



Professional ethical crises

A case study of accounting majors

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Abstract

Purpose – To investigate how accounting majors have reacted to recent accounting scandals and to evaluate the extent to which they are familiar with the scandals, the effects of the scandals on their opinions of accountants and corporate managers, and the consequent influences on the student's educational and career plans.

Design/methodology/approach – In total 105 accounting majors at two institutions were surveyed. Forsyth's ethics position questionnaire was used to evaluate the student's ethical orientation. The survey instrument also measures student demographic data, the student's knowledge of the profession and the scandals, and how the scandals affected the student's opinions and plans. The data are analyzed using linear regression.

Findings – Accounting students are generally knowledgeable about the scandals but seem to know considerably less about the accounting profession. Accounting students lowered their opinions of corporate managers more than that of accountants. Accounting students also express an increased interest in majoring in accounting and seeking a position in the profession, but express less interest in working for a Big 4 firm. Students scoring higher on the idealism scale tended to lower their opinions of accountants more than that of corporate managers.

Research limitations/implications – The results represent a case study only. It is believed that the conclusions may apply to other student populations.

Practical implications – The results can guide educators to prepare interventions that help students to avoid ethical crises.

Originality/value – The paper introduces ethical orientation in explaining how students react to ethical crises. The results enable accounting educators to understand what students feel and how and why they react to such events.

Keywords Ethics, Accounting, Students, Professional ethics

Paper type Research paper



Introduction

Ethical crises occur in all professions, affecting not only those already in the profession, but also those preparing to enter it. For example, the reputation of the law enforcement profession has suffered as a result of unethical and irresponsible behavior by a few of its members, most notably a result of instances of police brutality and corruption (i.e. Rodney King, Abner Louima) (Ceniceros, 2000). The Roman Catholic priesthood has likewise suffered a diminution of its reputation and financial standing,

as result of the molestation of children by a small number of priests and its long-term cover-up by the Church's hierarchy (Strupp, 2002). Both scandals have not only hurt each professions reputation, but also hurt recruitment of new members and exposed members to increased liability (McLeod, 2002; Greengard, 1996). The accounting profession experienced arguably the deepest crisis in its history with the discovery that accountants had acquiesced in monumental fraudulent financial reporting by corporate giants such as Enron, WorldCom, Tyco, and others. The long-term damage inflicted on these professions is still being felt. However, the reaction among those preparing to enter their respective profession, whether they are enrolled in a police academy, seminary, or college, is of vital significance. These individuals are the future of the profession and will determine its eventual success or failure.

The objective of this study is to investigate accounting student reactions to the ethical crises that have tarnished the profession they are preparing to enter. Specifically, we evaluate the extent to which current accounting majors are familiar with the accounting scandals that took place during 2001-2002, their ethical opinions of accountants and corporate managers, and the resultant influences on their educational and career aspirations. Of particular interest is the role of a student's ethical orientation in the development of his or her ethical opinion and educational and career plans.

The paper is organized as follows: following this introduction is a discussion of the scandals that rocked the accounting profession and lead to eventual passage of the Sarbanes-Oxley Act of 2002, followed by a review of the relevant literature. Hypotheses development and research methodology are discussed next, followed by a presentation and discussion of the results.

Overall, we find that accounting majors have reacted negatively to the events in the accounting profession. However, not all students reacted similarly. Moreover, we find that a student's ethical orientation can predict the nature of his or her reaction. The results indicate that accounting majors today are still influenced by the events surrounding the demise of Enron and Arthur Andersen, and that this influence has helped shape their ethical opinions of accountants and managers. Educators may thus better understand how students feel about the above behavior and their resultant reaction.

The accounting scandals

In October 2001 came the first reports of significant accounting irregularities in financial statements issued by Enron, which at the time was the seventh largest company on the *Fortune* 500. Enron had engaged in a widespread and highly complex series of financial transactions that had given investors and other stakeholders the impression that Enron's financial picture was considerably rosier than it truly was (McLean, 2001), including a substantial understatement of its liabilities. Enron's stock price fell precipitously from nearly \$34 per share on October 16 to a few pennies per share on November 28, when lenders downgraded Enron's debt to junk-bond status (Smith and Emshwiller, 2001). Enron eventually initiated the largest bankruptcy filing at the time, only surpassed by Worldcom's filing in 2002 (Gara and Langstraat, 2003).

The scandal soon focused attention on Arthur Andersen, Enron's public accounting firm. Evidence emerged that Andersen had considerable complicity in Enron's financial activity, having helped Enron to create an arcane web of partnerships, in an effort to remove huge amounts of debt from Enron's balance sheet, as well as signing

off on Enron's annual financial statements. According to an internal e-mail message, Andersen had considered dropping Enron as an audit client as early as February 6, 2001 (Duffy, 2002), but had nevertheless retained a high-profile and profitable client.

When news of Enron's accounting improprieties surfaced, several Andersen employees began shredding relevant documents and deleting associated e-mail messages and other electronic files, allegedly based on the firm's document retention policies. Six months later, Andersen was convicted of obstruction of justice (although in 2005 this was overturned on appeal, but too late to save Andersen), becoming the first major accounting firm to be convicted of a felony. As a result, the firm was no longer able to perform public company audits and the Big 5 thus became the Big 4.

Unfortunately, the Enron scandal was only the beginning. The list of corporations involved in recent major investigations of financial irregularities includes WorldCom, Computer Associates, Global Crossing, Tyco, Xerox, Halliburton, Bristol-Myers Squibb, Qwest Communications, Adelphia, K-Mart, Lucent Technologies, HealthSouth, and Freddie Mac (Gara and Langstraat, 2003). Every Big 4 accounting firm has been involved in these investigations to some extent and some have already been penalized for their roles. However, Arthur Andersen was associated with a disproportionate number of these firms (Worldcom, Qwest, Global Crossing, and Enron) and was the only firm to receive a criminal conviction.

Because of the scandals, investors lost billions of dollars while thousands of employees lost both jobs and their pensions. The crisis destroyed the credibility of financial analysts, led to the collapse of a Big 5 accounting firm, and severely tarnished the images of corporate managers and auditors. The single most significant consequence of these scandals was Congress' passage of the Sarbanes-Oxley Act of 2002. After decades of self-regulation, this legislation created the Public Company Accounting Oversight Board to oversee the accounting profession in the area of public company audits.

Particularly unsettling is the uncertainty surrounding the long-term effects of these events on the accounting profession and corporate leadership. Based upon their status as the future of the accounting profession, we view current accounting majors as a barometer by which we can assess these long-term effects. The long-term effects are exhibited in two ways. First, the opinions students currently have of accountants, the profession, and corporate managers illustrates the long-term effects of these events, given that these events took place when several current accounting students were still in high school. Additionally, students' educational and career aspirations will help predict the future and makeup of the profession. Given the current perceived shortage in accounting graduates, which is dependent upon a supply of current accounting majors, any significant reaction warrants attention (Francisco *et al.*, 2003).

Ethical orientation and ethical behavior

According to Steiner (1972), ethical behavior in organizations is defined as "conduct fair and just above and beyond constitutional laws and applicable government regulations." Within the vast literature on ethical behavior in business lies a body of research that examines the ethical perceptions of various business practices among practitioners and students. See, for example, Ford and Richardson (1994) and Borkowski and Ugras (1998).

Forsyth (1992) asserts that a determinant of an individual's behavior in response to an ethical issue is his or her personal moral philosophy. Relativism and idealism, two separate ethical constructs, are two aspects of an individual's moral philosophy (Elias, 2002). Forsyth (1980) developed the ethics position questionnaire (EPQ) to evaluate a person's ethical orientation, or ethical philosophy. The EPQ consists of 20 statements with which the respondent indicates his or her degree of agreement or disagreement on a five-point Likert scale. The first 10 questions measure the respondent's idealism and the second 10 questions measure his or her relativism. This instrument is well validated in the psychology literature (Forsyth, 1981; Leary *et al.*, 1986; Forsyth, 1992) and has been used in the accounting literature (Shaub *et al.*, 1993; Lawrence and Shaub, 1997; Ziegenfuss, 1999; Elias, 2002). Forsyth and Nye (1990) used the median value of each scale to define high and low. We follow their definition in the present study.

Idealism measures a person's attitude toward causing harm to others. Idealists feel that harming another individual is always avoidable and avoid choosing the lesser of two evils if it may result in harm coming to other people (Elias, 2002). Persons with low idealism, or pragmatists, acknowledge that following moral principles can result in negative consequences. They feel that some harm is often necessary to achieve an overall benefit (Forsyth, 1992).

Relativism measures a person's attitude toward universal moral principles and rules. Relativists reject universal moral principles and rules and feel that the morality of a given action depends on the situation and individuals involved (Forsyth, 1992). They preach a moral philosophy based upon skepticism (Forsyth, 1992). Persons low in relativism contend that morality requires acting in ways that are consistent with moral principles (Ziegenfuss, 1999).

Forsyth (1980) identifies four categories, called personal ethical philosophies (PEPs), based on a person's measured levels of idealism and relativism. Table I shows these four PEP categories. Situationists (PEP 1) reject universal moral principles, but still feel that morality requires actions that benefit all individuals involved. Absolutists (PEP 2) believe that morality requires striving for positive consequences and good for all, while maintaining compliance with general moral guidelines. Subjectivists (PEP 3) also reject universal moral principles, and contend that moral actions require a weighing of consequences of proposed actions, with awareness that some harm may be unavoidable. Subjectivists base their actions upon their personal, as opposed to universal, values. Finally, exceptionists (PEP 4) espouse adherence to universal moral guidelines and principles, but admit that following these guidelines and principles may have negative consequences.

	High relativism	Low relativism
High idealism	PEP = 1 Situationist	PEP = 2 Absolutists
Low idealism	PEP = 3 Subjectivists	PEP = 4 Exceptionists

Source: Forsyth (1980)

Table I.
Forsyth's personal ethical
philosophies (PEPs)

Empirical research has demonstrated the relationships between a person's PEP and their ethical judgments in business situations. See, for example, Barnett *et al.* (1994), Bass *et al.* (1999) and Elias (2002). Research has shown that people who are high on the relativism scale generally are more tolerant of ethically ambiguous behavior relative to people who are high on the idealism scale. Singhapakdi *et al.* (1996) demonstrates a connection between an individual's ethical beliefs and his or her attitudes toward social responsibility. This research justifies the use of ethical orientation as an explanatory variable in our study.

Hypothesis development

The purpose of this paper is to investigate accounting student reactions to the ethical crises that have tarnished the profession they are preparing to enter. Specifically, we examine the role of ethical orientation and student demographic variables on student reactions. Student reactions are measured both in their opinions of accountants and corporate managers, and their intended actions regarding declared major and career goals.

Ethical orientation

Idealists view the avoidance of harm to others as paramount. Research has shown that they take a strict view on activities that inflict harm on others and are generally harsher in their judgments of unethical conduct (Forsyth, 1992). Therefore, we form the following hypothesis:

H1a. Compared to low idealists, high idealists will judge the actions of accountants and corporate managers more harshly.

Furthermore, the scandals will have raised the student's awareness of the potential harm caused by accounting misbehavior, leading high idealists to become less interested in the profession. Therefore, we hypothesize:

H1b. Compared to low idealists, high idealists will exhibit less interest in majoring in accounting and pursuing an accounting career because of the accounting scandals.

Relativists reject universal moral codes and look to the circumstances surrounding the action before making a judgment. Consequently, high relativists may assign less blame to the individuals involved in a scandal, recognizing that their behavior may have been strongly influenced by their circumstances. Therefore, we form the following hypothesis:

H2a. Compared to low relativists, high relativists will judge the actions of accountants and corporate managers more leniently.

Students who are high on the relativism scale may feel that the culprits in the scandals were high relativists who chose to justify their actions based on circumstances. Thus, they can envision themselves falling prey to the similar situations and would seek to avoid a career that presents such challenges. Therefore, we hypothesize:

H2b. Compared to low relativists, high relativists will exhibit less interest in majoring in accounting and pursuing an accounting career because of the accounting scandals.

Gender

The impact of gender on ethical judgment is complex and unsettled. Prior literature has produced mixed results regarding gender effects. Earlier studies have found either no difference or have found that females exhibit higher ethical behavior than males (Lawrence and Shaub, 1997). Several studies have suggested that females are more concerned with ethical issues than males (Sankaran and Bui, 2003; Coate and Frey, 2000; Giacomino and Akers, 1998). Shaub (1994) found that female auditing students and auditors demonstrate higher levels of ethical reasoning than their male counterparts. However, other studies have found no significant gender difference in ethical perceptions or judgments (Lawrence and Shaub, 1997; Stanga and Turpen, 1991; Kidwell *et al.*, 1987).

According to Coate and Frey (2000), arguments for and against gender-based differences in moral reasoning are often based upon two approaches. The structural approach posits that the reward and incentive structure within a given profession force all those within to develop similar ethical values and beliefs. Hence, males and females in the same profession will exhibit similar ethical behavior. However, the gender socialization approach asserts that males and females bring different sets of values to the workplace and the classroom. Males view achievement as a competition and are more likely to “bend” the rules to succeed, whereas females are more concerned with self-performance, as opposed to relative performance. Accordingly, females are less likely to break the rules and are more critical of those who do (Betz *et al.*, 1989).

Overall, we expect gender to have a significant impact on students’ ethical perceptions and judgments. The students in the sample are unlikely to have been exposed to the accounting profession long enough to warrant application of the structural approach. Being students, their experience with the profession’s reward structure is minimal. Shaub (1994, 1996) find significant gender differences in ethical perceptions of accounting students (the same population under study here) and auditors, respectively. Accordingly, we expect gender differences, as illustrated in the following hypothesis.

- H3a.* Compared to male accounting majors, female accounting majors will judge the actions of accountants and corporate managers more harshly.
- H3b.* Compared to male accounting majors, female accounting majors will exhibit less interest in majoring in accounting and pursuing an accounting career because of the accounting scandals.

Age

A person’s age is posited to have an impact on his or her ethical judgments. According to Coombe and Newman (1997), younger individuals tend to be less focused on ethical issues than their older counterparts. As persons age, they become more moralistic (Sankaran and Bui, 2003). Age also plays a role in Kohlberg’s (1976) theory of cognitive moral development. According to Kohlberg, a person’s ethical reasoning develops through six progressive stages, from the pre-conventional level to the post-conventional level. As people age, they progress to a higher stage of moral development (Lawrence and Shaub, 1997). As a result, older individuals should exhibit higher ethical values and behavior.

Unfortunately, this may not be true for accountants. Sankaran and Bui (2003) studied a sample of 50 accounting majors and find that they demonstrate a general decline in ethical values as they grow older. Moreover, this result was reversed for a control group of non-accounting majors, both business and non-business. For the non-accounting majors, ethical values increase with age, consistent with the ethics literature.

Based on the prior overall findings in the ethics literature, we anticipate that older students will possess and demonstrate higher levels of ethical perceptions and behavior. As a result, older students will exhibit greater reservations about accountants, corporate managers, and accounting overall.

H4a. Compared to younger accounting majors, older accounting majors will judge the actions of accountants and corporate managers more harshly.

H4b. Compared to younger accounting majors, older accounting majors will exhibit less interest in majoring in accounting and pursuing an accounting career because of the accounting scandals.

Knowledge

The media coverage of the scandals, the strong governmental response, the demise of several large firms, and the numerous lawsuits have sent clear signals that accountants and corporate managers have engaged in widespread reckless and unethical behavior. Thus, we hypothesize that the impact of the recent scandals on students' perceptions of accountants and corporate managers will be more negative among students who are more knowledgeable of these developments and the accounting profession overall. Moreover, the same students will exhibit a larger decline in their interest in majoring in accounting and pursuing a career in accounting.

H5a. More knowledge of the accounting profession and the recent scandals are associated with a greater decline in student perceptions of accountants and corporate managers.

H5b. More knowledge of the accounting profession and the recent scandals are associated with a greater decline in student interest in majoring in accounting and pursuing an accounting career.

Data collection and methodology

We distributed a survey instrument to junior accounting majors at two institutions, a large public southern university and a small northeastern private university. We received 105 usable responses. The survey instrument consisted of five categories of questions: knowledge (20 questions), change in opinion (2 questions), change in educational and career plans (5 questions), ethical orientation (20 questions from Forsyth's (1980) EPQ), and student demographic questions (6 questions). A copy of the instrument is included in the appendix.

We code each response to a knowledge question as either +1 (correct) or 0 (incorrect) and we code the responses to the ethical orientation statements from 1 (strongly disagree) to 5 (strongly agree). We code the responses to the opinion questions from -2 (strong negative impact) to +2 (strong positive impact), and we code the responses to the educational and career plan questions from -2 (greatly decreased) to +2 (greatly increased).

We analyzed the data using linear regression with the variables that measure changes in opinions and changes in educational and career plans as the dependent variables. We use the variables that capture knowledge, ethical orientation, and demographic characteristics as potential explanatory variables. Using stepwise regression and other exploratory techniques, we build appropriate linear regression models, testing the standard regression assumptions using residuals plots and normal probability plots.

Results and discussion

Descriptive statistics – independent variables

Table II summarizes the results for the knowledge questions and indicates that the sampled students are knowledgeable of the scandals. On average, students correctly answered over 80 percent of the knowledge questions related to the scandals. Fifty-three of the 105 students (51 percent) answered all 5 questions about the scandals correctly, and 78 of the 105 students (74 percent) answered four or five of the questions about the scandals correctly. Thus, students remain well aware of the facts of the crisis in their profession.

Table II shows that accounting majors had more difficulty with questions concerning public accounting and its subfields. On average, students correctly answered only 43 percent of the knowledge questions related to public accounting; 57 percent answered only zero or one question correctly out of three. Similarly, on average, students correctly answered only 57 percent of the knowledge questions related to various accounting subfields (audit, tax and managerial); 40 percent answered zero or one question correctly out of three. However, they did better on questions concerning the Big 4 accounting firms. On average, students correctly answered 62 percent of the knowledge questions related to the Big 4 firms; 71 percent answered two or three questions correctly out of three.

	<i>Tot_Know</i>	<i>Tot_Scan</i>	<i>Tot_Acc</i>	<i>Tot_Sub</i>	<i>Tot_Pub</i>	<i>Tot_B4</i>
Respondents	105	105	105	105	105	105
Missing	0	0	0	0	0	0
Mean	12.06	4.07	3.14	1.70	1.30	1.85
SD	3.05	1.21	1.13	0.99	0.90	0.87
Minimum	4	0	0	0	0	0
Median	12	5	3	2	1	2
Maximum	18	5	5	3	3	3
Max. Possible	20	5	6	3	3	3

Notes: *Tot_Know* = Number of correct responses to 20 questions measuring a respondent's knowledge of both the overall accounting profession and the related scandals; *Tot_Scan* = Number of correct responses to 5 questions measuring a respondent's knowledge of the accounting related scandals; *Tot_Acc* = Number of correct responses to 6 questions measuring a respondent's knowledge of the overall accounting profession; *Tot_Sub* = Number of correct responses to 3 questions measuring a respondent's knowledge of accounting sub-fields (tax, audit, and managerial); *Tot_Pub* = Number of correct responses to 3 questions measuring a respondent's knowledge of public accounting; *Tot_B4* = Number of correct responses to 3 questions measuring a respondent's knowledge of the Big Four accounting firms

Table II.
Summary statistics for
the knowledge questions

Table III summarizes the results for the ethical orientation statements and the demographic characteristics of our respondents, except for gender. Fifty-six of our respondents (54 percent) are male and 48 (46 percent) are female, with one nonresponse. In very few instances (less than 5 percent), the student did not respond to all ethical orientation statements within a category (idealism or relativism), in which case we computed the average over all statements in that category to which the student did respond.

Table III reveals that accounting majors tend to score higher on the idealism scale (mean = 3.80) than they do on the relativism scale (mean = 3.02). The difference is highly statistically significant ($P < 0.005$) in a paired t -test. The mean score on the idealism scale is considerably above the midpoint of the five-point scale (3) while the mean score on the relativism scale is virtually at the center of the scale. We cannot generalize this statement to students in other professional programs, who may well have different ethical orientations relative to accounting majors (Giacomino and Akers, 1998).

Table IV shows the distribution of students over the four PEP categories defined in Table I. The definition of high and low on these scales uses the median values, namely 3.9 on the idealism scale and 3.0 on the relativism scale in our study. Table IV shows

	<i>Tot_Ideal</i>	<i>Tot_Rel</i>	<i>Age</i>	<i>Lived_US</i>	<i>Credits</i>	<i>GPA</i>	<i>YrsAccExp</i>
Respondents	99	98	101	104	98	95	104
Missing	6 ^a	7 ^a	4	1	7	10	1
Mean	3.80	3.02	24.6	20.9	89.0	3.25	1.11
SD	0.70	0.75	6.91	8.65	43.5	0.52	2.17
Minimum	1.9	1.3	18	1	6	2.00	0
Median	3.9	3.0	22	21	87	3.30	0
Maximum	5.0	4.9	51	50	250	4.00	15

Notes: ^aRespondent failed to respond to all of the questions in this category; *Tot_Ideal* = Mean score on 10 questions from Forsyth's (1980) EPQ to measure a respondent's degree of Idealism; *Tot_Rel* = Mean score on 10 questions from Forsyth's (1980) EPQ to measure a respondent's degree of Relativism; *Age* = Age of respondent in years; *Lived_US* = Number of years respondent has lived in the United States; *Credits* = Number of credits respondent will possess upon completion of current semester (includes current semester registration); *GPA* = Respondent's current grade point average; *YrsAccExp* = Number of years of accounting-related work experience

Table III.
Summary statistics for the ethical orientation statements and the demographic characteristics

	High relativism 46 students	Low relativism 52 students
High idealism 45 students	PEP = 1 Situationalist 24 students	PEP = 2 Absolutists 21 students
Low idealism 53 students	PEP = 3 Subjectivists 22 students	PEP = 4 Exceptionists 31 students

Table IV.
Distribution of students among the four PEP categories

Notes: Based upon respondents' median scores on the idealism (3.9) and relativism (3.0) scales of Forsyth's (1980) EPQ

that the students are distributed nearly uniformly across the four PEP categories. A plurality of students is grouped within PEP category 4, Exceptionists (31 students). According to Forsyth (1992), exceptionists prefer to rely on moral guidelines and rules, but admit that their use may result in harm. Fisher's exact test confirms that there is no association between idealism and relativism in this sample (two-tailed $P = 0.3105$). This supports the concept that idealism and relativism are independent constructs rather than opposite ends of a single construct.

Descriptive statistics – dependent variables

Table V summarizes the results for the opinion questions and for the educational and career plans questions. A χ^2 test reveals that the distributions of *Opin_Acct* and *Opin_CM* are different ($P < 0.001$). The mean student opinion score for accountants is -0.31 , while the mean score for corporate managers is -0.88 . Accounting majors lowered their opinions of corporate managers more than they lowered their opinions of accountants. This suggests that students shift blame away from their own profession onto others. Additionally, this also supports a finding that accounting majors recognize that it is corporate management, and not accountants, who are ultimately responsible for the integrity of the financial statements.

Table V also shows that, subsequent to the scandals, accounting majors have expressed more interest in accounting as a major (mean = 0.26, $P = 0.0011$ in a one-sample two-sided t -test of $H_0: \mu = 0$) and more interested in seeking an accounting position (mean = 0.23, $P = 0.0032$ in a one-sample two-sided t -test of $H_0: \mu = 0$). These results are consistent with an earlier study by Chen *et al.* (2002) of student opinions immediately following the Enron scandal. On the other hand, we see that accounting majors have become less interested in a position with a Big 4 accounting firm (mean = -0.18 , $P = 0.0254$ in a one-sample two-sided t -test of $H_0: \mu = 0$). Thus, while accounting students have become more interested in the profession itself, they have become less interested in becoming involved with the large Big 4 public accounting firms, those involved in the underlying scandals.

A *New York Times* article indicates that the recent accounting scandals may have "actually made accounting more attractive to young people" (Weidlich, 2002). Moreover, accounting faculty members have stated that the scandals have raised accounting's visibility among students, and may help dispel conceptions of accounting as dry and tedious (Wei, 2002). Therefore, on the one hand, the scandals have provided an image of corporate managers and accountants as greedy, corrupt, and incompetent, hardly a sound endorsement for recruiting new students to enter the profession and join the ranks of the "bad guys." On the other hand, accountants in particular have long suffered the reputation of being boring. Suddenly they have become anything but boring.

Results of regression analyses

Table VI summarizes the linear regression models for the dependent variables. Independent variables not listed in the first column are not significant at the 10 percent level in any model. None of the independent variables are significantly correlated with *IntPosAcc*, *Int_B4*, or *IntCarAud* and thus these dependent variables are omitted from the table. We point out that the R^2 values for all these models are small, indicating that most of the variation in the dependent variables remains unexplained.

Table V.
Changes in student
opinions of accountants
and corporate managers

<i>Impact</i>	<i>Opin_Acct</i> (percent)	<i>Opin_CM</i> (percent)	<i>IntMajAcc</i> (percent)	<i>IntPosAcc</i> (percent)	<i>IntPubAcc</i> (percent)	<i>Int_B4</i> (percent)	<i>IntCarAud</i> (percent)
Strong negative (-2)	4 (3.8)	12 (11.4)	2 (1.9)	2 (1.9)	3 (2.9)	4 (3.8)	5 (4.8)
Negative (-1)	34 (32.4)	70 (66.7)	9 (8.6)	9 (8.6)	14 (13.3)	31 (29.5)	13 (12.4)
None (0)	60 (57.1)	21 (20.0)	61 (58.1)	64 (61.0)	74 (70.5)	53 (50.5)	63 (60.0)
Positive (+1)	5 (4.8)	2 (1.9)	26 (24.8)	23 (21.9)	14 (13.3)	14 (13.3)	19 (18.1)
Strong positive (+2)	2 (1.9)	0 (0.0)	7 (6.7)	7 (6.7)	0 (0.0)	3 (2.9)	5 (4.8)
Totals	105 (100)	105 (100)	105 (100)	105 (100)	105 (100)	105 (100)	105 (100)
Means	-0.31	-0.88	0.26	0.23	0.00	-0.18	0.06

Notes: *Opin_Acct* = Impact of scandals on respondent's opinion of accountants (strongly negative to strongly positive); *Opin_CM* = Impact of scandals on respondent's opinion of corporate managers (strongly negative to strongly positive); *IntMajAcc* = Impact of scandals on respondent's interest in continuing to major in accounting (strongly negative to strongly positive); *IntPosAcc* = Impact of scandals on respondent's interest in pursuing a position in accounting (strongly negative to strongly positive); *IntPubAcc* = Impact of scandals on respondent's interest in pursuing a position in public accounting (strongly negative to strongly positive); *Int_B4* = Impact of scandals on respondent's interest in pursuing a position with a Big Four accounting firm (strongly negative to strongly positive); *IntCarAud* = Impact of scandals on respondent's interest in pursuing a career in auditing (strongly negative to strongly positive)

	Dependent variables			
	<i>Opin_Acct</i>	<i>Opin_CM</i>	<i>IntMajAcc</i>	<i>IntPubAcc</i>
Constant	0.9089 ^a	-0.5247 ^{**}	0.0588	0.9570 ^{**}
<i>Tot_Acc</i>	0.1569 [*]	-0.1118 [*]		-0.1474 ^{**}
<i>Tot_B4</i>			0.1991 [*]	
<i>Tot_Ideal</i>	-0.2084 [*]			
<i>Tot_Rel</i>				-0.1827 [*]
<i>Age</i>	-0.0380 ^{***}			
<i>Gender</i>			-0.3653 [*]	
<i>R</i> ²	0.1746	0.0422	0.0915	0.0961

Notes: The table shows the coefficients and the significance levels using the following codes: ^a < 10 percent, * < 5 percent, ** < 1 percent, and *** < 0.1 percent. The table also shows the *R*² values. Only variables that are significant at a minimal level of 10 percent are reported above; *Opin_Acct* = Impact of scandals on respondent's opinion of accountants (strongly negative to strongly positive); *Opin_CM* = Impact of scandals on respondent's opinion of corporate managers (strongly negative to strongly positive); *IntMajAcc* = Impact of scandals on respondent's interest in continuing to major in accounting (strongly negative to strongly positive); *IntPubAcc* = Impact of scandals on respondent's interest in pursuing a position in public accounting (strongly negative to strongly positive); *Tot_Acc* = Number of correct responses to 6 questions measuring a respondent's knowledge of the overall accounting profession; *Tot_B4* = Number of correct responses to 3 questions measuring a respondent's knowledge of the Big Four accounting firms; *Tot_Ideal* = Mean score on 10 questions from Forsyth's (1980) EPQ to measure a respondent's degree of Idealism; *Tot_Rel* = Mean score on 10 questions from Forsyth's (1980) EPQ to measure a respondent's degree of Relativism; *Age* = Age of respondent in years; *Gender* = 1 if respondent is male, 0 otherwise

Table VI.
Summaries of the linear regression models for the dependent variables

With respect to ethical orientation, Table VI shows that students who score high on the idealism scale lowered their opinions of accountants relative to students who score low on the idealism scale. However, idealism is insignificant in predicting student opinions of corporate managers or interest in accounting. These results provide partial support for *H1a*. Because of the scandals, idealist students look more harshly at accountants than they do at corporate managers. This suggests that students who are higher on the idealism scale may be prone to blame the individuals who were responsible for preventing the abuse, holding them responsible for inflicting great damage on so many people. There is no evidence to support an impact of idealism on their opinion of corporate managers. However, the results fail to support *H1b*; we found no evidence that the scandals have decreased interest in majoring in accounting or pursuing an accounting career.

Relativism, on the other hand, is insignificant in predicting student opinions of accountants or corporate managers, or their interest in majoring in accounting. However, students who score higher on the relativism scale became less interested in public accounting, consistent with *H2b*.

Student gender is insignificant in predicting student opinions of accountants or corporate managers. Therefore, we find no support for *H3a*. In addition, we find no support for *H3b*. Interestingly, we find that the scandals resulted in female students expressing significantly greater interest in majoring in accounting while male students demonstrated no change in their interest. One possible explanation is that female students, who have generally been found to exhibit views and behavior that are more ethical than males (Lawrence and Shaub, 1997), may have reacted more favorably than

male students to the broad range of corrective actions, such as Sarbanes-Oxley, that followed the scandals. Thus, female students may now see the accounting profession as more ethically grounded and therefore, more attractive. Alternatively, the trend of increasing female accounting enrollment may be driving the results. Females, as a percentage of accounting program enrollments, have been increasing over recent years (Nelson *et al.*, 2002). The factors driving this trend may also be driving the reported gender results.

Age was significant in explaining students' opinion of accountants, but not of corporate managers. Older students expressed a lower opinion of accountants, providing partial support for *H4a*. However, age was insignificant in explaining students' interest in accounting.

With respect to the students' opinions of accountants and corporate managers, we find that students who are knowledgeable of the accounting profession report a positive change in their opinion of accountants and a negative change in their opinions of corporate managers (partial support for *H5a*). We believe that students with greater knowledge of the accounting profession may identify closely with accountants, rendering the students more likely to shift the blame for the scandals to others, and may have encountered opinions that favor accountants over corporate managers in their coursework. This result also supports a conclusion that students are aware of the relative responsibilities born by accountants and managers regarding financial statement integrity.

With respect to the students' interest in majoring in accounting and pursuing an accounting career, we find that students who possess more knowledge of the accounting profession have become less interested in a career in public accounting (partial support for *H5b*). Greater knowledge of the accounting profession led to less interest in the area within the profession most affected by the scandals (public accounting). Thus, students may be losing interest in careers with large public accounting firms, opting for other opportunities.

Conclusion

Accounting students are generally knowledgeable about the scandals but seem to know considerably less about the accounting profession. This may be due to media coverage of the scandals themselves, and not the accounting profession itself. Accounting students may, therefore be generally unaware of the diverse opportunities and the working environment of the profession that they are about to enter.

In general, accounting students lowered their opinions of corporate managers more than that of accountants. This result reflects the students' understanding that the primary responsibility for the financial statements falls upon corporate management. Overall, accounting students also express an increased interest in majoring in accounting and seeking a position in the profession, but express less interest in working for a Big 4 firm.

However, students scoring higher on the idealism scale tended to lower their opinions of accountants more than that of corporate managers. Thus, the high idealists may be focusing blame for the scandals more on the accountants, whose perceived responsibility is to protect stakeholders. Consequently, a student's ethical philosophy alters their perception of the responsible party and their opinions regarding ethical conduct.

We reiterate that our results represent a case study only. While we believe that our conclusions may apply to other student populations, we do not make this claim since we have studied only accounting majors at two institutions. However, to the extent that current students serve as barometers by which we can assess the potential long-term effects of such ethical crises, we believe that our results will enable accounting educators to understand better what students feel and how and why they react to events such as these. This understanding can guide educators to prepare appropriate interventions that can help students to avoid becoming involved in similar ethical crises in the future.

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Appendix

- (1) The recent accounting/business scandals have had _____ on my opinion of accountants.
- a strong positive impact
 - a positive impact
 - no impact
 - a negative impact
 - a strong negative impact
- (2) The recent accounting/business scandals have had _____ on my opinion of corporate managers.
- a strong positive impact
 - a positive impact
 - no impact
 - a negative impact
 - a strong negative impact
- (3) The recent accounting/business scandals _____ my interest in majoring in accounting.
- greatly increased
 - slightly increased
 - did not change
 - slightly decreased
 - greatly decreased
- (4) The recent accounting/business scandals _____ my interest in seeking a position in accounting.
- greatly increased
 - slightly increased
 - did not change
 - slightly decreased
 - greatly decreased
- (5) The recent accounting/business scandals _____ my interest in seeking a position in a Big 4 accounting firm.
- greatly increased
 - slightly increased
 - did not change
 - slightly decreased
 - greatly decreased
- (6) The recent accounting/business scandals _____ my interest in seeking a position in a public accounting firm.
- greatly increased
 - slightly increased
 - did not change

- d. slightly decreased
e. greatly decreased
- (7) The recent accounting/business scandals _____ my interest in pursuing a career in auditing.
- a. greatly increased
b. slightly increased
c. did not change
d. slightly decreased
e. greatly decreased
- (8) Which of the following is not a Big 4 public accounting firm?
- a. Ernst & Young
b. BDO Seidman
c. PricewaterhouseCoopers
d. Deloitte & Touche
- (9) In your first year working at a Big 4 accounting firm, as opposed to a non-Big 4 public accounting firm, you are not more likely to
- a. Travel more often
b. Experience more of the audit process
c. Receive a higher salary
d. Participate in an audit of a Fortune 500 firm
- (10) A Big 4 public accounting firm, as opposed to a non-Big 4 public accounting firm, is more likely to:
- a. Have more international offices
b. Have more domestic offices
c. Both of the above
d. Neither of the above
- (11) Which of the following statements is true?
- a. Publicly traded firms have the option of submitting audited financial statements to the Securities and Exchange Commission.
b. An independent public accounting firm must audit the financial statements of every publicly traded firm in the US
c. Audited financial statements have no value since the auditors are employees of the companies they audit.
d. Audited financial statements are available to the auditing firm, the client, and regulatory agencies only.
- (12) In the USA the fees of the auditor are paid by
- a. the audit client
b. the government
c. the SEC (Securities and Exchange Commission)
d. none of the above

-
- (13) Auditing a client's financial statements is difficult because
- No standards exist to guide the auditor in the process, and each auditing firm has to develop its own standards.
 - Managers of the company may adopt strategies that maximize their own personal interest rather than the interests of the shareholders.
 - The auditors cannot be expected to have expertise in the industry in which their client operates.
 - There is not enough time to audit the client's annual financial statements.
- (14) Accounting firms are not permitted to
- perform audits of year-end financial statements.
 - provide management advisory services to clients.
 - prepare tax returns for clients.
 - prepare financial statements for clients.
- (15) The CPA certification is required in which of the following areas of accounting?
- Business/industry
 - Public accounting
 - Education
 - Not-for-profit
- (16) Which of the following is not a certification in accounting?
- CPA
 - CLA
 - CMA
 - CIA
- (17) The average annual starting salary in a public accounting firm for an entry-level position that requires a bachelor's degree in accounting lies in which range:
- \$30,000-\$36,000
 - \$36,000-\$42,000
 - \$42,000-\$48,000
 - \$48,000-\$54,000
- (18) The average annual starting salary in a public accounting firm for an entry-level position that requires a bachelor's degree in accounting is _____ the average annual starting salary for a position requiring the same credentials in a private firm
- generally greater than
 - generally less than
 - generally equal to
 - generally unrelated to
- (19) Which of the following statements is true about public accounting, as opposed to private accounting?
- You are likely to travel less frequently
 - You are likely to experience more face-to-face contact with the client

-
- c. You are likely to receive a lower salary
d. You are likely to participate in an internal audit
- (20) If you examine a company's financial statements in order to assure stockholders and other financial statement users that the company's financial position is reported fairly, then you are most likely working in which area of accounting?
- Business/industry
 - Government
 - Public practice
 - Nonprofit
- (21) If you are responsible for providing an objective review of your company's financial and operating systems, then you are most likely functioning as
- A consultant
 - Forensic accountant
 - External auditor
 - Internal auditor
- (22) If you were working in public practice, then you would normally not perform which of the following functions?
- Management accounting
 - Auditing
 - Forensic accounting
 - Tax advisory services
- (23) Which of the following public accounting firms was dissolved as a result of a felony conviction?
- Deloitte & Touche
 - Ernst & Young
 - Arthur Andersen
 - BDO Seidman
- (24) The public accounting firm cited in question 23 was convicted because they
- shredded documents related to an audit.
 - bribed foreign officials.
 - blackmailed members of the client's audit committee.
 - embezzled money from the client.
- (25) The public accounting firm cited in question 23
- was found guilty of obstruction of justice.
 - successfully defended itself against all charges and continues to audit publicly traded firms.
 - reached a monetary settlement with the Securities and Exchange Commission and thus avoided a lawsuit.
 - was accused of collusion with PriceWaterhouseCoopers.

- (26) Which of the following companies, audited by the firm referred to in question 23, was found to have engaged in fraudulent financial reporting?
- Exxon Mobil
 - Sunoco
 - Shell Oil
 - Enron
- (27) Which of the following companies was also found to have engaged in fraudulent financial reporting?
- Worldcom
 - IBM
 - General Motors
 - Food Lion
- (28) Gender (please circle one): Male Female
- (29) How many years have you lived in United States? _____
- (30) How many years of accounting work experience do you have? _____
- (31) How many credits will you have earned by the end of this semester (include all credits completed, plus credits you are currently taking) _____
- (32) Approximate cumulative GPA (grade point average) _____
- (33) Age: _____

Instructions: You will find a series of general statements listed below. Each statement represents a commonly held opinion and there are no right or wrong answers. You will probably disagree with some items and agree with others. We are interested in the extent to which you agree and disagree with such matters of opinion. Read each statement carefully. Then indicate the extent to which you agree or disagree by circling the number under each statement. The categories are:

- 1 = Strongly disagree,
2 = Moderately disagree,
3 = Neither agree nor disagree,
4 = Moderately agree, and
5 = Strongly agree.

Strongly disagree 1 2 3 4 5 Strongly agree

A person should make certain that their actions never intentionally hurt another, even to a small degree.

1 2 3 4 5

Risks to another should never be tolerated, irrespective of how small the risks might be.

1 2 3 4 5

The existence of potential harm to others is always wrong, irrespective of the benefits to be gained.

1 2 3 4 5

One should never psychologically or physically harm another person.

1 2 3 4 5

One should not perform an action which might in any way threaten the dignity and welfare of another individual.

1 2 3 4 5

If an action could harm an innocent other, it should not be done.

1 2 3 4 5

Deciding whether or not to perform an act by balancing the positive consequences of the act against the negative consequences of the act is immoral.

1 2 3 4 5

The dignity and welfare of people should be the most important concern of any society.

1 2 3 4 5

It is never necessary to sacrifice the welfare of others.

1 2 3 4 5

Moral actions are those that closely match ideals of the most "perfect" action.

1 2 3 4 5

There are no ethical principles that are so important that should be a part of my code of ethics.

1 2 3 4 5

What is ethical varies from one situation and society to another.

1 2 3 4 5

Moral standards should be seen as being individualistic; what one person considers to be moral may be judged to be immoral by another person.

1 2 3 4 5

Different types of moralities cannot be compared as to "rightness."

1 2 3 4 5

Questions of what is ethical for everyone can never be resolved since what is moral or immoral is up to the individual.

1 2 3 4 5

Moral standards are simple personal rules which indicate how a person should behave, and are not to be applied in making judgments of others.

1 2 3 4 5

Ethical considerations in interpersonal relations are so complex that individuals should be allowed to formula their own individual codes.

1 2 3 4 5

Rigidly codifying an ethical position that prevents certain types of actions could stand in the way of better human relations and adjustments.

1 2 3 4 5

No rule concerning lying can be formulated; whether a lie is permissible or not permissible totally depends upon the situation.

1 2 3 4 5

Whether a lie is judged to be moral or immoral depends upon the circumstances surrounding the action.

1 2 3 4 5

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