

# **An Empirical Study in Ethical Perception: Will the Mandated AICPA Curriculum Change Differ Between Those Who Have Taken An Ethics Course Or Not?**

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*Recent news about corporate scandals and unethical behaviors of some key financial advisors and their accountants may misrepresent the accounting profession, especially among accounting graduates, and taint their view of the how people in key financial advisory positions make decisions. The purpose of this study therefore is to explore the impact of taking an ethics course on the ethical perceptions of accounting graduates in the five-year accounting program and the four-year program. This study explores the stages of the theory of moral development by Lawrence Kohlberg and Victor and Cullen's Ethical Climate Questionnaire (ECQ), and examines each stage that leads to students progressing in their moral reasoning. Approximately one hundred and fifty-five graduates enrolled in the five-year and four-year accounting programs in selected accredited colleges and universities in New York State were surveyed. Implications of the finding are discussed.*

**Field of Research:** Accounting, Business Ethics

## **1. Introduction**

Recent news about corporate scandals and unethical acts committed by financier Bernard Madoff and his accountant David Friehling and Nicholas Cosmo, the owner and president of Agape World, Inc., may have made the public and the market stakeholders conscious as to the moral decline and unethical posture of financial advisors and their public accountants, and unveiled a possible decline in moral reasoning and ethical standards of public accountants (Koumbiadis & Okpara, 2008; Dellaportas, 2006; Esmond-Kiger, 2004). The unethical conduct by some public accountants has necessitated a change in the manner of responsibility for improving the quality of public accountants (Desplaces, Melchar, Beauvais, & Bosco, 2007). An investigation on this topic reveals that little research has been conducted on this issue and none at all on the ethical perceptions of accounting students and the difference, if any, made by the extra time spent by students in a 150-credit hour education program.

Ethical lapses among public accountants have necessitated a revision of the accounting curriculum (Earley & Kelly, 2004). Interestingly, students enrolled as accounting majors are faced with new challenges within the profession as a result of the debacles of large corporations (Puxty, Sikka, & Willmott, 1994). The challenges are in ethics, educational requirements, and professional responsibility within the profession of accountancy

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(Malone, 2006). According to Koestenbaum, Keys, and Weirich (2005), “business leaders are products of business schools which often teach that money always comes before ethics.” (p.13)

Accounting graduates are the future leaders within the accounting profession today. An investigation into the moral reasoning of accounting graduates may help society by improving future leaders’ awareness when making ethical business decisions and hopefully prevent future abuses of ethical issues (Myers, 2003).

## 2. Research Problem

Users of financial statements rely on the information therein to exhibit certain qualitative characteristics that are both relevant and reliable. The unethical decisions of accountants can prove detrimental to the public who use the information from the financial statements to make their own decisions (Brown, Stocks, & Wilder, 2007; Gene, 2005). But, public confidence in the accounting profession has been shaken by corporate scandals, which created a crisis affecting the reputation and credibility of accounting professionals (Earley & Kelly, 2004; Zabihollah, 2004). This crisis of ethics involving financial reporting by U.S. corporations has necessitated a change in the accounting curriculum. The question is whether the change in educational requirements would significantly improve ethical behavior of new accounting graduates.

### 2.1 Research Questions

The rationale for the research questions below was developed from the literature, and the questions have been found to be relevant to the study of ethics (Koumbiadis & Okpara, 2008; Dellaportas, 2006; Earley & Kelly, 2004; Cullen, Parboteeah, & Victor, 2003). The research questions serve as a basis for developing the hypotheses for this study. These research questions (RQ) helped to guide this study and were answered in accordance with the responses recorded on the ECQ and Demographic Questionnaire (DQ) questionnaires:

*RQ1: To what extent is ethical perception (egoism) important to the two groups of accounting graduates who have taken an ethics course?*

*H1: There will be no significant differences between ethical perceptions (egoism) of the two groups of accounting graduates who have taken an ethics course.*

*RQ2: To what extent is ethical perception (benevolence) important to the two groups of accounting graduates who have taken an ethics course?*

*H2: There will be no significant differences between ethical perceptions (benevolence) of the two groups of accounting graduates who have taken an ethics course.*

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RQ3: To what extent is ethical perception (*principle*) important to the two groups of accounting graduates who have taken an ethics course?

H3: There will be no significant differences between ethical perceptions (*principle*) of the two groups of accounting graduates who have taken an ethics course.

### 3. Theoretical Framework

The focus for this research relates to germinal studies on ethics and the ethical behavior of accounting graduates. Certified Public Accountants (CPAs) agree that individuals seeking a profession in accounting are required to be highly ethical (Mason, 1994). According to Alan and Jack (2008), clients pressure accountants to reduce fees and hours reported to the firm. Additionally, the expenses of maintaining a firm have increased as a result of the enactment of the Sarbanes-Oxley Act of 2002. Also, Jenkins and Wolf (2008) stated that the “CPA faces many challenges with an increase in liability risk, standards overload, a lack of growth in the demand for services, and keeping pace with the explosion in technological advances” (p. 46). Therefore, accounting graduates are to exhibit good moral character. This study also described models, perspectives, issues of importance, and controversies that are associated with ethical decisions and an individual’s moral ethical behavior.

#### 3.1 Kohlberg’s Theory

Kohlberg’s moral development theory provides the theoretical foundation for most contemporary empirical ethics research. Kohlberg’s theory suggests that people use three general hierarchical approaches to resolve an ethical dilemma. These dilemmas are classified into various levels: pre-conventional, conventional, and post-conventional or principled, which are further broken down into stages. The six stages of the pre-through post-conventional levels include a developmental sequence of ethical, problem-solving strategies. The moral development theory’s basic tenet is that an individual will progress through the stages in a sequential manner (Kohlberg, 1976; Rest, 1973, 1979). Kohlberg’s (1969) theory on cognitive moral development gave details on how people’s ability to make rational choices in society is influenced by one’s surroundings, which include culture, religion, and education. Kohlberg demonstrated that ethical reasoning is taught early on in life and develops gradually as individuals mature. Education, according to Kohlberg (1969), provides intervention and stimulates cognition as people go through a series of stages.

### 4. Literature Review

Among the most well-known paradigms on ethics is Kohlberg’s (1969) theory on Cognitive Moral Development (CMD), which expanded on Piaget’s (1932) work on children’s moral reasoning development. Kohlberg was interested more in the way of one’s moral thinking as opposed to one’s moral actions. Kohlberg’s theory on CMD has

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been used broadly to study the levels of moral progression of accounting students and accounting professionals (Jones et al., 2003). Jones et al. (2003) revealed a “relationship between a variety of individual characteristics and ethical development” (p. 92).

Kohlberg’s (1969) research on CMD was measured in a “series of stages that begin in adolescence and extend through adulthood” under the headings of pre-conventional, conventional, and post-conventional (p. 39). Under each heading appeared two stages. Kohlberg made it clear that people’s ability to rationalize ethically in society was carried by associations with others in one’s environment. Kohlberg showed that ethical values through moral reasoning may develop early on in life and grow slowly as people mature into adulthood. Rest (1986) noted that Kohlberg’s “six stages are viewed as forming an invariant developmental sequence in which attainment of an advanced stage is dependent on the attainment of each of the preceding stages” (p. 226).

Kohlberg’s six stages of moral maturity are found in Table 2. Victor and Cullen’s ethical climates “suggest that individuals’ moral reasoning skills (judgment on how moral dilemmas ought to be resolved) evolve over time, reflecting three distinct categories of moral judgment processes, which he termed pre-conventional, conventional, and post-conventional” (p.185-186).

Kohlberg (1969) stated that most people do not proceed beyond stage four of the ethical decision-making process, and theorized that most individuals do not progress through the three levels of cognitive moral development. Individuals who do get through the three levels use moral reasoning that would be characterized by reference to universal values or principles, even when these might not be compatible with society’s law (Trevino, 1986). Kohlberg’s theory is relevant to this study because of the way accounting students progress through the stages of moral maturity as they go through the accounting curriculum from the time they are freshmen to the time they graduate as seniors (Earley & Kelly, 2004; Clikeman, 2003; Jones, Massey, & Thorne, 2003).

### **4.1 Victor and Cullen’s Ethical Climate**

Grounded in Kohlberg’s theory of Cognitive Moral Reasoning (CMD), Victor and Cullen (1988) developed the Ethical Climate Questionnaire (ECQ) to measure moral reasoning by examining the organization’s ethical climate. The ECQ is a two-dimensional model that recognizes shared perceptions, ethical events, ethical practices, and ethical procedures which depend on the first dimension, the ethical criterion, and the second dimension, the loci of analysis.

The Ethical Climate Questionnaire (ECQ) is the instrument used to collect data in order to assess the ethical climate within an organization that is being studied. The ECQ employs a two-dimensional approach that recognizes ethical climates internal to an organization. The first dimension is characterized by the ethical criteria that consist of self in egoism, namely one’s own interest, benevolence, emphasizing the individual’s

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interest within the organization, and principle used within an organization, which is an “adherence to universal standards and beliefs” (Gül Selin & Ayse Begüm, 2008, p. 959). The second dimension suggests each ethical criterion is related to each individual, groups (local), and a greater population (cosmopolitan), which corresponds to the locus of analysis, which is shown in Table 1.

Victor and Cullen (1988) expound on the locus of analysis in their matrix:

Locus of analysis is a referent group identifying the source of moral reasoning used for applying ethical criteria to organizational decisions and/or the limits on what would be considered in ethical analyses of organizational decisions (Victor & Cullen 1988, p.105-106).

**Table 1 Theoretical Ethical Climate Types**

Ethical Criterion	Locus of Analysis		
	Individual	Local	Cosmopolitan
Egoism	Self-Interest (EI)	Company Profit (EL)	Efficiency(EC)
Benevolence	Friendship(BI)	Team Interest(BL)	Social Responsibility(BC)
Principle	Personal Morality(PI)	Company Rules and Procedures(PL)	Laws and Professional(PC)

Source: Victor and Cullen (1988, p. 104). From “Matching Ethical Work Climate to In-role and Extra-role Behaviors in a Collectivist Work Setting,” by A. S. M. Leung, 2008, *Journal of Business Ethics*, 79, p. 43-55. Copyrighted 1993 by the American Psychological Association with permission of the author

## 5. Methodology

While research on evaluating the ethical perceptions of individuals has been conducted in an earlier period (Kohlberg, 1976; Rest, 1973; Victor & Cullen, 1988), little research has been conducted on the issues, and no research, as far as can be found, is available on this topic pertaining to the perceptions of ethics among newly employed accounting graduates who fulfilled the 150 credit rule by either pursuing a master’s degree or an additional 30 undergraduate credits compared to accounting graduates who fulfilled 120 credits.

### 5.1 Research Design

The research design chosen for this study, which looks at accounting graduates from both private and public universities in New York State, used a non-experimental, cross-sectional survey design employing a hypothesis testing for this study on ethical

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perceptions (Johnson & Christensen, 2004). A cross-sectional survey design is the most appropriate choice for this quantitative study because these procedures allow the researchers to “compare two or more educational groups in terms of attitudes, beliefs, opinions, or practices. These group comparisons may compare students with students...or they may compare other groups within educational and school settings” (Creswell, 2005, p. 356). Cross-sectional studies have been used to evaluate programs in past accounting research (Shimin, 2008; Albrecht, Shamsub, & Giannatasio, 2007).

### **5.2 Sampling**

The researchers chose a sample of the two groups of accounting graduates. A sample list of 155 subjects for each group was selected from a list of colleges from the New York State Education Department Office of Higher Education (NYSED) (n.d.), under the 2008 Statistical Data and Reports on institutional files.

A stratified random sample technique was used to collect data from the two groups of accounting majors. This technique of sampling was chosen because unevenness on a characteristic of the sample studied may exist. From a representative sample of accounting graduates for each group, the researchers first separated the population into subgroups pertaining to certain characteristics (e.g., gender, GPA, and having taken an ethics course), and then a particular number of respondents using a simple random sample was selected from each subgroup. For example, there may be more female participants from the 120 credit program than the 150 credit program. According to Creswell (2005) “stratification ensures that the stratum desire will be represented in the sample in proportion to that existence in the population” (p. 148).

### **5.3 Instrumentation**

The instrument used for gathering data was Victor and Cullen’s Ethical Climate Questionnaire (ECQ). The ECQ consists of 36 questions and uses a two-dimensional approach to recognize ethical climates within a current work organization. The first dimension is characterized by the ethical criteria consisting of self in egoism, benevolence, and principle that are used within an organization. The second dimension corresponds to the locus of analysis. The objective of the ECQ in this study was to determine whether a significant difference exists between the ethical perceptions of the two groups of accounting graduates. Additional factors may exist as potential limitations to this study, such as an individual’s culture, religion, and type of organization where an individual may be employed.

### **5.4 Data Collection**

The set of questions asked the participants to read a scenario regarding coworkers who frequently remove resources (e.g., stationary, pens, etc.) from the office for their own personal use. The participants responded by indicating either “yes” or “no” and asked whether they would confront or avoid the individual. The choices included: a) Should

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rules be broken?, b) What is the distinction between what should be done as part of your job or what you know your peers feel you should do?, and c) What is your overall attitude on unethical behavior? The last part of the questions used a Likert scale ranging from completely false (1) to completely true (5). The 200 participants were asked to focus on what suggestions can be made by several recommendations on how to decrease unethical behavior among peers and fraudulent reporting. The choices comprise: a) documenting the findings, b) meet with a manager, c) assemble and collect all pertinent documents, and d) do nothing.

The lead author conducted the survey in the distribution of the instrument in both private and public universities. Out of the 200 surveys administered, a total of 155 students indicated an interest in participating. A total of 3 surveys were removed due to incomplete answers on the questionnaires. As a result, 155 surveys samples were used in the analysis of the study representing 77.5% for those surveyed. Table 2 shows the number of questionnaires distributed and the number that was ultimately used for the data analysis.

**Table 2 Questionnaire Response Summary**

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200	175 emailed, 25 mailed through the post office
3	Questionnaires partially completed 1.5%
42	No response was returned to the researcher 21%
155	Total usable questionnaires (a response rate of 77.5%)

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The demographic data received from the respondents indicated that the accounting graduates sample is a representative of the population of the two groups of accounting graduates. Table 4 presents the frequency distributions of the demographic characteristics of the survey respondents. The first group of accounting graduates consisted of 85 individuals who fulfilled the 120 credit hour program. Of the 85 respondents, 35 or 41% represented males and 50 or 59% represented females. The second group of accounting graduates was composed of 70 individuals who completed the mandated AICPA 150 credit hour program. Of the 70 respondents, 45 or 64% represented males and 25 or 36% represented females (See Table 3).

When it came to answering whether they had taken an ethics course, 70 out of 70 or 100% of the respondents in the 150 credit hour program reported having taken an ethics course compared to 59 out of 85 or 69% of the respondents in the 120 credit hour program (See Table 3).

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**Table 3 Demographic Characteristics of the Respondents (N=155)**

Demographic Variable		Program			
		120 Credits	%	150 Credits	%
Gender	Male	35	41%	45	64%
	Female	50	59%	25	36%
GPA	3.5 to 4.00	47	55%	63	90%
	3.0 to 3.45	33	39%	7	10%
	2.5 to 2.95	5	6%	0	
Have you taken an ethics course?	Yes	59	69%	70	100%
	No	26	31%	0	

*Note.* 120 program N=85, 150 program N=7

### 6. Results

To evaluate the differences in comparing means, the t-test is chosen as the best method for this study. The researchers used an independent sample t-test, which helped determine if any differences existed between the two groups (independent variable) and the ethical perceptions of accounting graduates (dependent variable). Any variations within the two groups of accounting graduates will be statistically analyzed with T and F values to determine if a statistical difference existed.

The table begins with a description of the respondents from both programs on the means and standard deviations of the study's variables which are derived from the nine dimensions of the Ethical Climate Questionnaire (ECQ). Furthermore, this section discusses the statistical tests that were used for data treatment and analysis. The results of the three hypotheses are reported and discussions of the findings of each research hypothesis are also presented.

**Table 4 Variable Means and Standard Deviations of both programs and ethics course**

Program	120 credit program		150 credit program	
	Mean	Std. Deviation	Mean	Std. Deviation
Egoism	2.94	.870	3.61	.680
Benevolence	3.03	.821	3.46	.370
Principle	3.40	.690	3.76	.460

*Note.* 120 program N=85, 150 program N=70

**6.1 Independent Sample T-test**

A total of three hypotheses were derived from the Ethical Climate Questionnaire (ECQ) and were tested in this study using the independent sample t-test (see Table 5). This test was appropriate for this study since the hypotheses compared the means between the two groups of accounting graduates who have taken an ethics course. In addition to the independent sample t-test, Levene’s test for the homogeneity of the variances between the two groups by computing an F-test. One cannot assume that the populations of the two groups looked at in this study had equal variances. Therefore, Levene’s test is one way to examine whether there is a difference between the variances between the two groups.

**Table 5 Independent Sample t-test**

ECQ Variables	Levene's Test for Equality of Variances		T-test for Equality of Means	
	f-test	Sig.	t-test	p-value (2-tailed)
Egoism	8.29	.188	1.786	.103
Benevolence	44.925	.000	2.774	.043
Principle	21.359	.013	4.245	.289

Note. 120 program N=85, 150 program N=70; \*p<0.05, \*\*p<0.01

**6.2 Hypothesis 1**

An F-test was conducted first to determine if a statistical significance existed between the two group’s variances using Levene’s Test. The p-values were not significant at .05. The three hypotheses are presented above in Table 5 .The null hypotheses were expressed as H1. Hypothesis 1 began with looking at the differences between the ethical perceptions of *egoism* between the two groups of accounting students who have taken an ethics course.

H1: There is no significant difference between ethical perceptions (*egoism*) of the two groups of accounting graduates who have taken an ethics course.

Hypothesis 1 shows that there was no statistical significance reported with a p-value of .103 among the two groups of accounting students when comparing those from the 150 credit program and those from the 120 credit program who have taken an ethics course. Therefore, the null hypothesis was accepted that there were no significant differences between ethical perceptions (*egoism*) of the two groups of accounting graduates when members of both groups have taken an ethics course.

### **6.3 Hypothesis 2**

An *F*-test was used first to determine if a statistical significance existed between the two group's variances using Levene's Test. The p-values were determined to be significant at .05. Hypothesis 2 began with looking at the differences between the ethical perceptions of *Benevolence* between the two groups of accounting students who have taken an ethics course.

*H2*: There is no significant difference between ethical perceptions (*Benevolence*) of the two groups of accounting graduates who have taken an ethics course.

Hypothesis 2 showed a statistical significance reported with a p-value of .043, which was less than .05. The researcher was 95% confident that a statistical difference existed between the two groups of accounting students in the 150 credit program and the 120 credit program. Therefore, the null hypothesis was rejected and the alternative hypothesis was accepted that there was a statistical significance in the differences between ethical perceptions (*Benevolence*) of the two groups of accounting graduates who have taken an ethics course.

### **6.4 Hypothesis 3**

An *F*-test was conducted initially to determine if a statistical significance existed between the two group's variances using Levene's Test. The p-values were determined to be significant at .05. Hypothesis 3 began with looking at the differences between the ethical perceptions of *Principle* between the two groups of accounting students who have taken an ethics course.

*H3*: There will be no significant difference between ethical perceptions (*Principle*) of the two groups of accounting graduates who have taken an ethics course.

Hypothesis 3 showed that there was no statistical significance reported with a p-value of .289, which was slightly greater than .05. The researchers were 95% confident that a statistical difference did not exist between the two groups of accounting students in the 150 credit program and those in the 120 credit program who have taken an ethics course. Therefore, the null hypothesis was accepted and the alternative hypothesis was rejected that there was a statistical significance differences between ethical perceptions (*Principle*) of the two groups of accounting graduates who have taken an ethics course.

## **7. Conclusion and Implications**

The study established that a difference exists for the students that took a course in ethics. Overall, accounting students are more likely to be aware of the importance of ethical behavior as a result of the demise of some large corporations, the ripple effect of these catastrophes on the economy, and the judicial consequences of perpetrating the financial fraud.

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This study also had some limitations. The researchers only compared the differences between the means of the two groups. This study could have used other statistical tests such as ANOVA to compare the difference within the groups. It is possible that comparing GPA, gender, employment, and taking an ethics class may turn out a different outcome. However, based on the findings and conclusion of this research, it is suggested that business school programs, especially accounting, should continue to emphasize ethical and moral issues in their respective programs. Accounting professors, in the opinion of the authors, should devote more time to raising students' awareness of ethical issues in the classrooms.

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