Influencing Ethical Development: Exposing Students to the AICPA Code of Conduct*

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ABSTRACT. Although the AICPA Code of Professional Conduct emphasizes the importance of education in ethics, very little is known about how and when the Code and the topic of ethics can be presented to enhance the effectiveness of ethics-oriented education. The purpose of this research was to provide preliminary evidence about the ethical development of students prior to, and immediately following, such courses. We found that: (1) accounting students, after taking an auditing course which emphasized the AICPA Code, reasoned at higher levels than students who had not taken the course; (2) there were no differences in moral reasoning levels when accounting and non-accounting majors were compared prior to an auditing course; and (3) there was a significant relationship between the Seniors' levels of ethical development and the choice of an ethical versus unethical action. It was concluded that an auditing course emphasizing the "spirit" of the Code can have a positive impact on the ethical behavior of some of the future members of the accounting profession.

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In January, 1988, the membership of the AICPA voted to adopt a new Code of Professional Conduct. The changes embodied in the Code have been termed "dramatic, indeed revolutionary" by George Anderson, chairman of the AICPA's Special Committee on Standards of Professional Conduct (Anderson, 1985). One of the most notable changes introduced in the new Code is its emphasis on education as a vehicle for influencing the ethical behavior of future members of the accounting profession (Anderson and Ellyson, 1986).

There has been limited research assessing the effectiveness of ethics-oriented courses (for a review and critique, see Glenn [1992] and Weber [1990]). Yet research has initially indicated that changes in student's ethical decision making may be due, in part, to ethics education. Although research undertaken by Martin (1981–82) and Wynd and Mager (1989) found that ethics education had no impact upon students' ethical reasoning and decision making, most studies have reported significant improvements in students' moral judgments by assessing their reasoning prior to, and immediately following, their taking an ethics-based course. Boyd (1981–82) administrated the Defining Issues Test (DIT, Rest [1979]) to 261 undergraduate business students. The "D scores," indicating their level of moral reasoning maturity, significantly increased for those students completing a Business and Society course. Yet, the students in Boyd's control group (those not enrolled in an ethics-based course) did not demonstrate improvement. Similar results were reported by Penn and Collier (1985), in their assessment of graduate students enrolled in a Business Ethics course, and by Nelson and Obremski (1990), who used group interaction in

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an ethics-based course to induce increases in students' moral reasoning.

There seems to be general agreement that such efforts can be beneficial (Briloff, 1985; Penn and Collier, 1985; Leob, 1988; Langenderfer and Rockness, 1989; Cohen and Pant, 1989).[1] There is also a substantial body of evidence that education, per se, can have a positive impact on students' ethical development (Rest, 1986; Nelson and Obremski, 1990). On the other hand, there is no general agreement as to either when or how educational interventions should occur. For example, Ponemon and Glazer (1990) found that accounting programs which emphasize more liberal arts education have a greater influence on ethical development than more traditional accounting programs. They suggest that ethical development occurs predominately in courses *outside* of the accounting curriculum.

Others have recommended that the topic be addressed *within* the accounting curriculum, yet there is little agreement about when this intervention should occur. Some argue that ethics should be included in courses throughout the accounting curriculum (Wyer, 1987; Cohen and Pant, 1991), while others agree that the topic should be addressed in specific courses either by adding a course in professionalism and ethics (Armstrong, 1987), or integration into existing courses, such as auditing (Kunitake and White, 1986). Just as there is variety in suggestions as to when ethics should be presented, there are a number of recommendations as to how ethics can be presented to be effective. Examples include the use of ethics cases (Langenderfer and Rockness, 1989), ethical dilemmas (Hiltebeitel and Jones, 1991 and 1992) and interventions designed to help accounting students incorporate more than simply rules in making ethical decisions (Shaub, 1994). Similarly, Kunitake and White (1986) stress that the AICPA Code of Professional Conduct provides such a vehicle for intervention, but that courses would be more effective if the "spirit" of the Code, rather than the enforceable rules, were emphasized.

Although research on how ethics can be presented to be effective is also limited, two studies did focus on accounting students and the impact of ethics education on the student's reasoning and decision making. Arlow and Ulrich (1980) reported that the personal business ethics of Senior management and marketing majors were significantly increased by exposure to a course which emphasized the role of ethics in decision making. Such an increase, however, was not observed for accounting students (p. 21). The interesting point is that the lack of change for the accounting students was due to the fact that accounting students had significantly higher scores than other business students *prior* to the course. The authors attributed this difference to the accounting students' exposure to ethics in previous auditing courses, although the design of the study precluded the testing of this attribution.

In a similar study, Fulmer and Cargile (1987) found that there were differences, by major, in Senior business students' ethical perceptions. That is, more accounting majors than other business students were able to correctly identify a situation as an ethical dilemma. The reason for the observed difference was again attributed to the accounting students' exposure to the Code of Professional Conduct in their auditing courses. Again, however, this attribution was not specifically tested in the study.

The results reported in these last two studies raise two interesting issues. First, neither study offers an explanation as to *how* the accounting students' exposure to the Code could positively influence personal ethics scores or perceptions of ethical issues. Second, the authors concluded that the observed differences occurred *when* the accounting students were exposed to the Code. The conclusion that such exposure was responsible for the differences rests on an implicit assumption that the differences did not exist prior to the accounting students' exposure to the Code in their auditing courses.[2]

I. Theoretical framework

Lawrence Kohlberg's theory of moral development (1981, 1984) provides a framework for developing hypotheses about the reasoning processes utilized when decision-makers must resolve an ethical dilemma.[3] Based upon earlier

work by Jean Piaget (1932), Kohlberg's theory posits that reasoning processes are "developmental" in nature and that an individual progresses through stages of moral reasoning. As summarized in Figure 1, Kohlberg identifies three levels of moral development through which individuals progress: preconventional, conventional, and postconventional, with two stages within each level. The second stage within each level represents a more advanced form of the first stage. A brief discussion of these six stages of moral reasoning follows (for a more detailed discussion, see Colby and Kohlberg (1987).

Preconventional level

At this level, a person responds to notions of "right" and "wrong", especially when expressed in terms of punishment, rewards or the imposition of physical power. At Stage 1 (Punishment and Obedience Orientation) the physical consequences of an action determine its goodness or badness. Avoidance of punishment and unquestioning deference to power are valued in their own right. Right action is defined in Stage 2 (Personal Satisfaction Orientation) as that which satisfies one's own needs. Elements of fairness and equal sharing are always interpreted in a physical or pragmatic way.

Conventional level

At this level, maintaining the expectations of the individual's family, group or nation are perceived as valuable. Stage 3 (Interpersonal Reciprocity Orientation) emphasizes behavior that pleases or helps others and is approved by them. There is much conformity to stereotypical images of what is majority or "natural" behavior. At Stage 4 (Law and Order Orientation) the individual takes the perspective of a generalized member of society. This perspective is based on a conception of the social system as a consistent set of societal, legal, or religious codes and procedures that apply impartially to all members of a society.

Postconventional level

At this level, there is a clear effort to define moral values and principles which have validity and application apart from the authority of the group and persons holding these principles. Generally with utilitarian overtones, Stage 5 (Social-Contract Legalistic Orientation) defines right action in terms of general individual rights and in terms of standards which have been critically examined and agreed upon by the whole society. Rather than rigidly maintaining laws in terms of Stage 4 law and order, Stage 5 emphasizes the

	Stage 1: Punishment and Obedience Orientation
Level 1 Preconventional	
	Stage 2: Personal Satisfaction Orientation
	Stage 3: Interpersonal Reciprocity Orientation
Level 2 Conventional	
	Stage 4: Law and Order Orientation
	Stage 5: Social-Contract Legalistic Orientation
Level 3 Postconventional	
	Stage 6: Universal Ethical Principle Orientation

Figure 1. Kohlberg's stages of moral reasoning.

possibility of changing law in terms of rational considerations of social utility. At Stage 6 (Universal Ethical Principle Orientation) right is defined by the decision of conscience in accord with self-chosen ethical principles appealing to logical comprehensiveness, universality, and consistency.

II. Development of research hypotheses

The majority of the research discussed earlier has documented that ethics-oriented education can have a positive influence on students' ethical development. In fact, the two students which specifically documented differences between Senior-level accounting and other business students (Arlow and Ulrich, 1980; Fulmer and Cargile, 1987) concluded that the differences existed because the accounting students had been exposed to ethics in their auditing courses. However, neither of these studies provided a theoretical explanation as to *how* such exposure could produce these effects. Kohlberg's theory of moral development provides a possible explanation for the observed effects.

Research conducted by Kohlberg and his associates has identified various traits underlying his stage theory. For example, longitudinal studies (Colby et al., 1983; Colby and Kohlberg, 1987) have consistently found that an individual's moral development progresses in a stage-to-stage manner. Progression, however, requires exposure to an environment which stimulates reasoning at the higher levels (Blatt and Kohlberg, 1975; Nelson and Obremski, 1990).

An auditing course which exposes accounting students to the AICPA Code of Professional Conduct could provide an environment that is conducive for students to progress to higher stages of moral reasoning. Cohen and Pant (1991) report that CPA's perceive the AICPA Code as the most effective mechanism for improving ethics in the accounting profession. Thus, our research focused upon the Code as an educational stimulus to enhance students' ethical development.

The 1988 Code is organized into two interrelated sections: (1) standards, or principles, of conduct; and (2) rules of behavior. As such, the reasoning embodied in the two sections appear to correspond to two of the stages described in Kohlberg's theory of moral development.

Exposure to Section 1 should encourage a sense of responsibility based upon personal integrity. The principles embodied in the Code

> express the profession's recognition of its responsibilities to the public, to clients, and to colleagues. They guide members in the performance of the professional responsibilities and express the basic tenets of ethical and professional conduct (AICPA Professional Standards, Section 51.02, 1988).

Although guidelines for conduct are established, the Code acknowledges the possibility of departure from these guidelines but challenges the individual to justify such departures. "By accepting membership, a certified public accountant assumes an obligation of self-discipline above and beyond the requirements of laws and regulations" (AICPA Professional Standards, Section 51.01, 1988). Kohlberg's Stage 5 reasoning recognizes the establishment of standards examined and agreed upon by the social group. Yet, Stage 5 also allows for deviation from these rules if justified in terms of a rational consideration of social utility or the protection of personal rights.

To guide its members, the Code emphasizes personal integrity as its highest value. "In the absence of specific rules, standards, or guidance, or in the face of conflicting opinions, a member should test decisions and deeds by asking: 'Am I doing what a person of integrity would do? Have I retained my integrity?' " (AICPA Professional Standards, Section 54.03, 1988). It would appear, then, that exposure to Section 1 of the Code would provide an environment which could stimulate students to reason at Stage 5.

Section 2 of the Code establishes professional norms (or rules) to guide behavior and lead to universal compliance. "A member who performs auditing, review, compilation, management advisory, tax, or other professional services shall comply with standards promulgated by bodies designated by Council" (AICPA Professional

Standards, Section 202.01, 1988). This type of reasoning corresponds to Kohlberg's Stage 4. Stage 4 emphasizes adherence to a consistent set of societal codes and procedures applied impartially to all in order to maintain social harmony. Thus it would appear that exposure to Section 2 would provide an environment conductive for students to reason at Stage 4.

Exposure to the Stage 4 and 5 reasoning in the Code in an auditing class may account for the differences between Senior-level accounting and other business students observed in previous research. These differences may be attributed to the accounting students' exposure to an environment which stimulated progression to higher levels of reasoning. Conversely, the other business students may not have been similarly exposed to courses emphasizing these higher levels of reasoning. Under these circumstances, Kohlberg's theory would predict that accounting students would score higher on ethical dimensions because of their differential exposure to the principled moral reasoning embodied in the AICPA Code of Professional Conduct. Therefore, it is hypothesized that:

H_1: Accounting majors will reason at significantly higher levels of moral reasoning than other business majors *after* the accounting majors have been exposed to the AICPA Code of Professional Conduct in an auditing class.

Prior research has established that differences in the ethical development of students should be expected after accounting students have been differentially exposed to principled moral reasoning in an auditing class. Observing that such differences exist, however, is not sufficient to conclude that exposure to the Code was responsible for the differences. Rather, it is also necessary to observe that such differences do not exist *before* this differential exposure. Further, it would aid in our understanding of how ethics-oriented classes affect students' ethical development to have a theoretical basis from which to base our predictions.

Just as Kohlberg's theory provides a theoretical explanation as to how exposure to the AICPA Code could have a positive impact on accounting students' ethical development, his theory can also be used to predict that the positive impact occurred *when* the accounting students were exposed to the Code in their auditing courses. Prior to this time, accounting students would most likely have been exposed to relatively the same environments as other business students.[4] As there is no reason to expect that the accounting students would have been differentially exposed to environments fostering progression to higher stages of reasoning before their exposure to the Code in an auditing course, it is also hypothesized that:

H_2: There will be no significant differences in the stages of moral reasoning of accounting majors and other business major *prior* to the accounting majors' differential exposure to the AICPA Code of Professional Conduct in an auditing class.

Weber and Green (1991) note that the values of teaching principled moral reasoning are found in the improvement of students' individual integrity (Mentkowski, 1988) and their just resolutions of ethical dilemmas (Penn and Collier, 1985; Baxter and Rarick, 1987). Research has shown that the importance of courses which stimulate students to reason at higher levels lies in the consistently observed empirical relationship between higher levels of reasoning and choice of an ethical (rather than unethical) course of action (see Blasi (1980) for a review of these studies). Recently, Brabeck (1984) and Shepard and Hartenian (1991) found a positive relationship between higher levels of students' moral reasoning and their selection of the ethical action alternative. As such, education can have an impact on the ethical behavior of future members of the accounting profession by providing an environment which fosters progression to higher stages of reasoning. Therefore, it is hypothesized that:

H_3: There will be a significant difference between the stages of reasoning associated with the choice of an ethical and an unethical course of action.

III. Methodology

To test the research hypotheses, samples of accounting and other business majors both before and after the accounting majors had completed an auditing course were required. Specifically, a sample of Senior-level accounting majors was obtained during the last few weeks of an auditing class to test Hypothesis 1. A total of 32 accounting students completed the experimental task as part of an in-class exercise. At approximately the same time, 27 Senior-level, non-accounting majors enrolled in an introductory managerial accounting course completed the experimental materials for extra course credit.

To test Hypothesis 2, the authors sought to obtain samples of both accounting and other business majors immediately preceding the time that the accounting students would begin an auditing course. Typically, accounting students take the required auditing course during their Senior year. Therefore, the sample was comprised of 53 Junior-level business students (26 accounting majors and 27 other business majors) completing an introductory managerial accounting course.[5]

Data to test the hypotheses were obtained from the participants' written responses to an ethical dilemma.[6] In this dilemma, a newly-hired manager discovers evidence of fraud while fulfilling his routine duties. When the manager confronts his supervisor with the evidence, he is told to shred the evidence and let the supervisor take care of the matter. Written responses consisted of: (1) the participants' choice of whether they believed the manager should or should not comply with the supervisor's instructions (shred the evidence), and (2) the reasons why they recommend that particular course of action.

Stage of moral reasoning was assessed by analyzing the reasons why a particular course of action had been recommended. These responses were coded using the Abbreviated Scoring Guide, based on the Kohlbergian Standard Issue Scoring method (Weber, 1991). This method compares each subject's responses to the traits embodied in Kohlberg's six stages of moral reasoning. The process consists of three major steps: (1) breaking down the subject's response into identifiable units of moral reasoning; (2) matching the units to the corresponding stages of moral reasoning; and (3) assigning stage scores. This method was selected because of its simplicity and efficiency while maintaining acceptable levels of reliability and validity compared to other scoring methods.

Following the general format of the Abbreviated Scoring Guide, the reasons why a particular course of action was chosen. Once the unit of moral reasoning was identified, the unit was matched to the attributes contained in each stage of Kohlberg's stages of moral reasoning. If more than one stage of reasoning was identified in the response, the higher stage score was assigned to be consistent with the research objective to identify the highest stage displayed by the students. In all of the cases where more than one stage of reasoning was identified, the two stages were in sequential order (e.g., Stage 1 and Stage 2, or Stage 2 and Stage 3). If the authors agreed on the appropriate stage score, that score was assigned. If uncertainty or disagreement occurred, the authors discussed and reassessed their evaluations until a mutually agreeable stage score was identified (see Figure 2 for representative examples of responses assigned to each level of reasoning).

IV. Results

Of the 112 cases submitted by the students, three had to be eliminated because the stage of reasoning was uncodeable.[7] Table I contains aggregate data on descriptive characteristics of the sample. Statistical tests were performed to assure that the groups were equivalent on these characteristics. As all of the p-levels were greater than 0.05, it was concluded that the Juniors and Seniors were sufficiently homogeneous as to age, sex, race, marital status and previous work experience so that our results would not be confounded by any of these factors.

Hypothesis 1 focused upon understanding *how* an auditing class could have an impact on students' ethical development. Specifically, it predicted that accounting students would reason at significantly higher stages of reasoning than other

	ACTION RECOMMENDED	
	Shred the Papers	Do Not Shred the Papers
Stage 1	There is no reason for the newly-hired manager to be a hero and risk losing everything.	The newly-hired manager could avoid the worst penalty of all which would be a criminal charge against him.
Stage 2	This would enable the newly-hired manager to acquire more work experience to further his career in accounting.	Shredding the papers could ruin the newly-hired manager's credibility and stand in the way of a promotion or a future job.
Stage 3	The newly-hired manager would be acting as a "team player" within the firm and his supervisor would appreciate that.	This course of action is the best for the newly-hired manager, the firm and the stockholders of the firms involved.
Stage 4	There is an obligation for every employee to be loyal to the employer. This is essential for the operation of any firm.	If we ignore accepted written laws within our society, there would be a breakdown of the system.
Stage 5	The supervisor has a right to run his office in the manner he deems necessary. He may have other information which may justify his actions for the greater good for all involved.	The newly-hired manager should not compromise his perceived ethical code for a business.

Source: adapted from Weber and Green (1991)

Figure 2. Representative examples of reasoning at each stage.

TABLE I
Descriptive characteristics of sample

Number of subjects	Juniors 51	Seniors 58	Difference* 7
Characteristic			
Age (Mean Years)	20.40	22.39	1.99
Sex (% Male)	0.63	0.60	–0.02
Race (% Caucasian)	0.84	0.93	0.09
Marital Status (% Single)	0.98	0.93	–0.05
Work Experience (% with Experience)	0.80	0.76	–0.05

* *Note*: No differences significant at $p < 0.05$

business students after the accounting students had been exposed to the Code. Table II shows the number of Seniors from each group found to be reasoning at each stage. As can be seen in Table II, nearly one-half of the Senior accounting majors utilized principled reasoning to resolve the dilemma (Stage 4 or higher), while only about 30 percent of the other business students

TABLE II
Distribution of seniors' stages of reasoning

	Stage of Reasoning					
	1	2	3	4	5	Total
Major						
Accounting Majors	1	7	8	10	6	32
Other Business Majors	4	5	9	6	2	26
Total	5	12	17	16	8	58

Result of Mann-Whitney Test for Differences in the Distrbutions: $p = 0.054$, one tail

utilized principled reasoning. A Mann-Whitney test indicated that the mean rank for accounting majors (32.61) was higher than the mean rank of the other business majors (25.67) and that this difference is significant ($p = 0.054$, one-tail). Thus, Hypothesis 1 is supported.

Figure 3 graphically displays the percentages of the two groups found to be reasoning at each stage. The overall tendency of the Senior accounting students to reason at higher stages than the other Senior business students is more easily seen in this figure than from the raw data in Table II. While both groups contained at least some students reasoning at each stage, the distribution of reasoning stages for accounting Seniors is skewed toward higher stages than the distribution of stages for other Senior business majors. The overall tendency of the accounting Seniors to reason at higher levels depicted in Figure 3 is the underlying reason for the significance of the statistical test and additional support for Hypothesis 1.

The purpose of Hypothesis 2 was to document that any differences between the accounting and other business students occurred *when* the accounting students were differentially exposed to the Code in an auditing course. Thus, Hypothesis 2 predicted that significant difference in stages of reasoning, by major, would not exist prior to the course. Table III displays the number of Juniors at each stage of reasoning. Although Stage 4 was the predominant stage of reasoning for the Junior-level accounting majors (eight students), there were almost as many demonstrating Stage 2 (seven students). Conversely, the predominant stage for the other Junior business majors was Stage 3. Note also the very small number of students in each group who displayed the ability to reason at Stage 5 (no accounting

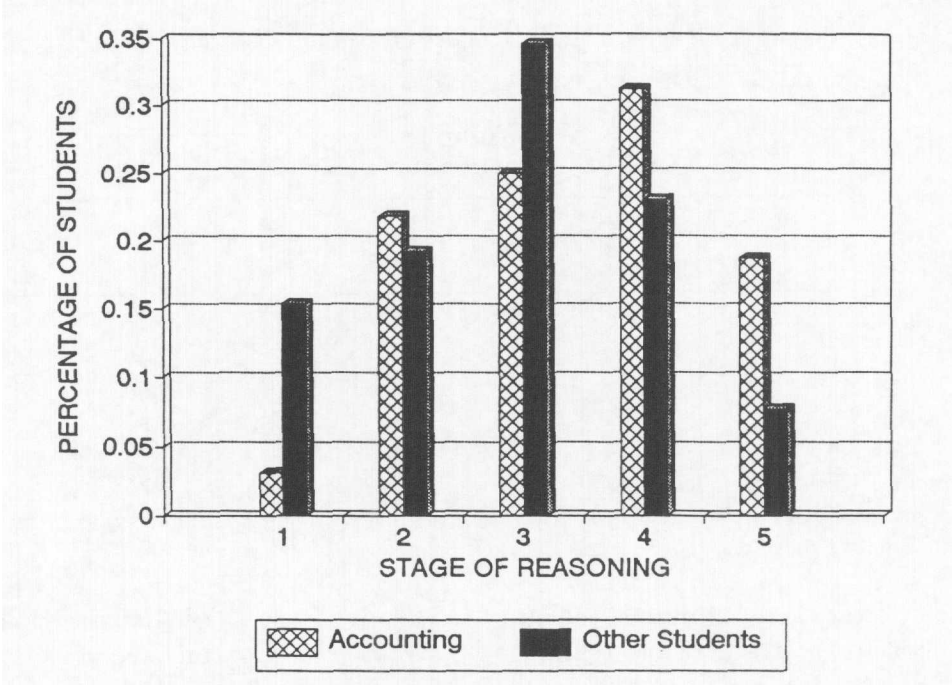

Figure 3. Seniors' stages of reasoning by major.

TABLE III
Distribution of juniors' stages of reasoning

	Stage of Reasoning					
	1	2	3	4	5	Total
Major						
Accounting Majors	5	7	5	8	0	25
Other Business Majors	4	7	11	2	2	26
Total	9	14	16	10	2	51

Result of Mann-Whitney Test for Differences in the Distributions: $p = 0.938$, two-tailed

students and only two other business majors) compared to the number reasoning at the Punishment and Obedience Orientation, Stage 1 (five accounting and four other business Juniors). A Mann-Whitney test indicated that the mean ranks for the two groups (26.16 for accounting majors compared to 25.85 for other business students) did not differ significantly ($p = 0.938$, two-tailed). Thus, Hypothesis 2 is also supported.

The percentage of each group of Juniors reasoning at each stage is graphically depicted in Figure 4. Figure 4 illustrates the similarity in the distributions of the two groups' levels of reasoning underlying the absence of a significant difference in the reasoning of the Juniors. A relatively large proportion of accounting Juniors (70%) reasoned at levels below those typically characterized as principled. This general pattern was very similar for the other business students as well. Over 80 percent of these students utilized reasoning either at or below Stage 3.

Hypothesis 3 proposed a link between higher (lower) stages of reasoning and choice of an ethical (unethical) course of action. Table IV displays the frequency with which each stage of reasoning was associated with each action choice in our sample of Seniors. As Table IV shows, the ethical action was chosen more than three times as often as the unethical action. Overall, 43 students chose the ethical action, while only 15 chose the unethical action. Further, Table IV illustrates that, with the exception of Stage 5 reasoning, there were instances of every stage of reasoning observed for each action choice. A Mann-Whitney test indicated that the mean rank for the reasoning associated with the choice of the ethical action (32.17) was higher than the mean rank for the reasoning associated with the unethical action (21.83), and that this difference

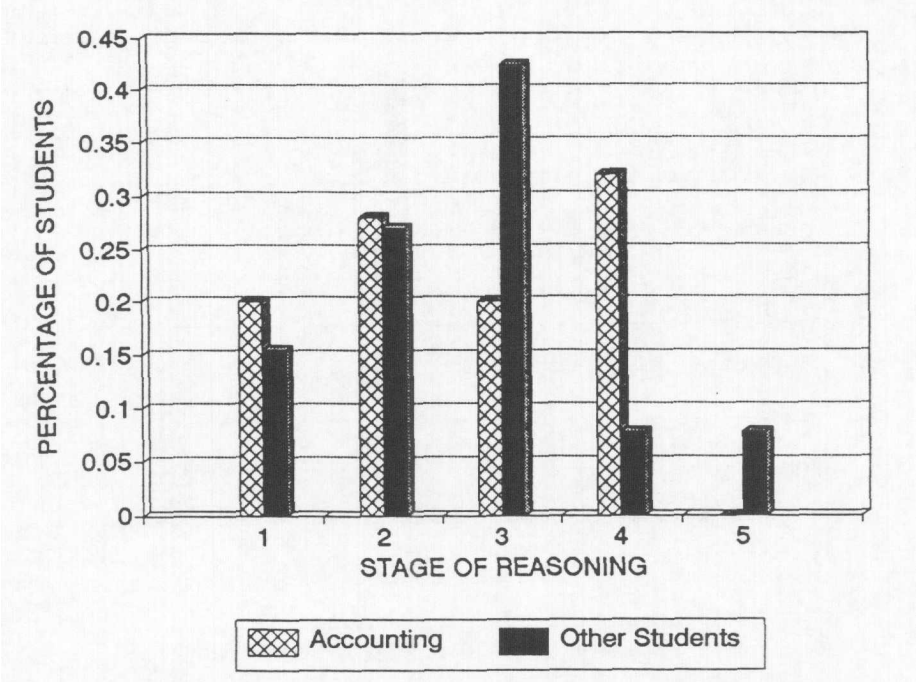

Figure 4. Juniors' stages of reasoning by major.

TABLE IV
Distribution of seniors' choices of action by stage of reasoning

	Stage of Reasoning					
	1	2	3	4	5	Total
Choice of action						
Ethical (Do not shred evidence)	4	7	10	14	8	43
Unethical (Shred evidence)	1	5	7	2	0	15
Total	5	12	17	16	8	58

Result of Mann-Whitney Test for Differences in the Distributions: $p = 0.018$, one-tail

was significant ($p = 0.018$, one-tail). Thus, the hypothesized relationship between higher levels of reasoning and choice of an ethical action was also supported.

The percentage of Seniors choosing either the ethical action or the unethical action is graphically displayed in Figure 5. Inspection of Figure 5 reveals that principled reasoning was associated with 51 percent (22) of the 43 ethical action choices, whereas principled reasoning was associated with only 13 percent (2) of the 15 unethical action choices. Therefore, as shown by our data, exposure to the Code not only influenced students' ethical development, but also improves their ability to select the ethical course of action in resolving an ethical dilemma. These results further establish the positive relationship between higher stages of reasoning and ethical action, as cited earlier in this paper.

VI. Discussion and conclusions

The primary objective of this study was to provide some initial insight into how and when a professional code of ethics can be presented in accounting courses to enhance the effectiveness of ethics education. Kohlberg's theory of moral development was utilized as a theoretical basis for predicating that exposure to the AICPA Code of Professional Conduct would have a positive influence on the reasoning processes and decision making of students. To this end, the theory and the Abbreviated Scoring Guide method appear to be an acceptable framework as our findings are generally consistent with previous studies using the same method with similar subjects (Colby and Kohlberg, 1987). A second objective of the

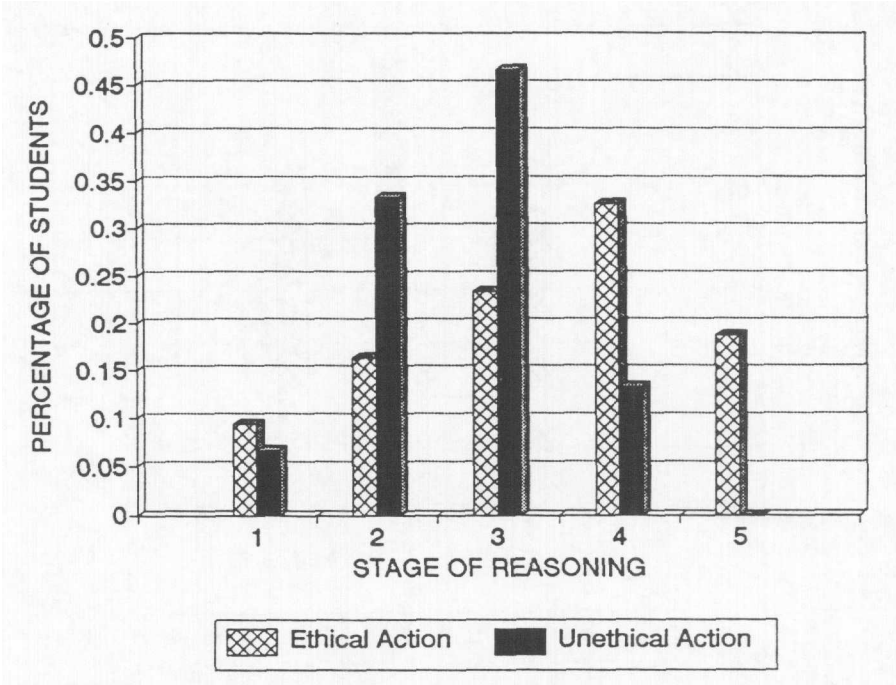

Figure 5. Seniors' stages of reasoning by action.

study was to provide preliminary empirical evidence about the reasoning processes of students prior to, and immediately following, exposure to ethics-oriented courses and integrate our results with those of previous studies.

By combining the data testing hypotheses 1 and 2, important discoveries emerge regarding how and when ethics education using a professional code can have an impact in the accounting curriculum.

It appears that, through the Junior year, the accounting curriculum has little impact upon the ethical development of accounting majors. As shown in this research, especially in the data used to test hypothesis 2, no differences in the level of ethical development were found between Junior accounting students and Junior non-accounting students. The implication of this finding is that there does not appear to be a self-selection process whereby more (or less) ethical students choose to major in accounting. In addition, coursework unique to the accounting curriculum prior to the auditing course appears to have had little influence leading to a differentiation of the ethical development of accounting students from other business students.

However, in exploring the level of moral reasoning of Senior-level students, significant difference were found between the accounting and non-accounting students. In this sample, the primary difference appears to be the auditing course taken by the Senior accounting students. In the accounting curriculum, the auditing course provides an opportunity for accounting students to be exposed to principled moral reasoning (Stages 4 and 5) through the presentation of a professional code of ethics. These levels of reasoning are typically at a higher stage than the level of reasoning exhibited by students prior to the course (e.g., Juniors). Thus, the exposure to ethical principles embodied in reasoning slightly above the students' current level of moral maturity provided an effective educational environmental conducive for stimulating students' moral reasoning to a higher level. In linking this result with previous research, it appears that the implicit assumption made in the two studies cited earlier (Arlow and Ulrich, 1980; Fulmer and Cargile, 1987) was validated by our findings. *The auditing course, offered in the accounting curriculum and exposing the students to the AICPA Code which embodies principled moral reasoning, was an effective influence upon the students' ethical development in this study.*

The effectiveness of the students' exposure to the Code is not limited to the students' reasoning processes. Hypothesis 3 furthers the analysis by assessing the relationship between stage of moral reasoning and the chosen course of action. A positive relationship has been consistently observed in prior studies (see Blasi [1980] for a review of these studies), particularly when using business students as subjects (Brabeck, 1984; Shepard and Hartenian, 1991). The positive relationship was further supported by the results of our study. Students who demonstrated higher stages of reasoning (Stages 4 and 5) were more likely to select the ethical action alternative than those demonstrating reasoning at Stage 3 or below. Thus, *the students' exposure to the AICPA Code not only increased their level of moral maturity, but subsequently enabled more students to select the ethical course of action based upon their higher level of moral reasoning.*

The authors caution against strong conclusions drawn from our results for several reasons. First, this research is limited to an assessment of students exposed to professional accounting values and ethical principles within an undergraduate accounting curriculum. Little is known about the influence upon the ethical reasoning and decision making of these students once they enter the accounting profession. One study (Arlow and Ulrich, 1980) found that the students' personal ethics scores declined after four years of work experience. Alternatively, one might suggest that the ethical principles embodied in the Code are frequently reinforced in the accounting profession through continuing education courses and the daily adherence to the Code by colleagues. The continued influence of the Code upon individuals' level of moral reasoning should be explored through empirical research.

Second, although validation was found for an increase in ethical development by exposing accounting students to the Code during an auditing course, the data in this research should

be used with caution. It must be recognized that our sample may not be representative of the population of Junior and Senior business students. Our students were almost exclusively caucasian, single, and in their early 20s. Additional studies using different demographic samples will be needed before these results can be generalized.

Third, in this research the presentation of the Code in an auditing course was the only environment considered to influence students' ethical development. It is possible that other pedagogical approaches in the accounting curriculum may be used to achieve similar improvements in ethical reasoning and decision making. For example, Nelson and Obremski (1990) utilized student-led discussion groups to increase students' stage of moral reasoning.

Finally, the presentation of principled moral reasoning could be introduced into other accounting courses (as suggested by Wyer [1987] and Cohen and Pant [1991], or accounting students could be exposed to this stimulus in courses outside the accounting curriculum (e.g., ethics or business and society courses). As cited earlier, research exploring the impact of ethics-based courses upon students' ethical reasoning and decision making has been generally positive (Arlow and Ulrich, 1980; Boyd, 1981–82; Penn and Collier, 1985; Fulmer and Cargile, 1987; Nelson and Obremski, 1990; Harris and Guffey, 1991).

Notes

* An earlier draft of this paper appears in the "Teaching and Training Business Ethics in the 90's and Beyond: Issues, Strategies, and Tactics" conference proceedings.

[1] See Miller and Miller, 1976 and Walzer, 1978 for a different point of view.

[2] There are reasons to argue *a priori* that such differences could exist prior to auditing courses at the Junior level. For example, it has been suggested that there is a self-selection process whereby accounting majors choose to enter the accounting profession because the profession values the same ethical behavior that the students already possess (Ponemon and Glazer, 1990).

[3] Over the past twenty years numerous criticisms have been lodged against Kohlberg's stage theory. Kohlberg and his associates have responded to their major critics (see Kohlberg, Levin and Hewer [1983]), addressing issues of stage sequencing, subjectivity in the scoring method, gender and cultural bias, and others. In general, Kohlberg's stage theory has been clarified or refined to withstand these challenges and is widely used and accepted in the field of moral development.

[4] The authors recognize that the possibility exists that students may have been enrolled in an ethics course outside of the business school during this time period. This factor will be examined in the results section.

[5] It is recognized that there could be as much as a nine-month interval before the accounting students would begin an auditing course. However, research has shown that, without specific attention toward moral education (as found by Blatt and Kohlberg [1975]), movement from one stage to the next highest stage typically takes a six to eight year period (Colby and Kohlberg, [1987]). Therefore, this sample should be appropriate to address the research questions.

[6] The full text of the case and the data collection instrument can be obtained from the first author upon request.

[7] The stage of reasoning was uncodeable generally because the students failed to provide reasons *why* they were choosing a particular action. Rather, the responses focused on what specific actions they would take.

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