Chapter 7
Moral Reasoning and Business Ethics: Implications for Research, Education, and Management

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During the last decade, a number of business ethics researchers have turned to moral psychology for theory, constructs, and measures that could be applied to social scientific research in the business ethics domain. The search for moral character, a stable personality trait that would predict immoral behavior began with the classic classroom cheating studies of Hartshorne and May (1928). However, because these studies seemed to demonstrate that immoral behavior was situation specific, the subject of moral character was neglected by psychologists for some time.

Beginning in 1958, Kohlberg revived interest in moral psychology. His theory of cognitive moral development (Kohlberg 1969) emphasized the cognitive basis of moral judgment and its relationship to moral action. A number of business ethics researchers have been guided by Kohlberg's (1969) cognitive moral development (CMD) theory. Although not without its critics (see Kohlberg et al. (1983) for a synopsis of and reply to criticisms), Kohlberg's CMD theory has become the most popular and tested theory of moral reasoning, and it remains among the most cited work in contemporary behavioral science (Endler et al. 1978). This paper will review CMDresearch, focusing in particular on related business ethics research. It will draw implications from this research for future business ethics research, for business ethics education, and for the management of ethical decision-making behavior in organizations.

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Moral Reasoning – Cognitive Moral Development

Rest (1986, p. 3) posed the question, "when a person is behaving morally, what must we suppose has happened psychologically to produce that behavior?" He proposed that, in such a situation, a person would perform at least four basic psychological processes: (1) interpret the situation in terms of the actions possible, and the effects of these actions on the self and others; (2) judge which course of action is morally right; (3) give priority to what is morally right over other considerations; (4) demonstrate the strength and skills to follow through on the intention to behave morally.

CMD theory focuses primarily on the cognitive processes involved in number two, judging what is morally right. The research has been concerned with discovering people's moral judgment strategies by presenting them with hypothetical moral dilemmas, and then asking them to judge what is right and wrong and to explain their justifications. Their explanations and justifications are then used to characterize how they reason about moral dilemmas. Theory and research have also linked moral judgment to moral action (Blasi 1980). How people think is related to what they do.

The groundwork for CMD theory was laid by Jean Piaget (1932) in his seminal study of moral development in children. Piaget challenged social influence views of morality (Durkheim 1925). He viewed morality as cognitive and developmental. Moral rules developed through the child's active role in constructing moral judgments as well as through interactions with the social environment. Piaget identified two separate moralities that characterize children from ages 6 through 12. The first type of morality, characteristic of young children, can be described as a morality of constraint or heteronomy (subject to another's law) where right is defined as obedience to authority. This morality is gradually replaced by a morality of cooperation or autonomy where children begin to comprehend rules separate from adult authority figures. Through peer interaction and cognitive development, the child eventually begins to see morality as a necessity of the social system, and rules are viewed as mutually beneficial. The child becomes more autonomous and less dependent on externally imposed rules.

Kohlberg (1969) built on Piaget's work with his longitudinal research on children and young adults. Kohlberg followed 58 American boys ranging from 10 to 16 years of age, interviewing them every 3 years over a 12 year period. His research, based upon the boys' open-ended responses to hypothetical moral dilemmas, delineated a structure of moral reasoning and its gradual transformation from middle childhood to adulthood. According to the theory, changes in moral reasoning result from cognitive disequilibrium that occurs when an individual perceives a contradiction between his or her moral reasoning level and the next higher one (Turiel 1969).

Over 20 years of research has provided considerable support for Kohlberg's model. In general, this research supports the major components of the model, that is: (1) moral judgment has a cognitive base; (2) stages represent qualitative differences in modes of thinking – hierarchical, integrated systems of thought, each representing

a structured whole; (3) individuals develop through an invariant sequence of stages; (4) individuals prefer problem solution at the highest stage available to them (Kohlberg 1969).

Kohlberg's CMD framework provides three broad levels of CMD, each composed of two stages. Within each level, the second stage is a more advanced and organized form of the level's general perspective Individuals move forward through an invariant sequence of stages, each representing a qualitatively different mode of thought. The stages are considered to be structured wholes in the sense that an individual's moral reasoning is expected to form a coherent system that can best be described by one stage or by a combination of at most two adjacent stages. The stages are also hierarchical integrations, meaning that people comprehend reasoning at all stages below their own, but not more than one stage above their own. The basic structural element in the development of moral maturity is social perspective – or the view one has of his or her relationship to society and its moral rules and expectations. Although six stages are identified, few people reach the highest stages (Colby et al. 1983).

At level one (labeled the preconventional level), a person views rules as imposed and external to himself or herself. Moral decisions are explained and justified in terms of one's own hedonistic interests, and particularly in terms of rewards and punishments, and the exchange of favors. Stage one individuals are guided by obedience for its own sake. Punishment avoidance is the key consideration. At stage two, a marketplace orientation develops. Fairness is interpreted in terms of a "you scratch my back, I'll scratch yours" reciprocity.

At level two (the conventional level) the individual has internalized the shared moral norms of society or some segment like a family or peer group. What is right is explained in terms of living up to roles and what is expected by relevant others, fulfilling duties and obligations, and following rules and laws. Kohlberg's research placed most American adults at this conventional level. More, specifically, at stage three, good behavior is thought to be what pleases or helps others and what is approved by them. Motives and intentions also become important at this stage. The stage three individual is interested in interpersonal trust and social approval. At stage four, the individual's perspective broadens to consider the society of which s/he is a part. Fulfilling agreed upon duties becomes important. At this stage, moral judgments consider the rules and laws of social, legal, or religious systems that are designed to promote the common good.

The level three (postconventional) individual has gone beyond identification with others' expectations, rules, and laws. S/he sees beyond law for law and order's sake. More specifically, stage five individuals are aware of the relativism of personal values. The emphasis is still on laws and rules because they represent the social contract, but stage five thinking considers the possibility of changing the law for socially useful purposes. At stage six, the individual is guided by self-chosen ethical principles of justice and the rights of human beings. These principles may be consistent with society's expectations but they are not selected for that reason. Some values and rights must be upheld regardless of what others think. When laws and one's own principles conflict, one acts in accord with the principles. According to

Kohlberg, less than 20% of American adults reach principled level thinking. In his reformulation of moral stages, Kohlberg (Colby et al. 1983, p. 60) stated that stage six is not supported by the longitudinal data. "Stage 6 has disappeared as a commonly identifiable form of moral reasoning." The theoretical definition of stage six, derived from the writings of a very small sample of society's moral leaders, represents a terminal stage that very few individuals are expected to reach.

In a somewhat controversial stance, Kohlberg (1981) claimed that higher stage judgments are objectively "better" and therefore more desirable than lower stage judgments according to both cognitive and moral criteria. In terms of cognitive criteria, he argued that stage five judgments are more cognitively complex (more differentiated) and more cognitively inclusive (include lower stage judgments). In terms of moral criteria, he argued that stage five judgments "come closer to the formal criteria distinguishing moral from nonmoral judgments. These criteria have been elaborated by a tradition of 'formalist' moral philosophy running from Kant to contemporaries such as Hare, Frankena, Brandt, Rawis, and Raphael" (Kohlberg 1981, p. 191). Thus, Kohlberg found philosophers' justifications of moral reasoning to be consistent with his explanations of developmental movement to a principled thinking stage.

Measurement of Cognitive Moral Development

The ability to conduct solid social scientific research relies upon the availability of valid and reliable measurement instruments. During the 1970s CMD researchers developed a number of instruments to measure CMD, perhaps motivated by Kurtines and Grief's (1974) critical review of Kohlberg's original measurement methods. Kohlberg and colleagues (Colby et al. 1983) published their longitudinal study of moral judgment along with an in depth treatment of the measurement issue. Gibbs and colleagues (Gibbs and Widaman 1982; Gibbs et al. 1984; Basinger and Gibbs 1987) continue the development of measures that are easier to administer and score. At the same time, Rest (1979) developed a different approach to measuring CMD, the Defining Issues Test.

Standard Issue Scoring

Kohlberg's method of assessing subjects' CMD is termed standard issue scoring (Colby et al. 1983). Standard issue scoring evolved over a number of years from earlier approaches. It specifies stage criteria and defines the moral concepts that are used within each stage. The interview and its scoring are designed to "elicit a subject's: (1) construction of his/her own moral reasoning, (2) moral frame of reference or assumptions about right and wrong, and (3) the way these beliefs and assumptions are used to make and justify moral decisions" (Colby and Kohlberg 1987, p. 61). Standard hypothetical dilemmas are used to elicit subjects' reasoning. Kohlberg

and colleagues (Colby et al. 1983) presented substantial evidence supporting the reliability and validity of the standard issue scoring method.

The most famous dilemma, known as the Heinz dilemma, takes place in Europe. It asks subjects to react to a situation where Heinz is the husband of a woman dying from a special kind of cancer. A very expensive drug might save her. However, Heinz has only half of the $4,000 he needs. The druggist will not sell it cheaper or let Heinz pay later. Heinz considers breaking into the drugstore to steal the drug for his wife. Through systematic analysis of responses to a series of 9–12 standardized probe questions, the standard issue scoring method elicits the cognitive organization or patterning of subjects' responses.

To score CMD, subjects' responses to these standard hypothetical moral dilemmas and standardized probe questions are first classified into two standard issue categories. For example, in the Heinz dilemma, responses are classified as upholding the life issue if they argue in favor of stealing the drug, and as upholding the law issue if they argue against stealing the drug. Responses are then further analyzed in terms of the content of the justification of the choice and the value content appealed to in the justification. Finally, formal stage structures are identified. The focus is on a subject's competence. Probe questions are designed to elicit the upper limits of the subjects' thinking (Colby and Kohlberg 1987; Kohlberg et al. 1983).

Although the validity and reliability of Kohlberg's standard issue scoring system has been criticized (Cortese 1984), the most serious limitation to its use in research may be the significant amount of time required to conduct lengthy interviews with each research subject, and the substantial training needed to prepare researchers to conduct interviews and score responses. These limitations have led to the development of measures that can be group administered and more objectively scored.

Sociomoral Reflection Measure

Gibbs and Widaman (1982) developed a non-interview, open-ended written measure called the sociomoral reflection measure (SRM). This measure retains the qualitative nature of interview responses, but answers are written in response to a printed open-ended questionnaire rather than being verbalized in an interview setting. Like the interview, the SRM is a production task. Subjects make decisions in response to hypothetical moral dilemmas, and then justify these decisions. Researchers can train themselves to administer and score the instrument and it can be administered in groups. The developers report psychometric properties comparable to those of the moral judgment interview and the standard issue scoring method. A correlation of 0.85 with the standard interview method was reported in an age-heterogeneous sample.

One benefit of these open-ended measures, oral or written, is that social desirability of responses is not considered to be a problem. According to CMD theory, subjects who are asked to spontaneously generate responses to hypothetical questions are cognitively incapable of generating responses at a higher level than their highest stage of moral development.

Sociomoral Reflection Objective Measure

The sociomoral reflection objective measure (SROM) reflects a further contribution to the assessment of moral reasoning. Based upon the SRM, Gibbs and colleagues (Gibbs et al. 1984) developed an objective, multiple-choice measure of reflective sociomoral reasoning. The measure is a group-administered recognition task that assesses the developmental status of justifications for moral decisions. It presents dilemmas adapted from Kohlberg's Moral Judgment Interview and a series of stage-significant response options representative of stage one through five. The measure can be completed in about 45 min. The developers reported acceptable reliability and validity of the measure for adults and most adolescents. In addition, there was no significant correlation with the Marlow-Crowne measure of social desirability. Finally, the SROM was found to have substantial concurrent validity with the SRM and Kohlberg's moral judgment interview, although scores on the recognition task were generally slightly higher than spontaneously produced responses.

Because this measure provided little advantage over the SRM in terms of administration time, Basinger and Gibbs (1987) conducted a study to determine whether a shortened version of the objective measure would achieve acceptable reliability and validity. The shortened form presents two moral dilemmas and a series of response options representative of stages one through four. Subjects indicate whether these options are "close" or "not close" to their own reasoning, and which option is closest to their own thinking. The short form takes 20 min less to administer and it is quicker to score. The shortened form evidenced acceptable validity and reliability for eleventh graders, but not for sixth graders or juvenile delinquents and there was no evidence that higher moral judgment scores reflected social desirability bias. Because it excludes stage five items, the SROM may be inappropriate for research with adults.

Defining Issues Test

The Defining Issues Test (DIT) (Rest 1979) is the most widely used assessment technique for studying moral judgment (Gibbs and Widaman 1982). Like the more recent work of Gibbs and colleagues (Gibbs et al. 1984; Basinger and Gibbs 1987), the DIT is a recognition task rather than a production task. It does not require the subject to produce responses to open-ended questions. Rather, it presents the subject with six hypothetical moral dilemmas and for each, a list of considerations for determining what is right. Subjects rank the four most important considerations, and these are used to create the P score. The measure shows how a subject construes a moral dilemma by indicating those issues the subject perceives as most important for decision making. A high P score indicates that the subjects give more importance to principled considerations. Because of the very different measurement approaches, scores on the DIT are not expected to be equivalent to scores on Kohlberg's open-ended test. Thus, it is considered to be inappropriate, based on the DIT, to make statements about what specific Kohlberg stage (i.e., one through six)

a subject is in (Gibbs and Widaman 1982). However, based upon the P score, subjects can be characterized as more or less principled. In addition, Rest provides suggested cut-off scores that can be used to divide samples into groups. For example, subjects can be divided into principled and non-principled categories. The DIT measure has been used in over 500 studies and has been found to have favorable psychometric properties (Davison and Robbins 1978). In addition, Rest incorporated a check for socially desirable responses and appropriate test-taking set. For example, he recommended computation of the M score. The M score indicates to what extent the subject is choosing items that are lofty sounding but meaningless. Protocols with M scores of 8 or higher are eliminated from further analyses (Rest 1979).

A number of the measures, described above, have been used or adapted for business ethics research designed to understand managers' moral reasoning and moral behavior. This research is reviewed below.

Research on Cognitive Moral Development and Business Ethics

Adult Moral Reasoning

CMD research provides overwhelming evidence that moral reasoning scores increase with age. This research has been replicated many times and with many samples in the U.S. and abroad. In addition, the age trend has been demonstrated with Kohlberg's interview measurement techniques as well as with the more objective DIT measure (Rest 1983). However, more is known about CMD in children than in adults. Research has found that some subjects at lower stages of moral judgment (stages one to three) continued to develop toward stage four from ages 16–24. Other research has suggested that higher-stage subjects (stages four to six) became more consistently high stage (Kohlberg and Kramer 1969). Kohlberg argued that stages five and six (when it exists) are adult stages, typically not reached until the late twenties or beyond (Kohlberg and Turiel 1973).

Continuing adult development has been linked to higher education. The longitudinal research found significant positive correlations between adult CMD and educational level ranging from 0.54 to 0.69. In fact, years of formal education has been one of the most consistent correlates of CMD, although it is not clear what accounts for this relationship (Rest and Thoma 1985; Rest and Deemer 1986). Rest and Deemer (1986, p. 57) argued that education is a proxy variable for other kinds of life experience. They suggested that moral judgment accompanies "a growing awareness of the social world and one's place in it."

In recent theorizing about adult moral reasoning, Kohlberg and colleagues (Kohlberg et al. 1983) have distinguished between the notions of hard and soft stages. Four criteria are used to identify hard stages. Hard stages represent qualitatively different modes of thinking. They follow an invariant sequence, are structured wholes, and are hierarchically integrated. Unlike hard stages, soft stages do not

depend on the unconscious emergence of new cognitive functions. Rather, they depend on more conscious "formal reflection" and the adult's focus on the self as a whole system of meaning in relation to an ethical philosophy and a more complete world view. Kohlberg and his colleagues concluded that soft stages may be more useful than hard stages for characterizing the hierarchical levels of positive development in adulthood. "The strict Piagetian stage construction may need to be abandoned in the study of adult development but the idea of soft stages of development in adulthood should not be" (Kohlberg et al. 1983, p. 40). Additional research will be required to more fully understand adult moral development.

Manager's Moral Reasoning

A number of researchers have proposed that Kohlberg's CMD stages can be used to characterize managers' moral reasoning in business ethics situations (Derry 1989; Manning 1981; Stratton et al. 1981; Treviño 1986; Weber 1990). For example, Manning (1981) hypothesized that CMD theory could be applied to explain and predict a manager's reasoning in a performance appraisal situation where a salespersons' productivity had decreased due to emotional problems. He proposed that a stage one manager would reason through the situation in terms of potential consequences for him/her (the manager) if discipline wasn't imposed. Alternatively, a stage four manager would be expected to take into account broader issues such as the salesperson's past loyalty.

Stratton et al. (1981) empirically tested a similar proposition. They used Kohlberg's six CMD stages to classify management students' responses in an ethical dilemma involving padding an expense account. They found that subjects who recommended padding the expense account were more likely to use a rationale categorized in the first three moral reasoning stages. Students who recommended not padding the account were much more likely to use higher level arguments.

Recent theory and research suggest that moral reasoning may vary depending upon the context. Higgins et al. (1984) argued that individuals' moral judgments operate within a range of moral development stages. Because situational cues are salient in real situations, moral judgments in these situations can be expected to be lower than they are in hypothetical dilemma situations that are less personally involving. Treviño (1986) applied this argument to managers in business settings. She proposed that managers' moral reasoning level would be lower in actual work-related decision situations compared to the hypothetical non-work related dilemmas typical of Kohlberg's research. Weber's (1990) research supported this hypothesis in an interview study with 37 managers. Each manager was confronted with three ethical conflicts, one taking place outside of the business context and two within a corporate context. Based upon Kohlberg's standard issue scoring (Colby et al. 1983), Weber (1990) developed two hypothetical business dilemmas so that managers' moral reasoning in business dilemma situations could be compared to their reasoning in response to Kohlberg's Heinz dilemma. He also developed a reliable abbreviated

adaptation of Kohlberg's standard issue scoring method. Weber (1990) found that conventional level (stages three and four) reasoning predominated in the business context dilemmas. Consistent with the hypothesis, the reasoning level in the two business-related conflicts was significantly lower than the reasoning level for the non-business dilemma.

The finding that managers use lower level moral reasoning to resolve business context dilemmas is consistent with an understanding of human behavior based upon cultural anthropology. Cultural anthropology has found that individuals play highly differentiated roles that allow them to accept different values, norms and behaviors in different life domains (e.g., work and home). This context-specificity allows human beings to cognitively organize their experience while limiting cognitive dissonance and felt contradiction (Barrett 1984; Treviño 1990). Given Weber's (1990) findings, this context-specificity notion may have important implications for our understanding of moral reasoning in organizations. Future research should delve further to understand these differences between managers' moral reasoning in business versus other settings. For example, managers may feel pressured to rely upon justifications that are consistent with the reward structure of the business organization rather than the highest stage available to them. Obedience to authority, conformity to the group, and maintenance of the status quo may be more salient considerations in the business organization setting, constraining and limiting the expression of managers' moral reasoning capacity.

In a study of managers that investigated the relationship between age, education, and CMD, Elm et al. (1990) found that older managers and those with longer tenure with the firm had lower moral reasoning scores, as measured by the DIT. This finding was not due to differences in educational level. The study found no significant relationship between education and moral reasoning level. Given the previous evidence for a strong relationship between age and CMD, and educational level and CMD, these findings must be considered cautiously. However, it is possible that in situations that constrain an individual's freedom to select and consider various moral points of view, moral reasoning may be retarded rather than facilitated. For example, if the business organizational context focuses the individual's attention on quantitative analysis of numbers rather than more qualitative moral issue considerations, or on obedience and conformity rather than broader issues of rights and justice, moral growth may not be supported.

Moral Reasoning and Gender

With more women in the work force, it becomes important to address the question of CMD and gender. Do men and women differ in terms of moral reasoning? And, if so, what implication, if any, does this difference hold for the business setting?

Carol Gilligan (1977) has become widely recognized for her criticism of Kohlberg's justice perspective on moral reasoning as it applies to women. Kohlberg developed his justice-based theory using an all-male longitudinal sample, but argued

that the theory was applicable to both genders. Gilligan's interviews with women about their experiences of moral conflict in an abortion decision situation led her to claim that Kohlberg's justice perspective on moral reasoning was gender-biased and inadequate for capturing women's moral reasoning. She argued that Kohlberg's justice perspective places the self as moral agent against a background of social relationships. Judgments about the conflicting claims of self and others are made against a standard of equality. Alternatively, in Gilligan's proposed "care" perspective that she argued is more likely to be used by women, relationships become the focus. For example, the public abortion debate centers on a justice perspective. Claims of the fetus and the pregnant woman are either balanced or placed in opposition in terms of rights and respect for individuals. However, when framed as a problem of care, the focus shifts to questions of the connection between the women and the fetus and whether it is caring or careless to end the connection (Gilligan and Attanucci 1988).

Gilligan and Attanucci (1988) summarized two studies in which they conducted interviews to determine whether men and women differ in terms of the moral concerns they raise when discussing actual moral conflicts in their lives. Interview data was scored in terms of the most frequent mode of moral reasoning, care only or justice only. One study of 11 women and 10 men matched for high levels of education and professional occupations supported the idea that men are more likely to raise justice concerns and women are more likely to raise care concerns. However, a second study of medical students did not support the hypothesized relationship between gender and moral orientation. The moral reasoning of medical students, both men and women, seemed to be strongly influenced by the powerful cultural norms of medical practice.

Reporting on DIT-related research, Rest (1986) reported that sex differences on the DIT are trivial, and that when they exist, females score higher. Sex differences explain less than one-half of 1% of the variance in DIT scores. Thus, he argued that Gilligan's view regarding gender differences is not at all supported by DIT-based research (Rest et al. 1986).

Derry (1987, 1989) conducted a study of business managers based upon Gilligan's work. She hypothesized that male and female business managers would differ in moral reasoning – that females would voice a morality of care more frequently and men would more frequently voice a morality of justice. She interviewed first level managers ranging in age from 32 to 62. Her findings did not support the gender difference hypothesis. She found no significant differences in the moral reasoning of men and women managers. In fact, all but one of the managers who described a moral conflict at work used primarily rights reasoning.

Derry concluded that the gender differences that have been found in other research may be context specific and do not carry over into careers and organizational cultures where men and women are trained to think in certain ways. Women business managers are simply using the reasoning processes that are consistent with their organizational roles and responsibilities and that they believe will be rewarded in the business context. Like Weber's (1990) work, this research suggests that the norms and roles of the business context may have a powerful influence on managers'

moral reasoning. And, consistent with the findings for medical students (Gilligan and Attanucci 1988), these norms and roles appear to similarly influence men and women.

Moral Reasoning and Culture

CMD theory argues that moral judgment development is universal. Human beings follow a similar developmental course in terms of how they judge right and wrong in moral dilemma situations. The underlying conceptions and categories are proposed to be common across all human cultures. Snarey (1985) conducted a literature review pertaining to the cross cultural research. He reviewed 44 studies conducted in 26 cultural areas. Forty-four percent of the samples represented non-European populations that have been influenced by the West (e.g., India, Japan). Thirty-three percent included tribal or village folk populations. Many of the samples included adults. Based upon the evidence provided in these studies, Snarey concluded that the cross-cultural research supports the invariant sequence proposition. The full range of stages was represented in the data. Stages one to four were universally in evidence. Stage skipping and stage regressions were rarely found. Although stage five was rare, it was evident in approximately two-thirds of the populations that included subjects aged 18–60 and older. Nearly all samples from urban cultures or middle-class populations exhibited some principled reasoning.

Rest et al. (1986) examined research findings from 20 DIT-based studies conducted in 15 cultures. In their review, they found that the similarities between cultures were much more striking than the differences, suggesting additional support for the universality claim, as well as support for the portability of the DIT for cross-cultural research.

Cross-cultural research in business ethics could benefit from the application of Kohlberg's CMD model. This research would provide a common theory base for comparing managerial cognitions in ethical dilemma situations. Stage definitions could be used as a common basis for categorizing and explaining how managers from different cultures think about ethical dilemmas in their work. The emphasis, as always with Kohlberg's model, would be on managers' thought processes, their rationales, justifications, and explanations for why a particular action is right or wrong. For this research to be conducted effectively, work will be required to adapt CMD measures to the languages and cultures to be studied (Treviño 1988).

CMD theory would also support the development of hypotheses and empirical research to investigate the influence of culture on the moral reasoning of managers. For example, Kohlberg (1969) argued that development derives in part from participation in decision making and role-taking opportunities. Therefore, cultures oriented toward group decision making, active involvement of the individual, and mutual responsibility, may contribute to moral judgment development (Treviño 1988).

Managers' Moral Reasoning and Behavior

Although moral cognition is an important and interesting field of study in itself, the question of a possible link between cognition and behavior has been the focus of much CMD research. The proverb, "As a man thinketh, so is he" suggests that thoughts and behaviors are related. However, others have argued that thoughts and words have little relationship to deeds. Mischel and Mischel (1976, p. 107) argued that "history is replete with atrocities that were justified by involving the highest principles … in the name of justice, of the common welfare, of universal ethics, and of God, millions of people have been killed and whole cultures destroyed." Despite this skepticism, Kohlberg (1969) argued that cognition and action should be related due to the individual's drive to achieve consistency between thought and behavior. Thus, he proposed that higher stages of CMD should be related to more ethical behavior.

The empirical research on the relationship between moral judgment and behavior supports a moderate relationship between the two. For example, CMD has been found to be significantly related to cheating behavior (Grimm et al. 1968; Malinowski 1979; Malinowski and Smith 1985), resistance to pressure from an authority figure (Kohlberg 1969), helping behavior (Kohlberg and Candee 1984), and whistleblowing (Brabeck 1984). In a critical review of the moral cognition/moral action empirical literature, Blasi (1980) concluded that: (1) considerable support exists for a moderate statistical relationship between moral reasoning and moral action; (2) moral reasoning is important, but does not fully explain delinquent behavior; (3) weaker support exists for the relationship between CMD and stage honesty or altruism; (4) less support exists for the hypothesis that principled individuals are more likely to resist social conformity pressures in moral dilemma situations.

More recently, Thoma (1985) reviewed about 30 studies based upon the DIT measure. The behaviors studied varied broadly from naturally occurring phenomena such as delinquency to laboratory simulations of behavior such as cheating. Similar to Blasi's (1980) finding, the link between moral judgment and behavior was pervasive, but moderate, with correlations of about 0.30. In a particularly interesting finding, moral judgment, as measured by the DIT, was significantly related to the quality of medical interns' overall job performance (Candee 1985). Although it is arguable that moral judgment is more important to the physician's work than to other work roles, this research raises questions about the potential relationship between moral judgment and managerial performance or perhaps moral judgment and effective leadership. Words like integrity and values are frequently used to characterize effective business leaders. Empirical research will be required to investigate the potential relationship between CMD and leadership or management effectiveness.

Several research studies have demonstrated a significant relationship between moral reasoning level and behavior in business situations. For example, Vecchio (1981) hypothesized and found that CMD level moderated inequity resolution. In overpayment

conditions, individuals higher in CMD were more likely to maximize work performance quality and minimize quantity. In addition, in two in-basket decision-making studies, Treviño and colleagues (Treviño et al. 1985; Treviño and Youngblood 1990) found that moral reasoning level, as measured by the DIT, was significantly related to ethical decision behavior. More principled subjects made significantly more ethical decisions. Similarly, Ponemon (1990) demonstrated that auditor underreporting was systematically related to the level of moral reasoning. Underreporting refers to the underreporting of chargeable time where auditors report fewer hours than they actually utilized to complete a task. In an experimental laboratory study of 88 auditors from a national public accounting firm, those with lower DIT scores under-reported most severely.

Given support for the moderate relationship between moral judgment and moral action, researchers have begun to consider additional variables that are proposed to mediate this relationship. Higgins et al. (1983) presented evidence regarding the importance of judgments of responsibility as potential mediators between judgments of what is right and moral action in a particular situation. Judgments of responsibility may serve as important mediators between moral judgment and action in actual job situations. Responsibility judgments may be influenced by role expectations. For example, within a work organization, professionals and individuals at higher hierarchical levels may be held to stricter moral standards (Hamilton and Sanders 1981). Thus, a physician is likely to feel personally responsible for the consequences of a medical decision. However, for lower level workers, responsibility may be more easily diffused to peers or superiors, making correspondence between moral thought and moral action less likely. The social psychological literature has documented this diffusion of responsibility phenomenon in bystander intervention studies. With diffusion of responsibility, if an individual is one of many observing an emergency, he feels his own responsibility for taking action lessened and he is less likely to help the victim (Darley and Latane 1968; Latane and Darley 1986). Similarly, this phenomenon may occur in organizational settings where someone else (generally a superior) is supposed to be responsible. Thus, organizations wishing to promote moral behavior that is consistent with moral reasoning may need to find managerial structures and systems that encourage individual managers to take personal responsibility for their decisions and actions (Treviño 1986, 1990; Turiel and Smetana 1984).

Influencing Moral Reasoning

Given the research support for a relationship between moral cognition and moral action, it is appropriate to ask whether moral reasoning can be influenced. The next sections will focus on research suggesting that moral judgments can be affected by the work itself, by training interventions, and by group decision-making and leadership.

The Work Itself

Moral reasoning is thought to be a distinct cognitive domain that can be influenced through interaction with one's environment. Thus, it is reasonable to suggest that an adult's work may influence the development of moral reasoning. Kohlberg and colleagues found that some adults continued to advance in moral reasoning after leaving formal schooling (Colby et al. 1983). They proposed that two characteristics of the work itself may play a role in the continuing development of moral reasoning: role taking opportunities and responsibility for the resolution of moral dilemmas. Role taking means taking account of the perspective of others. Thus, according to the theory, individuals whose work affords them the opportunity to hear and consider others' viewpoints, will be more likely to advance in moral reasoning as a result of their work. Similarly, individuals whose work requires them to be responsible for resolving moral conflicts (e.g., physicians) would be more likely to advance. Little research has been conducted to test these propositions. However, a study by Armstrong (1987) is suggestive. Armstrong compared the moral reasoning scores (as measured by the DIT) of practicing accountants with an average of 1 year of graduate education with the moral reasoning scores of college students, graduate students, and adults in general as reported in Rest's data. CPA respondents' scores were significantly lower than both college student scores and graduate student scores, suggesting that accountants' moral reasoning scores were more like those of adults in general. She concluded that accountants' college education may not have fostered moral growth. However, it is also possible that the work of accountants is in some way related to a loss or regression in moral growth. Longitudinal research will be required to test this possibility. Management researchers may wish to ask the question, does the work of business managers generally contribute to development in moral reasoning or not?

Training and Education

Many managers assume that any individual of good character should be able to function effectively, making the moral decisions required of a manager in today's complex business environment. However, Rest (1988, p. 24) argued that "to assume that any 20 year old of good general character can function ethically in professional situations is no more warranted than assuming that any logical 20 year old can function as a lawyer without special education." The basic disposition of good general character requires additional special education in the profession's unique problems and the approaches to solving them.

   Thus, one potential practical approach to influencing moral reasoning is through CMD-based education and training interventions. The moral education literature suggests that moral education programs based upon moral development theory have succeeded in producing substantial gains in moral reasoning especially with participants in their twenties and thirties. These training programs are aimed at helping participants to think through moral controversy by raising hypothetical ethical

dilemmas. The purpose of the training is to promote movement through moral reasoning stages by exposing participants to reasoning one stage higher than the one the participant generally uses. Theoretically, the discussion will promote internal cognitive conflict, leading the participant to question his or her own reasoning, and consider the next higher stage reasoning. This begins a restructuring of cognitive patterns and positive change (Rest 1988). These strategies have been tested and supported with children as well as adults in dental, medical, and business education settings (Boyd 1981–1982; Candee 1985; Goldman and Arbuthnot 1979; Penn and Collier 1985; Power et al. 1989). Many of these studies have demonstrated increases in moral judgment in a relatively concentrated period of time (Power et al. 1989). A meta-analytic review of over 50 DIT-based studies (Rest and Thoma 1986) included 12 studies with adult students. This review suggested that the most effective educational programs are those that involve dilemma discussions and those that last from 4–12 weeks. In addition, adult groups advanced more than younger groups. Future research is needed to investigate whether these advances that result from educational interventions bring about concomitant changes in behavior. Additional research will also be needed to determine whether educational interventions can influence other aspects of moral decision making such as the identification of a situation as a moral dilemma, a skill that has been overlooked in most moral education programs (Candee 1985).

Kohlberg and colleagues (Power et al. 1989) have recently addressed what they perceive to be some limitations of these moral education programs. First, most traditional moral education programs direct attention to hypothetical dilemmas rather than to real world problems. Second, although moral education programs have been shown to increase moral judgment scores, behavior is not likely to change until stage five, principled thinking (Blatt and Kohlberg 1975). At lower stages, the influence of the social context is extremely important. An underlying theoretical tenet of CMD theory argues that moral judgment development occurs through the interaction of the individual with his or her environment. Thus, Kohlberg proposed that moral development and behavior could be positively influenced via participation in "just communities," schools that treat their students justly and encourage them to take an active role in making their community more just. These schools are governed democratically, holding weekly community meetings to discuss issues of moral concern. At these meetings, students are exposed to various points of view. Students also participate in the development of a social contract that defines the rights and responsibilities of community members. Finally, students and teachers have the same basic rights of freedom of expression, respect from others, and freedom from physical or verbal harm. The underlying assumption is that the institutional climate created in these just communities will provide the conditions that are necessary for moral growth. Studies comparing several just community high schools with comparison schools found the just community schools to be higher on a measure of moral culture. In addition, students from several of these schools scored higher on measures of individual CMD (Power et al. 1989).

Based upon this research, Higgins and Gordon (1985) have begun to develop a theory of the climate of work organizations. Their study of worker-owned companies

suggests that informal educational processes in work organizations can be made more explicit and formal. In addition, they argue that educational experiences in the workplace should promote individual moral development. They have developed a method that allows workplace norms to be assessed in terms of CMD theory and suggest that it may be applicable to the many recent attempts at democratization of the workplace in the U.S.

This research has potential implications for business ethics education as well as for management. First, a typical discussion about how business ethics education should be conducted often resolves around the question of whether business ethics should be taught via a separate course or by integrating business ethics content across the curriculum, or perhaps whether cases or some other pedagogical approach should be used. The research reviewed above suggests that CMD based education has the potential to significantly influence moral reasoning and could be used in both higher education and corporate training contexts. In addition, Kohlberg's just community concept suggests that business school educators should be directing their attention to how the moral development of their students is affected through the "hidden curriculum," the norms and values that regulate social relationships in the school or educational program. Can business educators envision the development of just communities in business education programs? The creation of a just community requires faculty and administrators to willingly change their behavior, letting go of their positions of unquestioned authority and opening themselves to the challenges of a truly democratic community.

Group Decision Making and Group Leadership

The foregoing discussion and most of the research has emphasized moral reasoning at the individual level of analysis. However, in organizations, complex decision making is often accomplished in group settings. Recent research has addressed the influence of group processes and leadership on moral reasoning. For example, building on the work of Nichols and Day (1982), Dukerich et al. (1990) explored the impact of group discussion and group leadership on moral reasoning. In two studies, they found that, in general, individuals benefited from a consensus-oriented group discussion of DIT dilemmas. Individual moral reasoning scores on a DIT post-test were significantly higher than individual scores on the pre-test. However, additional analyses suggested that subjects who were initially lowest on moral reasoning advanced significantly while those who were highest actually had lower post-test scores. More research will be needed to determine if these changes in individual moral reasoning resulting from group discussion are transitory or permanent. Perhaps most interesting were the findings regarding the role of the group leader. When less principled individuals played the leadership role, group performance decreased. Groups with leaders higher in moral reasoning either improved or stayed the same. These research results suggest that managers interested in supporting ethical behavior in the organization may wish to encourage group decision making. However, it may also be important to influence group leadership. In the research,

more principled individuals were not any more likely to emerge as leaders than were individuals lower in moral reasoning. Thus, organizations may wish to provide leadership training for these individuals and/or assign them to leadership positions in decision-making groups.

Conclusion

The study of ethical behavior has been guided by a number of paradigms and approaches, most prominent among them a normative approach rooted in philosophy and a descriptive/predictive approach rooted in the social sciences (Fleming 1987; Kahn 1990). This special issue has chosen to focus on the social scientific approaches. Kohlberg's work is somewhat unique in the sense that his theory represents something of an integration of these normative and descriptive/predictive approaches (Kohlberg 1981). Kohlberg's highest stages are thought to be more desirable in that they are consistent with moral philosophers' moral reasoning justifications (Kohlberg 1981). The normative and descriptive/predictive approaches can be expected to continue to exist side by side, each making its distinctive contribution to the study of business ethics.

This paper has focused on CMD theory and research, suggesting important implications for future theorizing and research in the area of business ethics. More CMD-based research will be required to understand how managers reason about ethical dilemmas in the work setting and how these reasoning processes influence their behavior in actual managerial situations. In particular, research is needed to understand whether and how the work itself and the work setting influence continuing adult moral development. The evidence thus far suggests that managerial work in business settings may not support moral reasoning at one's CMD capacity. Powerful organizational norms, reward systems, and structures may serve to constrain or even retard moral reasoning. This evidence may point future research in the direction of socialization theories of morality. These theories emphasize the external social system as the primary source of morality rather than the individual as in Kohlberg's work (Gibbs and Schnell 1985).

Clearly, CMD theory and research represent only one research stream within the descriptive/predictive approaches to studying business ethics. In order to more fully understand ethical behavior in an organizational context, it will likely be necessary to investigate additional influences on ethical behavior beyond CMD. For example, Rest (1986) proposed that the psychology of morality is comprised of four component processes of which moral judgment is only one. Future research should investigate other important processes such as the ability to recognize moral concerns in actual business decision-making situations and the ability to follow through on one's intentions (Rest 1986). Treviño (1986) proposed an interactionist model of ethical decision-making behavior in organizations. Treviño's model places CMD within the more complex context of other potentially important personality variables (e.g., locus of control, self-monitoring, ego strength) and situational influences

(e.g., reward systems). Others have proposed ethical decision-making models that take into account values and the important role of significant others (Ferrell and Gresham 1985). Payne and Giacolone (1990) proposed the application of a number of social psychological approaches to understanding how ethical dilemmas are perceived. Research has just begun to test these more complex models (Treviño and Youngblood 1990). Further development and testing of these broader approaches will contribute to our understanding of moral judgment and behavior in organizations and will have implications for ethics education and the effective management of ethical behavior in business organizations.

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