating moral development has been shown to be slow and gradual. Intervention studies do give the picture of a change by educational interventions (Rest, 1986). The movement of the experimental groups in these moral education interventions has been slow but significantly greater than in control groups. The amount of change was less than in the longer-term longitudinal studies, and change induced by educational intervention requires a heavy focus on moral problem solving.

Yankelovich (1978) compared an ethics class with a philosophy class in logic. It was found the logic class moved subjects up on a logic test but not on the DIT, whereas the ethics class move subjects up on the DIT but not on the logic test. This indicates that each test (the DIT, the logic test) is sensitive to specific

domains of cognitive development and that specifically focused interventions are more effective when focused on a specific domain (Rest, 1988).

In 1982 Olson conducted studies to measure the effect of a leadership training and leadership experience intervention on student development. This quasi-experimental study, took place in a small private college.

The treatment consisted of five months of training and experience. Pre/post testing were given using the California Psychological Inventory (CPI) and the P score of the Defining Issues Test (DIT). The results of the analysis, although not generally significant, did indicate consistent positive growth in student development due to leadership training programs.

Another significant study by Newstrum and Ruch (1975) evaluated the ethical beliefs and behaviors of 121 managers participating in an executive development program. Respondents were asked about divulging confidential information using company services for personal use, conducting personal business on company time and padding expense accounts. A major conclusion of this study was that managers held beliefs congruent with their superiors. The development program served as a key reference for managers' ethical decisions.

A survey was taken by Harvard Business Review readers (Arlow and Ulrich, 1980). Top, middle and lower level managers as well as professional and nonprofessional employees comprised the sample. Residents came from medium-sized companies specializing in

manufacturing. This study found the personal code of ethics ranked as the most significant influence on business executives to make ethical decisions. The most important influence on unethical decisions was the behavior of supervisors (Arlow and Ulrich, 1980; Hegaraty and Sims, 1978).

Summary

Chapter II consists of a comprehensive review of research and professional literature relating to adult moral development.

The review of literature was classified into five major categories: (1) Adult Moral Development Theory, (2) Kohlberg's Theory on Moral Development, (3) Moral Educational Programs, (4) Ethics, and (5) Current Studies in Business Ethics Educational Programs.

CHAPTER III

METHODOLOGY

Introduction

Due to the lack of ethical employee conduct employers are initiating ethics educational programs designed to offer employees a solid understanding of corporate policy regarding the moral aspects of business decision-making. This research will investigate the influence of a specific ethics educational program on levels of adult moral judgment.

Design

A non-equivalent control group quasi-experimental design with a control group and an experimental group was utilized in this study. Campbell and Stanley (1966) recommend the use of this design when a researcher lacks full control over the scheduling of experimental stimuli and of the ability to randomize exposures. Rather, when control and experimental groups constitute naturally assembled collectives such as classrooms they are treated as if the assignment of subjects was random and under the experimenter's control (Campbell and Stanley, 1966). The more similar the experimental and the control groups are in their recruitment and the more this similarity is confirmed by the scores on the pretest the more effective control becomes. Assuming that these considerations were

approximated for purposes of internal validity, this design can be regarded as controlling the main effects of history, maturation, testing, and instrumentation (Campbell and Stanley, 1966).

Hypotheses Tested

The hypotheses that the investigator examined included the following:

Hypothesis One. There is no significant difference in moral judgment between treatment and non treatment groups pretest scores as measured by the Defining Issues Test (DIT).

Hypothesis Two. There is no significant difference in growth in moral judgment between treatment and non treatment students due to an ethics educational program measured by the Defining Issues Test (DIT) posttest scores.

Hypothesis Three. There is no significant difference in moral judgment pretest scores among age categories as measured by the Defining Issues Test (DIT).

Hypothesis Four. There is no significant difference in growth of moral judgment among age categories in the experimental group due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

Hypothesis Five. There is no significant difference in moral judgment pretest scores between males and females in the experimental group as measured by the Defining Issues Test (DIT).

Hypothesis Six. There is no significant difference in growth of moral judgment between males and females in the experimental

group due to an ethics educational program as measured by the Issues Test (DIT) pre/posttest scores.

This design enabled the investigator to compare two groups of subjects (control group and treatment group) with respect to a measurement of individual development of moral judgment (dependent variable) after being exposed to the experimental treatment, an ethics educational program (independent variable). Age and gender were also used as independent variables. Pretests and posttests were administered to both groups to control for internal validity.

Population and Sample

This study was conducted at The University of Central Oklahoma and Oklahoma City University. The University of Central Oklahoma (UCO) was founded in 1890 in Edmond, Oklahoma as a teacher education institution. Women comprise 56% of the student body and have accounted for more than half of the students body since 1977. Oklahoma City University (OCU) chartered in 1904 is located near the center of Oklahoma City, Oklahoma and is sponsored by the Methodist church. Women comprise about 52% of the OCU student body. Both universities are accredited by the North Central Association of Colleges and Secondary Schools. The population of general interest in this study was undergraduate students who were in educational programs designed to prepare students for future leadership roles.

The sample for this study comprised students enrolled in two Fundamentals of Management classes in the College of Business at

University of Central Oklahoma in Edmond, Oklahoma and two Economics and Quality of Life classes at Oklahoma City University. The treatment group class at UCO met at 5:50 to 7:17 pm on Tuesday and Thursday evenings. The control group class, met at 7:30 to 9:00 pm on Tuesday and Thursdays. At OCU the treatment group Economics and Quality of Life class met at 9:30 am on Tuesdays and Thursdays and the Economics Quality of Life control group class met at 10:45 am on Tuesdays and Thursdays. The treatment groups received an ethics educational program in addition to the standard curriculum. The researcher taught both courses at OCU and UCO and had four years experience teaching Fundamentals of Management and one semester experience teaching a college level ethics course as well as one year of experience teaching Economics and Quality of Life.

The recommended sample size for moral development research is 20 to 40 participants (Harvard Moral Development Workshop, 1981). Classes selected for this research study fell within these parameters.

Independent Variables

The treatment independent variable was an ethics educational program administered to subjects for the duration of 15 minutes twice a week over a 15 week academic period. Also considered independent variables within the treatment group were gender and age. There were three age categories utilized in this study 18-25 years and 26-33 and 34+ years. Previous reviews of moral educational programs (Enright, Lapsley, and Levy, 1983; Leming,

1981; Lockwood, 1978; Lawrence, 1980; Rest, 1979) have suggested that some moral educational programs are effective in promoting moral judgment development, particularly if the program lasts longer than a few weeks and if the instruction involved the participants in discussion of controversial moral dilemmas.

The educational procedure used in this study incorporated the use of case readings about ethical dilemmas and ethics business training videos portraying moral problems occurring in business practice. Appendix A lists the entire instructional schedule for each class and all cases and videos used for both experimental groups. Cases were given to students to read prior to class. They were then analyzed through the use of a moral problem solving model (Appendix B), buttressed by interactive exchanges between subjects. Videos were shown to students followed by the class discussion of ethical issues apparent in them. Subjects in the treatment groups were also exposed to Kohlberg's Adult Moral Development Theory and his stages of moral development (Appendix A). The instructor gave an example of an ethical dilemma resolved by application of each of the three levels of moral development.

Dependent Variable

The dependent variable was a P score on the DIT designating levels of moral judgment. Detailed scoring procedures resulting in a P score are found in Appendix F.

Instrument

Since levels of moral judgment are cognitively related, advanced moral reasoning depends upon sound logical reasoning and is advanced with respect to the stages in adult moral development. Logical reasoning is necessary but not by itself a sufficient condition for mature moral action. An individual can reason in terms of principles and yet not live up to these principles (Colby and Kohlberg, 1983). Moral judgment was measured through the use of the Defining Issues Test.

The long form of the Defining Issues Test (DIT) was used to measure moral judgment in this study. The DIT consists of seven stories presenting controversial social issues to the subject who was asked to rate related issues used in solving the dilemmas according to their importance. "According to Rest (1979), the DIT, used in over 500 studies, is the "best documented test of moral judgment development." The DIT not only asks what line of action the subject favored but the reason behind the choice. The test range of reliability for the P score has been in the high .70s to .80s. and internal consistency has been in the high .70s (Rest, 1986).

Procedure

Permission was obtained from University of Central Oklahoma and Oklahoma City University to conduct this study involving their students. The study was also approved by the Oklahoma State University Internal Review Board and permission received from the

Center For the Study of Ethical Development at the University of Minnesota to use the Defining Issues Test (Appendix C).

Additional preparatory steps undertaken were to design consent forms (Appendix D) that were presented to students to obtain their written permission for participation in this research and to designate the experimental group and the control group by the toss of a coin. Every attempt was made to gain 100 percent participation. The DIT (Appendix E) was designed to be administered to large groups of subjects at the same time. A class period (50 minutes) was used for the seven story version. Subjects who lingered over answers were encouraged to finish within the class period.

In administering the test, the following points were communicated to the participants:

1. The importance of the subject's own opinions.
2. The time allowed to complete the questionnaire was usually ample for everyone to finish. Subjects were asked to consider every item carefully but also to pace themselves to finish in an hour.
3. Every story had 12 issues. The first task after reading the story was to read each item by itself and to rate it in importance. After rating each item individually, then the subject considered the set of 12 items and ranked the four most important items. A sample story (Frank Jones deciding about buying a car) was used to illustrate the task of rating and ranking issues in terms of their

importance in making a decision.

4. Subjects were instructed that each case may contain some items which would not be easily comprehended. If a subject did not understand a word in an item, it was not interpreted. Subjects were asked to rate these items low.
5. The items were rated and ranked in terms of how important that issue was in making a moral decision (e.g., Which was the crucial question that a person should focus on in making a decision?) Some items were perceived by subjects as being important to making the decision and were ranked accordingly. The subjects were encouraged to consider if the decision should rest on that particular issue?
6. The subjects were asked to check one of 5 places used as a rating scale. The following rating scale was explained:
Great importance -- if the question concerned something that made a crucial difference one way or the other in making a decision about the problem.
Much importance -- if the question concerned something that a person should clearly be aware of in making a decision, and would make a difference in the decision, but not a big crucial difference.
Some importance -- if the question concerned something generally cared about, but something that was not of crucial importance in deciding about this problem.
Little importance -- if the question concerned something

that was not sufficiently important to consider in this case.

No importance -- if the question was about something that had no importance in making a decision, and that was considered to be a waste of time when trying to make a difficult decision.

Scoring

Currently three methods are available for scoring the DIT; by hand, by computer, or by the Center For Ethical Development at the University of Minnesota. Hand scoring, chosen for this study comprised the following steps:

1. Preparation of data sheet for each subject for each questionnaire (Appendix F). For pre and posttesting both scores were entered on the same data sheet.
2. The rankings (at the bottom page of each story) were scored by categorizing according to the 5 point scale given. For each scored item, a chart was consulted to ascertain the stage that the item exemplified (Appendix G).
3. After finding the corresponding stages, weights were given according to the rankings and added to the subjects data sheet. Pretest and posttest scores were compared through the use of a "P" score (Principled morality score). Raw scores were converted to percentage scores. Higher P scores indicated that the subject gave high ratings to high stage items. The three high stage ratings were 5a (stage three conventional level), 5b (stage four conventional

level) or 6 (universal ethical principled level). The P score was lower to the extent that the subjects gave high ratings to lower staged items (Rest, 1979).

4. Two established reliability check procedures were implemented as indicators of the usability of a subject's questionnaire. These were the M score and the Consistency Check. The M score indicated a subject's tendency to endorse statements for their pretentiousness rather than their meaning. Tests with raw M scores higher than 8 were discarded. The Consistency Check was used as a indicator of the subject's inconsistency between rating items and ranking items. This check questioned whether the subject was taking the test seriously or misunderstood instructions and also provided one additional measure to reject inappropriate responses.

Data Analysis

The purpose of the interpretation was to assess change in moral judgment using P scores. Change had to exceed the estimated standard error of measurement in order to be considered a difference in true developmental change rather than just normal subject fluctuation or test instability (Rest, 1979). This study required statistical analysis in both the pretest stage and the posttest stage. Pretest data were analyzed to ascertain if the following significant pretest dissimilarities existed:

1. Using P scores, pretest data were analyzed by means of t-test for significant differences in change between control group subjects and experimental group subjects.

2. Using P scores, pretest scores were analyzed by means of t-test to determine differences in moral judgment in experimental and control groups due to gender.

3. Using P scores, pretest scores were analyzed by means of multiple t-tests to determine differences in control groups and experimental group subjects due to age, (grouping 18-25 years and 26-33 and 34+ years).

Posttest analysis procedures were conducted to ascertain significant change due to the treatment variable. These include:

1. Using P scores, posttest data were analyzed by means of t-test to determine if a significant change occurred between control group subjects and experimental group subjects.

2. Using P scores, posttest data were analyzed by means of t-test to determine if a significant change occurred in the treatment group between gender groupings.

3. Using P scores, posttest data were analyzed by means of Analysis of Co-variance for significant change among age groups.

4. Tukeys was used as a post-hoc test to identify specific differences were the Analysis of Co-variance indicated the existence of a significant difference.

CHAPTER IV

RESULTS

Introduction

The results of the statistical analyses along with an interpretation of the data collected are presented in this chapter. The statistics generated by this non equivalent group quasi-experimental study will be presented in tabular and textual form throughout this chapter. The statistical tests of all hypotheses are also presented.

The purpose of this study was to investigate the impact of ethics educational programs on levels of moral judgment used in the problem solving abilities of adult business students. Results are reported in response to six hypotheses investigated:

Hypothesis One. There is no significant difference in moral judgment between treatment and non treatment groups pretest scores as measured by the Defining Issues Test (DIT).

Hypothesis Two. There is no significant difference in growth of moral judgment between treatment and non treatment students due to an ethics educational program as measured by the Defining Issues Test (DIT) posttest scores.

Hypothesis Three. There is no significant difference in moral judgment pretest scores among age categories as measured by the Defining Issues Test (DIT).

Hypothesis Four. There is no significant difference in growth of moral judgment among age categories in the experimental group due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

Hypothesis Five. There is no significant difference in moral judgment pretest scores between males and females as measured by the Defining Issues Test (DIT).

Hypothesis Six. There is no significant difference in growth of moral judgment between males and females in the experimental group due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

Design and Analysis Procedures

A quasi-experimental design with control and experimental groups was utilized. The sample for this study comprised students enrolled in two Fundamentals of Management classes and two Economics and Quality of Life classes. The treatment group, one management class and one economics class, received an ethics educational program for 15 minutes twice a week (23 class periods) program for 15 weeks in addition to the standard curriculum (See Appendix H). Both control group classes and treatment group classes were tested over identical content contained in their respective standard curricula. The grades achieved by students in all four classes are shown in Table 1.

TABLE 1
GRADE POINT AVERAGES FOR STUDENTS ENROLLED IN
CONTROL AND EXPERIMENTAL CLASSES

Class	Group	Class Grade Point Average
Management	Control	2.9
Management	Experimental	3.2
Economics	Control	2.6
Economics	Experimental	2.7

The Defining Issues Test (DIT) was administered as both a pretest and posttest. The DIT yields a P score which was utilized to assess change in moral judgment. Higher P scores indicated that subjects gave higher rankings to items representing advanced stages of moral judgment. Change had to exceed the estimated standard error of measurement in order to be considered a difference in true developmental change rather than just normal subject fluctuation or test instability.

There were two checks on the reliability of each subject's questionnaire the "M" scores and a Consistency Check. The "M" score checked the subject's tendency to endorse statements for its pretentiousness rather than meaning. Tests with raw M scores higher than 8 were discarded. The second check on subjects' reliability is the Consistency Check. This check involved questions regarding the subject's entire protocol. If there were inconsistencies in more than two stories or if the number of inconsistencies on any story exceeded seven instances, the subject's test set was discarded. Only tests identified as valid were used for further analysis. The reliability check form used to provide the M score and the Consistency Check is shown in Appendix F. Instructions regarding scoring of reliability checks is shown in Appendix G. The results of these checks are shown in Table 2.

All pre/posttest scores are listed in Appendix I. The mean pre/posttest scores of both control and experimental groups are

TABLE 2
DISCARDED POSTTEST SETS BASED ON TWO INTERNAL
RELIABILITY CHECKS

Class	Group	Tests Given	Discarded Tests "M"	Discarded Tests Consistency	Valid Tests
Management	Control	19	4	3	12
Management	Experimental	30	4	6	20
Economics	Control	26	4	0	22
Economics	Experimental	17	3	4	10
Totals		92	15	13	64

presented in Table 3.

The dependent measures used in this study were the scores obtained by each participant through the use of the Defining Issues Test (DIT). The dependent measures were subjected to t-tests or an Analysis of Co-variance.

Table 4 shows the demographic breakdown of the 64 valid tests that were analyzed in this study. Appendix I lists the complete scores of all participants with valid tests.

Hypothesis and Data Analysis

Hypothesis One

There is no significant difference in moral judgment between the treatment and non treatment groups pretest scores as measured by the Defining Issues Test (DIT).

Table 5 presents t-tests results used to determine if these were of pretest differences in moral judgment between participants in control and experimental groups as measured by the DIT. Analysis revealed no significant difference at the .05 level of confidence between these groups. Therefore, the null hypothesis was not rejected.

Hypothesis Two

There is no significant difference in growth of moral judgment between treatment and non treatment group students due to an ethics educational program as measured by the Defining Issues Test (DIT) posttest scores.

TABLE 3
PRETEST AND POSTTEST MEAN P SCORES
BY CLASS AND GROUP

Class	N	Group	Pretest	Posttest
Management	12	Control	37.7	36.9
Management	10	Experimental	44.4	44.4
Economics	22	Control	33.0	34.8
Economics	20	Experimental	36.7	40.0

TABLE 4
DEMOGRAPHIC ANALYSIS OF PARTICIPANTS
WITH VALID TESTS

CLASS	GROUP	N	MALE	FEMALE	MEAN AGE	AGE RANGE
Management	Control	12	7	5	32	20
Management	Experimental	20	10	10	33	23
Economics	Control	22	7	15	19	9
Economics	Experimental	10	3	7	7	37

TABLE 5
RESULTS OF t-TEST TO MEASURE PRETEST DIFFERENCES
BETWEEN EXPERIMENTAL CONTROL GROUPS AS
MEASURED BY THE DIT

GROUP	N	MEAN	SD	t	P
Experimental	30	41.9	16.5		
				0.09	NS
Control	34	34.9	15.8		

P < .05

Table 6 presents t-Test results of differences in stages of moral judgment growth of both the experimental and control groups mean pretest P scores over the 15 week instructional period as measured by the DIT. Analysis revealed no statistically significant difference at the .05 level of confidence between groups. Accordingly, the null hypothesis was not rejected.

Hypothesis Three

There is no significant difference in moral judgment pretest scores among age categories in the experimental group as measured by the Defining Issues Test (DIT).

Table 7 presents multiple t-test results of pretest differences in stages of moral judgment among age categories as measured by the DIT. Analysis revealed a significant difference in moral judgment at the .05 confidence level between the 18-25 and the 34+ age category. The null hypothesis therefore, was rejected. As a matter of interest, control group pretest scores were also analyzed in the same manner yielding similar results.

Hypothesis Four

There is no significant difference in growth of moral judgment among age categories in the experimental group due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

TABLE 6

POSTTEST RESULTS OF t-TEST BETWEEN EXPERIMENTAL
AND CONTROL GROUPS GROWTH IN MORAL JUDGMENT
AS MEASURED BY THE DIT

GROUPS	N	MEAN P SCORE	SD	t	P
Experimental	30	42.9	13.5		
				0.07	NS
Control	34	35.6	18.8		

P < .05

TABLE 7

RESULTS OF t-TESTS TO MEASURE EXPERIMENTAL GROUP
PRETEST DIFFERENCES IN MEAN SCORES BETWEEN
AGE CATEGORIES AS MEASURED BY THE DIT

AGE	N	MEAN	SD	AGE	N	MEAN	SD	t	P
(18-25)	11	34.9	15.8	(26-33)	8	37.2	18.05	.7	NS
(18-25)	11	34.9	15.8	(34+)	11	51.0	13.9	.01	*
(26-33)	8	37.2	18.0	(34+)	11	51.0	13.9	.8	NS

P < .05

Table 8 presents Analysis of Co-variance results for differences in moral judgment among age groups as measured by pre/posttest scores on the DIT over the 15 week educational period. Analysis revealed no significant difference at the .05 level of confidence among age categories. Therefore, the null hypothesis was not rejected.

Hypothesis Five

There is no difference in moral judgment pretest scores between males and females in the experimental group as measured by the Defining Issues Test (DIT).

Table 9 presents t-Test results for difference in pretest moral judgment scores between gender groups in the experimental group as measured by the DIT. Analysis revealed no statistically significant difference at the .05 level of confidence between males and females. The null hypothesis was therefore not rejected.

Hypothesis Six

There is no significant difference in growth of moral judgment between male and females in the experimental group due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

Table 10 presents t-Test results of differences in growth of moral judgment between males and females in the experimental group due to an ethics educational program. Analysis revealed no

TABLE 8

ANALYSIS OF CO-VARIANCE OF DIFFERENCES IN
THE EXPERIMENTAL GROUPS' PRE/POSTTEST
SCORES BETWEEN AGE GROUPS
AS MEASURED BY THE DIT

Source	DF	MS	F	P
Age	2	135.4	.571	NS
Residual	26	236.6		
Total	29	338.4		

F = .572 P < .05

TABLE 9

RESULTS OF t-TEST TO MEASURE EXPERIMENTAL
GROUP DIFFERENCES IN PRETEST SCORES
BETWEEN MALES AND FEMALES

GROUPS	N	MEAN SCORE	SD	t	P
Females	16	46.3	16.5		
				.11	NS
Males	14	36.8	15.7		

P < .05

TABLE 10
RESULTS OF t-TEST TO MEASURE DIFFERENCES
IN EXPERIMENTAL GROUP POSTEST SCORES
BETWEEN MALES AND FEMALES

GROUPS	N	MEAN SCORE	SD	t	P
Females	16	47.1	19.5	.18	NS
Males	14	38.2	16.3		

P < .05

significant difference at the .05 level of confidence among age categories. Therefore, the null hypothesis was not rejected.

Summary

Six hypotheses were tested by means of statistical procedures for the purpose of investigating the impact of ethics educational programs on levels of moral judgment and problem solving abilities of adult business students. A significant growth in moral problem solving as measured by the DIT was not achieved by the application of an ethics educational program for the experimental group. There was no indication of a relationship between gender and moral judgment. However, findings did suggest a significant pretest relationship between moral judgment and age.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Introduction

The problem addressed in this study was that in business and educational organizations there are numerous short-term programs in ethics being offered, yet there is no evidence regarding their effectiveness. Because of the impact of the human rights movement in reaction to sociopolitical conflict, the question of morality as viewed in a societal context, has become an increasingly prominent focal point in decision-making efforts among American business leaders. CEO's and top managers are concerned about potential public mistrust of business because, as a part of society, businesses must develop ethical standards in response to societal issues they confront in pursuit of business objectives. Commitment to these standards are an important unifying force for companies. This commitment can only be accomplished by asking employees to incorporate corporate standards of ethical conduct into their daily activities and decision-making. In order to sensitize employees to ethical issues, broaden and deepen employee awareness of code directives and underscore the commitment of the company to its ethical principles effective communication between management and employees is mandatory.

The purpose of this study was to investigate the impact of an ethics educational program on levels of moral judgment used in problem solving by adult business students.

The subjects of this study were students enrolled in four classes: two Fundamentals of Management classes and two Economics Quality of Life classes. One Management class and one Economics class were identified as experimental groups and the other two classes were identified as control groups. The experimental groups were given an ethics educational program in addition to their regular curriculum over a fifteen week period. The measurement of change in moral problem solving was the Defining Issues Test (DIT) which consisted of seven stories presenting controversial social issues to the subjects who were asked to rate related issues used in solving the dilemmas according to their importance.

Specifically, the study investigated following hypotheses:

Hypothesis One. There is no significant difference in moral judgment between treatment and non treatment groups pretest scores as measured by the Defining Issues Test (DIT).

Hypothesis Two. There is no significant difference in growth of moral judgment between treatment and non treatment students due to an ethics educational program as measured by the Defining Issues Test (DIT) posttest scores.

Hypothesis Three. There is no significant difference in moral judgment pretest scores among age categories in the experimental group as measured by the Defining Issues Test (DIT).

Hypothesis Four. There is no significant difference in growth of moral judgment among age categories in the experimental group due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

Hypothesis Five. There is no significant difference in moral judgment pretest scores between males and females in the experimental groups as measured by the Defining Issues Test (DIT).

Hypothesis Six. There is no significant difference in growth of moral judgment between males and females in the experimental groups due to an ethics educational program as measured by the Defining Issues Test (DIT) pre/posttest scores.

Procedures

The procedure followed in this study consisted of the following steps:

(1) a review of the research and the literature regarding the study of adult moral developmental theory in relation to business ethics training,

(2) the selection of a research design that could evaluate the data gathered in this experiment,

(3) the treatment of the experimental group and data collection for control and experimental groups,

(4) the analysis and the interpretation of the data used in answering the research questions, and

(5) the writing of this research report.

This study was conducted at the University of Central Oklahoma in Edmond, Oklahoma and Oklahoma City University in Oklahoma City, Oklahoma during the spring semester of 1991. The subjects of this study were students enrolled in two Fundamentals of Management classes at the University of Central Oklahoma and two Economics and the Quality of Life classes and Oklahoma City University. The Management groups met at 5:50 and 7:30 pm on Monday and Wednesday. Both groups used identical books and base curriculum. The Economics groups met at 9:15 and 10:45 am on Tuesday and Thursday. Both groups used identical books and base curriculum. All four groups were taught by the same instructor and received the same amount of ethics educational time. However, the experimental groups received fifteen minutes of ethics instruction each class period in addition to the instruction specific to the respective class. The ethics instruction took five hours and forty-five minutes over the fifteen week period.

Measurements were taken at the beginning of the fifteen week instructional period to establish pretest scores and at the conclusion of the instructional period to establish posttest scores. These data were then subjected to statistical analysis using the t-Test, and the Analysis of Co-variance. An Alpha level of .05 was used in the analysis to determine significance.

Findings

Based on an analysis of the test data in Chapter IV, the major findings were:

1. The pretest mean P scores for students in the experimental groups were not significantly different from the P mean scores for students in the control groups.

2. The ethics educational programs made no significant change in the levels of moral judgment used in problem solving in the treatment groups as compared with the control group.

3. There was a significant pretest difference in the moral judgment used between the youngest age group (18-25 year old) and the oldest group (34 and over).

4. Based on the participants in this study, there was no significant posttest difference among age groups in the experimental group indicating growth in moral judgment.

5. At the pretest level there was no significant difference in moral judgment based on gender.

6. There was no significant increase in levels of moral judgment used in moral problem solving in the treatment group due to gender.

Discussion of Findings

This study did not corroborate the conclusions of other studies (Lapsley, Sison and Enright, 1976; Leming, 1981; Lockwood, 1978; Lawrence, 1980; and Rest, 1979). Findings in above cited studies were that moral educational courses that last at least six weeks together with participant discussions of controversial moral dilemmas buttressed by interactive exchanges with peers produced significant increases in the levels at which moral decisions are

made. The educational program used in this study (one fifteen minute session twice a week for fifteen weeks using the same interactive format) was not effective in obtaining significant change. However, the results did support Kohlberg's premise that age and experience is a prerequisite for advanced moral judgment. The older age group participants in this study had achieved higher levels of moral judgment.

It was noted that gains in moral judgment scores were greater in younger participants than older age groups although Analysis of Co-variance results indicated that these differences were not statistically significant at the .05 Alpha level.

An Analysis of Variance was run in addition to the Analysis of Co-variance for the age groupings. This offered further evidence to support the finding that although not significant, age had an important effect on moral judgment score. The significance level for this Analysis of Variance .0537.

Conclusions

Based on the findings of this study and the review of related literature the following conclusions are drawn:

1. Higher levels of advanced moral judgment in business students is not likely to be achieved by short term ethics educational programs added to existing business courses.
2. Achieving a level of advanced moral judgment is influenced in a significant way by the age of the person.

3. Previous research which has found that women have lower moral judgment levels should be viewed with caution.

Recommendations

For Practice

Comprehensive ethics courses should be offered early in the business course curriculum. These courses should focus on increasing students' overall awareness of ethical issues facing business managers today. They should provide an analytical format used to formulate and implement ethical decisions. These comprehensive ethics courses should then be reinforced through out the business program. This can be accomplished by inclusion of ethical issues specific to each business discipline.

For Further Research

Additional investigation is needed to investigate the relationship between age and the level of moral judgment used in making moral decisions.

Additional study is needed to investigate the relationship between gender and the level of moral judgment used in solving ethical dilemmas.

A replicate of this study should be made using a business setting in which a larger group of respondents could be engaged in the experiment.

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APPENDIXES

APPENDIX A

KOHLBERG'S SIX STAGES OF DEVELOPMENT

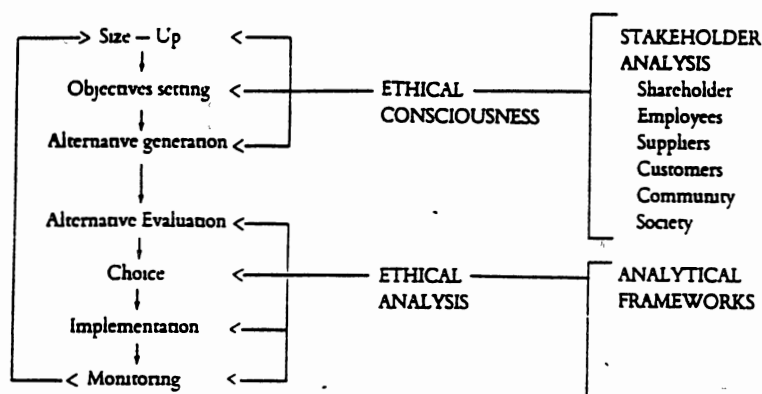
Stage	What is considered to be right
<u>LEVEL ONE - PRECONVENTIONAL</u>	
Stage One - Obedience and punishment orientation	Sticking to rules to avoid physical punishment. Obedience for its own sake
Stage Two - Instrumental purpose and exchange	Following rules only when it is in one's immediate interest. Right is an equal exchange, a fair deal.
<u>LEVEL TWO - CONVENTIONAL</u>	
Stage Three - Interpersonal accord, conformity, mutual expectations	Stereotypical "good" behavior. Living up to what is expected by people close to you.
Stage Four - Social accord and system maintenance	Fulfilling duties and obligations to which you have agreed Upholding laws except in extreme cases where they conflict with fixed social duties. Contributing to the society, group
<u>LEVEL THREE - PRINCIPLED</u>	
Stage Five - Social contract and individual rights	Being aware that people hold a variety of values; that rules are relative to the group. Upholding rules because they are the social contract Upholding nonrelative values and rights regardless of majority opinion.
Stage Six - Universal ethical principles	Following self-chosen ethical principles. When laws violate these principles, act in accord with principles.

Note Adapted from Kohlberg, L. (1969) Moral stages and moralization: The cognitive-developmental approach. In T. Lickona (Ed), *Moral development and behavior: Theory, research, and social issues* (pp. 34-35). Holt, Rinehart & Winston.

APPENDIX B

GUIDELINES FOR PAPERS AND

TEAM DISCUSSION



Using the Model shown above the following suggestions are offered:

1. Name and Date and Case in upper right hand corner.
2. Try to type papers if possible - if not use readable penmanship.
3. The first half of the model is to develop your awareness of all of the factors included in making ethical decisions.
 - a. First list the relationships of each of the stakeholder groups to the situation under discussion and how they are to be affected by decisions made.
 - b. List the most desirable outcomes for each stakeholder group.
 - c. List some of your ideas on how to deal with the problem considering the best interests of the stakeholder groups. (Some will lose and some will gain in most cases)
4. The second half of the model is to aid in your implementation of the alternative that you chose to use.
 - a. Indicate your choice of the best alternative and explain why you chose to implement it.
 - b. Indicate how you would put your "ethical" solution into action. (implementation)
 - c. All your decision once put into action will need to be monitored and evaluated. Indicate how you would do this.

APPENDIX C

PERMISSION FORMS

**CENTER for the study of
ETHICAL DEVELOPMENT**

University of Minnesota

James Rest, Research Director / 141 Burton Hall / 178 Pillsbury Drive / Minneapolis, MN 55455 / (612) 624 0876 or 624 4540
Muriel Bebeau, Education Director / 15136 Moos Tower / 515 Delaware Street SE / Minneapolis, MN 55455 / (612) 625 4633

09-19-1990

Renee Warning
Meinders School of Bus
2501 N Blackwelder
Oklahoma City, OK 73106

Dear Ms. Warning:

I grant you permission to use the Defining Issues Test in your study. If you are making copies of the test items, please include the copyright information on each copy (e.g., Copyright, James Rest, 1979, All rights reserved.

Best wishes for your study. Please send me a copy of your results.

Sincerely,



James Rest
Professor
Educational Psychology

**OKLAHOMA STATE UNIVERSITY
INSTITUTIONAL REVIEW BOARD
FOR HUMAN SUBJECTS RESEARCH**

Proposal Title: Ethics: Training: Institutionalizing Moral Decision
Making

Principal Investigator: Melvin Miller/Renee Warning

Date: September 26, 1990 IRB # ED-91-009

This application has been reviewed by the IRB and

Processed as: Exempt Expedite Full Board Review
Renewal or Continuation

Approval Status Recommended by Reviewer(s):

Approved Deferred for Revision
Approved with Provision Disapproved

Approval status subject to review by full Institutional Review Board at next meeting, 2nd and 4th Thursday of each month.

Comments, Modifications/Conditions for Approval or Reason for Deferral or Disapproval:

Signature:  Date: October 3, 1990
Chair of Institutional Review Board

13/04/11 10:10

APPENDIX D

CONSENT FORM

You are invited to participate in a doctoral study investigating the degree to which ethics education can instil advancement in moral judgment.

If you decide to participate, this study will involve two hours of class periods for the completion of questionnaires. I, Renee Warning, Ed.D. candidate in the Department of Occupational and Adult Education at Oklahoma State University, will conduct this research.

Any information about you that is obtained from this study will remain confidential and will not be disclosed without your permission. Upon completion of this study, findings will be reported in a general manner utilizing the data generated by the entire group participating.

Your signature below indicates your consent to participate in this study.

Signature of Participant Date

Signature of Investigator Date

APPENDIX E

DEFINING ISSUES TEST

OPINIONS ABOUT SOCIAL PROBLEMS

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

Please give us the following information:

_____ female
 Age _____ Class and period _____ male
 School _____

* * * * *

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

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

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

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid \$200 for the radium and charged \$2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about \$1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug? (Check one)

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

IMPORTANCE:

Great Much Some Little No

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

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

Most important _____ Second most important _____

Third most important _____ Fourth most important _____

STUDENT TAKE-OVER

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

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

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

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

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

IMPORTANCE:

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

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

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

ESCAPED PRISONER

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

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

Should report him Can't decide Should not report him

IMPORTANCE:

Great Much Some Little No

Great	Much	Some	Little	No	
					1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
					2. Everytime someone escapes punishment for a crime, doesn't that just encourage more crime?
					3. Wouldn't we be better off without prisons and the oppression of our legal systems?
					4. Has Mr. Thompson really paid his debt to society?
					5. Would society be failing what Mr. Thompson should fairly expect?
					6. What benefits would prisons be apart from society, especially for a charitable man?
					7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
					8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
					9. Was Mrs. Jones a good friend of Mr. Thompson?
					10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
					11. How would the will of the people and the public good best be served?
					12. Would going to prison do any good for Mr. Thompson or protect anybody?

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

Most important _____ Second most important _____

Third most important _____ Fourth most important _____

THE DOCTOR'S DILEMMA

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

What should the doctor do? (Check one)

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

IMPORTANCE:

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

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

Most important _____

Second most important _____

Third most important _____

Fourth most important _____

WEBSTER

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

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

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

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

IMPORTANCE:

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

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

Most important _____ Second most important _____

Third most important _____ Fourth most important _____

NEWSPAPER

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

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

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

Should the principal stop the newspaper? (Check one)

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

IMPORTANCE:

Great Much Some Little No

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

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

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

APPENDIX F

DATA SHEET

APPENDIX G

RANKING SHEET

2. To begin with, look only at the four rankings at the bottom of the page (the numbers in response to the question, "From the list of questions above, select the four most important: Most Important _____, Second Most Important _____, Third Most Important _____, Fourth Most Important _____.")

3. For the item marked as "most important" consult the chart below to find out what stage the item exemplifies. For instance, if a subject's first rank on the Heinz story was Item 6, this would be a Stage 4 choice; Item 10 on the Heinz story is Stage 5A; Item 4 on the Heinz story is an "M" item (explained in Interpretation section).

STORY	ITEM											
	1	2	3	4	5	6	7	8	9	10	11	12
Heinz	4	3	2	M	3	4	M	6	A	5A	3	5A
Stu.	3	4	2	5A	5A	3	6	4	3	A	5B	4
Pris.	3	4	A	4	6	M	3	4	3	4	5A	5A
Doc.	3	4	A	2	5A	M	3	6	4	5B	4	5A
Web.	4	4	3	2	6	A	5A	5A	5B	3	4	3
Newsp.	4	4	2	4	M	5A	3	3	5B	5A	4	3

4. After finding the item's stage, weigh the choices by giving a weight of 4 to the first rank ("most important"), 3 to the second rank ("second most important), 2 to the third rank, and 1 to the fourth rank.

5. For each 1st, 2nd, 3rd, and 4th ranked item in the six stories, enter the appropriate weight in the stage column on the subject's DATA SHEET. For instance, in the example above where the first choice was item 6, a Stage 4 item, enter a weight of 4 on the data sheet under Stage 4 in the box for Heinz story. If the item ranked "second most important" was Item 10 (a stage 5A item), then 3 points would be put under Stage 5A. If Item 4 were ranked 3rd, put 2 points under M, and so on.

6. The completed table on the DATA SHEET, will have four entries for every story and 24 entries altogether. (There can be more than one entry in a box, e.g., a first and second choice on the Heinz story at the same stage --in which case put both numbers in the box.)

7. On the subject's DATA SHEET, total each stage column (e.g., for Stage 2 column, add numbers by Heinz story, Student story, Prisoner, etc. Do this also for Stage 3, 4, 5A, 5B, 6 and M.).

8. To get the raw Principled morality score ("P"), add the points together.

APPENDIX H

**INSTRUCTIONAL SCHEDULE FOR BOTH
EXPERIMENTAL GROUPS**

Jan. 15	Orientation
Jan. 17	Pretests given
Jan. 22	Film: In Search Of Excellence (Peters, T. & Waterman D.)
Jan. 24	Discussion: In Search of Excellence (Peters T. & Waterman D.)
Jan. 29	Ethics introduction
Jan. 31	Business and Social Responsibility (Stoner & Freeman, 1989)
Feb. 4	Hohlberg's Stages and class participation (Apdx 2)
Feb. 6	Case: Union Carbide (Hay Gray & Smith, 1989)
Feb. 12	Test #1
Feb. 14	Ethics Problem Solving Model and application (Apdx 1)
Feb. 19	Film: Ethics in Business; (Arthur Anderson Corp.)
Feb. 21	Issue of Corporate Day Care (Wall Street Journal Nov. 30, 1987, p23.)
Feb. 26	Case: Coca Cola Does "What It Ought To". (Hays, Gray and Smith)
Feb. 28	Film: Ethical Terminations (Arthur Anderson Corp.)
Mar. 5	Hohlberg's Stages/Review
Mar. 7	Test #2
Mar. 12	The Law and Ethics in Hiring and Promotion (Phillips, 1991)
Mar. 14	Film: Ethics In Business; Training Film (Arthur Anderson Corp)
Mar. 19	Spring Break
Mar. 21	Spring Break
Mar. 26	Case: Apartheid in South Africa (Hays, Gray and Smith)
Mar. 28	Case: University of Arkansas: Ownership of Stock In South America (Hays, Gray and Smith)
Ap. 2	Ethics and Rewarding (Stoner and Freeman)
Ap. 4	Moral Responsibility of Corporate Executives For Disaster (Bishop, 1991)
Ap. 8	Review
Ap. 10	Test #3
Ap. 15	The Jimmy Carter Years (Stoner and Freeman)
Ap. 17	Corporate Ethics: A Research Report (Berenbiem, 1987)
Ap. 22	Corporate Creed or Corporate Greed (Bologna, 1980)
Ap. 24	Codes of Conduct In Business (Bowman, 1981)
Ap. 29	Posttests
May 2	Review
May 7	Final

Witness Jody McCoy

Witness Gregory Chen

APPENDIX I

**CONTROL AND EXPERIMENTAL GROUP PRE-TEST
AND POST-TEST SCORES**

Control Group		Experimental Group	
Pre	Post	Pre	Post
20	23.3	56.6	63.3
13.3	40	46.7	36.6
20	26.6	36.6	40
40	40	36.6	43.3
33.3	40	40	43.3
26.6	66.6	63.3	56.6
23.3	13.3	56.6	13.3
66.6	53.3	80	66.6
46.6	16.6	33.3	16.6
26.6	36.6	50	73.3
60	36.6	26.6	40
76.6	50	63.3	38.6
27.5	65	53.3	70
37.5	62.5	16.6	16.6
27.5	22.5	50	50
52.5	25	57.5	80
30	27.5	47.5	40
30	37.5	20	56
52.5	35	42.5	33.3
50	50	12.5	12.5
40	30	55	37.5
37.5	42.5	25	30
45	25	50	52.5
32.5	27.5	45	50
50	32.5	40	55
20	40	22.5	25
32.5	32.5	10	20
52.5	52.5	47.5	65
15	32.5	25	32.5
22.5	37.5	47.5	32.5
27.5	25.20		
15	25		
32.5	22.5		
20	17.5		

VITA 

Renee Warning

Candidate for the Degree of

Doctor of Education

Thesis: A STUDY OF THE EFFECT OF ETHICS EDUCATION ON MORAL JUDGMENT

Major Field: Occupational and Adult Education

Biographical:

Personal Data: Born in Sibley, Iowa, the daughter of Rene and Louisa Remmers.

Education: Graduated from Melvin Consolidated High School, Melvin, Iowa; received Bachelor of Business Administration degree from University of Central Oklahoma at Edmond, Oklahoma, August, 1986; received Master of Business Administration degree from the School of Business, University of Central Oklahoma, Edmond, Oklahoma in 1988; completed requirements for Doctor of Education degree at Oklahoma State University in May 1992.

Professional Experience: Lecturer at the School of Business, University of Central Oklahoma, January 1986 to present. Lecturer at the Meinders School of Business, Oklahoma City University, August 1990 to present. Fifteen years of related business experience.

Name: Renee Warning

Date of Degree: May, 1992

Institution: Oklahoma State University

Location: Stillwater, Oklahoma

Title of Study: THE EFFECTS OF ETHICS EDUCATION ON MORAL JUDGMENT
USED IN PROBLEM SOLVING OF ADULT BUSINESS STUDENTS

Pages in Study: 112

Candidate for the Degree of
Doctor of Education

Major Field: Occupational and Adult Education

Scope and Method of Study: This quasi experimental study was conducted during the spring semester of 1991 to investigate the impact of an ethics instructional program on levels of moral judgment of adult business students. An ethics education program was administered to subjects in two experimental groups and two control groups for 15 minutes twice per week for 15 weeks. The Defining Issues Test (DIT) was used as a pre/posttest to measure growth in moral judgment. The DIT consisted of seven stories presenting controversial social issues to subjects who were asked to rate related issues used in solving ethical dilemmas. Pretest score data were analyzed by means of t-tests to identify any differences between control and treatment groups, gender differences and differences due to age groups. Data were analyzed by means of t-tests to determine significant changes between control and treatment groups, and between genders. The Analysis of Co-variance was used among age categories.

Findings and Conclusions: Based on data analysis it was found that the ethics instruction program made no significant change in the levels of moral judgment used in problem solving in the treatment groups as compared with the control groups. No significant pre and posttest differences in moral judgement was found between males and females; however, older participants had significantly higher pretest levels of moral judgment than did younger subjects. The Analysis of Co-variance did not indicate a significant change among any of the age groups. It was concluded that higher levels of advanced moral judgment are not likely to be programs and that previous which has found that women have lower levels of moral judgment should be viewed with caution. Recommendations for practice and further research are made.

ADVISER'S APPROVAL

Melvin R. Miller