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Case Studies of Ethics Scandals: Effects on Ethical Perceptions of Finance Students

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ABSTRACT. Ethics instructors often use cases to help students understand ethics within a corporate context, but we need to know more about the impact a case-based pedagogy has on students' ability to make ethical decisions. We used a pre- and post-test methodology to assess the effect of using cases to teach ethics in a finance course. We also wanted to determine whether recent corporate ethics scandals might have impacted students' perceptions of the importance and prevalence of ethics in business, so we used in-depth case studies of several of the major scandals (e.g., Enron, Tyco, Adelphia). Our results are somewhat surprising since studying ethics scandals positively impacts students' ethical decision making and their perceptions of the ethics of businesspeople.

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KEY WORDS: Case pedagogy, case studies, corporate misconduct, ethics, ethics across the curriculum, ethics scandals, ethics training, teaching ethics

Instructors educating business students have confronted the key issue of whether ethics instruction, when integrated into accounting, marketing, finance, production and other business courses, impacts students' ethical decision making. Management, marketing and accounting instructors have written extensively about issues associated with teaching ethics; however, "Finance journals and textbooks have been relatively silent on this topic, with the exception of Irvine's (1987) 'The Ethics of Investing'" (Hess and Norman, 2004: 42). While little is known about the impact of ethics instruction in any business discipline, this is probably more so for the field of finance.[1]

The question of the effect of teaching ethics in finance has become more critical as business schools shift from a stand-alone business and society course to integrating ethics into courses across the entire business curriculum. In the 1980s, nearly half of all AACSB accredited business schools offered a special course in business ethics (George, 1987), but many schools dropped their course or made it an elective when the AACSB revised its standards. Numerous business schools have attempted to integrate ethics across the curriculum with each business course addressing ethical issues within the particular discipline. This shift has generated a debate about whether ethics can be taught effectively within particular disciplines – such as in a finance course – or whether it needs to be addressed in a stand-alone course in order to positively impact students' ethical perceptions and decision making. Since many business schools have adopted the approach of integrating ethics education across the curriculum, we need additional research that investigates the impact of ethics education within each discipline. We also need to know more about whether certain pedagogies work best in particular disciplines: we cannot simply assume that pedagogies that work best in management or stand-alone ethics courses will work well in courses in finance, accounting, or other disciplines.

Researchers have argued that assumptions imbedded in the typical business curriculum may lead students to conclude that career success in business requires unethical decisions and behavior (Kumar et al., 1991). The idea of teaching ethics in a finance course may seem incompatible to some academics and businesspersons since finance instructors explicitly argue that shareholder wealth maximization represents the major goal of the firm. However, as a panel discussion of professors, practitioners, and lawyers suggest, within the finance discipline maximization of shareholder wealth is viewed as consistent with ethical behavior (Ang, 1993). Instructors incorporating ethics education into finance stress shareholder wealth maximization cannot be achieved except by ethical behavior. A key goal of our research was to address the impact of ethics education in an undergraduate and a MBA finance course that stresses shareholder wealth maximization as an ethical objective of the firm.[2]

How we should go about teaching ethics is a topic addressed by Feldman and Thompson (1990). A combination of pedagogies is discussed which include lecture, case study, and guest speakers. Shannon and Berl's (1997) review of literature on teaching business ethics refers to one study that found in discipline-specific courses case study combined with lectures is the most practical way of blending ethics instruction into the course. For our study ethics was blended into an undergraduate and a graduate finance course using a combination of case study and class discussion. Student perceptions of business ethics are examined both before and after the case study and the results are compared.

Our cases differ from those sometimes used in other courses because we required students to research and generate their own cases rather than relying on pre-existing cases. This enables students to frame – become aware of, recognize and categorize – ethical issues for themselves rather than relying on published cases with a pre-framed ethical issue or dilemma (Baucus and Rechner, 1995), a process that more closely approximates the way managers encounter ethical issues in the workplace (i.e., not as pre-framed ethical dilemmas). Students in the finance class researched and developed their own in-depth case studies of major ethics scandals such as Adelphia, Enron and Tyco, presenting and discussing the cases in class. We assessed the impact of this pedagogy in the finance course by conducting a pre- and post-test of students' ethical perceptions using a survey adapted from Froelich and Kottke (1991) and Cole and Smith (1995).

In sum, the purpose of this study was to examine students' ethical perceptions before and after they conducted in-depth case studies of corporate ethical scandals in a finance course. We were interested in whether integrating ethics into a finance course could affect students' ethics. We begin by presenting our research hypotheses, followed by our methods and results. We conclude by discussing limitations of our research and implications for ethics researchers and instructors.

Research hypotheses

Our review of the literature indicated that individual characteristics may account for differences in how people respond to major ethical scandals, so we developed several hypotheses involving key individual characteristics. We also built on prior literature to develop our hypothesis regarding the impact that in-depth case studies of ethical scandals would have on students' ethical perceptions.

Demographic characteristics and ethical perceptions

The relationship between gender and ethical perceptions or ethical decision making has received quite a bit of attention by researchers. Gilligan (1982) argues that females rely on an ethic of "care" or a framework based on responsibility, while males use a "justice" framework or rely on rights and duties as shown in Kohlberg's (1981, 1984) model of moral development. Research investigating the relationship between gender and ethics has shown mixed results. Some research supports the proposition that females tend to be less accepting of questionable behavior (Cole and Smith, 1996; Luthar et al., 1997). Other researchers have observed mixed results with females from the general population in the U.S. making significantly more ethical choices than males, while females and males in the business school population did not exhibit any significant differences (McCabe et al., 1991). Ford and Richardson (1994) reviewed fourteen studies, with half supporting a positive relationship and half showing nonsignificant results. A positive relationship was also supported in 29 of the 47 studies compiled by Borkowski and Ugras (1998) for their meta-analysis, with 16 of the studies having nonsignificant results and two studies revealing mixed results. Their meta-analysis of these 47 studies showed that females tend to respond more ethically to dilemmas and cases presented in ethics research, although they caution that this does not necessarily mean that women will behave more ethically than men (Borkowski and Ugras, 1998). This leads us to hypothesize that females will demonstrate stronger positive ethical perceptions than males.

H1: Female students will be less willing to accept unethical or questionable behavior than male students.

Researchers have investigated the impact of age on ethical reasoning and ethical decision making. Kohlberg's model of the stages of moral reasoning (1981, 1984) suggests that individuals usually move to higher stages of moral reasoning as they age. However, researchers have found mixed support for the relationship between age and ethical decision making. Some studies have shown a positive relationship among age and ethical decision making (Rest, 1986; Thoma, 1985), indicating that people's values may become stronger with maturity (Cole and Smith, 1996). Researchers reviewing 35 studies found that 29% supported a positive relationship between age and ethical decisions, while 20% showed mixed results and 51% reported a nonsignificant relationship (Borkowski and Ugras, 1998). Their meta-analysis of these studies supported the positive relationship among age and ethical decision making (Borkowski and Ugras, 1998). Thus, we hypothesize that age and ethical decision making will be positively related.

H2: Older students will be less willing to accept unethical or questionable behavior than younger students.

A review of recent literature on student business ethics perceptions indicated a number of studies that compare results across groups, either among different types or levels of students (e.g., business versus other professional students), students versus businesspeople, or students of business in different countries. Results of these studies tend to be mixed, but generally support differences across groups of students.

Parsa and Lankford (1999) compare perceptions of business ethics between undergraduate and MBA students. Students were asked to respond to questions as an operative employee, and then again as a key manager of a company. Undergraduate students were found to act more ethically than MBA students, and both groups increased their ethical orientation the higher the professional corporate position they were assigned. Green and Weber (1997) showed that significant differences exist between juniors and seniors at the undergraduate level, with junior accounting and nonaccounting majors showing no differences in ethical decision making while senior accounting students exhibited higher ethical reasoning than senior nonaccounting students. Borkowski and Ugras (1998) identified 30 studies that examined the relationship between undergraduate major and ethical decisions with six studies revealing a positive association, 17 with nonsignificant results and seven studies showing mixed results. The meta-analysis of these 30 studies by Borkowski and Ugras (1998) did not support significant differences between business majors and nonbusiness majors in their ethical decisions. Their results contrast sharply with those of McCabe, Dukerich and Dutton who showed that MBA students tend to be less ethical than law students when entering graduate school and that the MBA program does not appear to change MBA students' ethics (1991, 1994).

Researchers have found some differences across students from different countries. Ahmed et al. (2003) compare business ethics across business students in six countries. They find basic agreement on ethical business practices, but differences are found in the respondents' tolerance to damage that results from unethical behavior. Chinese and Russian students (emerging economies) perceived less harm from some of the scenarios described, relative to other respondents. Interestingly, U.S. students indicated a more positive view of the compatibility of ethics and profit seeking in business. Luthar et al. (1997) indicates female students show significantly more favorable attitudes toward ethical behaviors than males, while seniors were more cynical than freshmen about the current ethical climate. Freshmen were more likely than seniors to indicate a positive relationship between business success and good business ethics.

Less research exists comparing differences between students and businesspeople. Cole and Smith (1996) conducted one of the key studies, comparing business students and business practitioners. Students were significantly more accepting of questionable behavior than business practitioners and had more negative views of business ethics. Waerneryd and Westlund (1993) report similar results for students and financial managers in Sweden.

Overall, results of prior research lead us to expect differences in ethical perceptions among MBA and undergraduate students. Based on prior research showing that undergraduate students tend to be more ethical than MBA students (Parsa and Lankford, 1999), we hypothesize that:

H3: Undergraduate students will be less willing to accept unethical or questionable behavior than MBA students.

We anticipate that it may be difficult to separate relationships posited in hypotheses two and three. Hypothesis two posits that older students will be less accepting of unethical behavior and hypothesis three maintains that undergraduate students will exhibit less tolerance of unethical conduct than MBA students; however, MBA students tend to be older than undergraduate students. The two hypotheses derive from prior research cited in this section such as Kohlberg's work that indicates as individuals age, they often reason at a higher level of moral development. Results of research by McCabe et al. (1991, 1994) indicate that MBA students tend to have lower ethical views after going through their education than when they entered the MBA program. We developed separate hypotheses for these relationships, but we recognize the two effects may be difficult to sort out, particularly for our two samples that are close in age. Our two samples differ in average age by only 6 years. In comparison, Cole and Smith (1996) report age ranges for students of 18–25 and for business people between 36 and 50.

Case studies and ethical perceptions

Roderick et al. (1991) found that while 97% of business student respondents considered themselves honest, more than one third would attempt an illegal act for profit in the business world if they believed the chances of being caught were slim. Two-thirds of the students responding to the survey indicated white-collar crime was not emphasized in their business classes. This indicates there is a role for ethics instruction in business schools and research shows that students are receptive to ethics education (Shannon et al. 1997 and Byerly et al. 2002).

Ethics education appears to positively impact students' ethical perceptions and judgment. Green and Weber (1997) reviewed research on the effect of ethics education. They concluded that most studies seem to indicate that most students improve their moral reasoning and ethical perceptions after taking an ethics course. Additionally, a meta-analysis of 55 studies by Schlaefli et al. (1985) showed that ethics education has a positive impact on students' ethics, and that group discussion of ethical dilemmas and psychological development programs were effective in achieving these results. Most researchers and educators appear to agree that ethics education exerts a positive influence on students, but we do not yet know enough about the appropriate pedagogies to use when teaching ethics.

A variety of approaches have been used in different courses. Green and Weber (1997) showed that exposing auditing students to the AICPA code of ethics in their senior year positively influenced their ethical reasoning. In another accounting course, Welton et al. (1994) relied on a combination of exposure to Kohlberg's stages of moral development, study of the accounting profession code of ethics and use of written and video cases; their results comparing pre- and post-test results for the experimental and control groups showed that ethics education positively impacted students' ethical reasoning. Discussing ethical dilemmas was an effective approach across a number of studies, according to the meta-analysis by Schlaefli et al. (1985).

The use of cases represents an appropriate pedagogical tool for management and business ethics courses (Mathison, 1988). This pedagogy includes relying on student written cases and discussion of current events (Strong and Hoffman, 1990). Cases have also been advocated for other business courses, such as for teaching ethics in accounting (Langenderfer and Rockness, 1989). Discussion of short cases has been recommended as the appropriate pedagogy for teaching ethics in finance classes (Hess and Norman, 2004). The benefits of students researching and developing their own cases as a means for teaching ethics education has been persuasively argued, most recently by DesJardins and Diedrich (2003). They maintain that researching and preparing a case offers pedagogical benefits, such as "a more active and meaningful learning experience" (p. 40) that requires students to wrestle with "the full range of complexities involved in economic decisions" (p. 39). The student-generated cases in our finance course involved current ethics scandals in major corporations, so we were teaching ethics within the real world context of business where managers face ethical decisions, as advocated by Gandz and Hayes (1988).

In sum, research appears to indicate that ethics education positively impacts students' ethical perceptions and that cases – researched and generated by the students – represent a popular and possibly effective pedagogy for teaching ethics. Classroom discussion of the cases should be included as part of the case teaching pedagogy. We built on prior research and the ethics literature to develop our hypothesis that completing the ethics case studies will positively impact students' ethical perceptions, likely by increasing students' awareness of the effects of unethical behavior and impacting students' values.

H4: In-depth case studies of ethics scandals will positively affect students' ethical perceptions, making the students less willing to tolerate unethical or questionable behavior.

Methodology

Sample

Our sample consisted of 54 undergraduate and 32 MBA students at a private Jesuit university. Undergraduate students at this university take a required core set of courses involving Ethics, Religion and Society (ERS). In contrast, MBA students typically work full-time and take business courses essential for their degree with no ERS coursework. Thus, undergraduate students at this university can be expected to participate in discussions consistent with Jesuit or Catholic values along with their business education, while MBA students receive business education typical of most business schools in the U.S. and with little espoused Jesuit values.

Measures

Ethical perceptions

We measured students' ethical perceptions using a survey adapted from Froelich and Kottke (1991) and Cole and Smith (1995). In the survey the students were asked to respond to ten situations in two ways, as they believe a typical businessperson would respond, and what they believed to be the ethical response. An important consideration of this type of research is that respondents perceive themselves as less likely to engage in unethical behavior that the average person (Manley et al., 2001). Self-enhancement bias has been the subject of much study and indicates people tend to attribute their own behavior to situational factors and attribute other's behavior to dispositional causes (Jones and Nisbett, 1971). The survey in this study avoids this bias by not asking what respondents themselves would do, but what the standard should be (ethical response) and how well others meet that standard (typical businessperson). A higher mean response is more ethical. We administered the survey as a pre-test prior to students studying the cases of ethics scandals and then again at the end of the course after students completed their research, presentation and discussion of the scandals.

The survey was administered in two finance courses. The undergraduate course, Financial Management, is an advanced corporate finance course required of all finance majors and has the traditional basic finance course as a prerequisite. The class is composed mostly of seniors, with some juniors. The MBA course, Managerial Finance, is a core course required of all MBA students and has the traditional undergraduate basic finance class in the last five years, or its equivalent, as the prerequisite. The MBA class is composed mainly of students nearing the end of their program of study, since a number of foundation skills classes must be completed before core courses can be taken. The MBA program is part-time and predominated by students who work full-time. Discussions of ethics in finance take place throughout the courses. Beginning the first day of class, the goal of the corporation is discussed. Consistent with most finance texts, shareholder wealth maximization is advocated as the goal of the corporation. However, the instructor stresses that this goal is rarely consistent with ill-treatment of other stakeholders and largely inconsistent with such treatment.

Gender

We wanted to know if students responded differently to our case pedagogy in the finance course based on their gender. We measured gender as a dichotomous variable (GENDER) with 0 = male and 1 = female respondents.

Age

We were interested in whether our case pedagogy would affect students' ethical perceptions differently according to the student's age. We created a variable called AGE that measured the student's age in years.

Level of education

Our sample consisted of undergraduate and MBA students and we wanted to see if any impact on students' ethical perceptions depended on the student's prior level of education. This was particularly important since our undergraduate students had likely received more religious- or Jesuit value-based education than our MBA students. We created a dichotomous variable for education (MBA) with 0 = undergraduate and 1 = MBA students.

Post-case

We created a variable we named post-case to indicate when the survey was administered. POST-CASE equals zero if the response corresponds to the pre-test and equals one if the response is to the survey administered after the case studies.

Method and analysis

At the beginning of the class students were asked to complete the survey of ethical perceptions as part of the ethics component of the class. Additional instructions were provided on the survey itself. In teams students completed a case study of an ethics scandal connected to finance. The topic that was the focus of the study had to be approved by the instructor.[3] Students turned in both a written report of their findings and presented their analysis in class. In particular, students were asked to identify causes of ethical breaches and make recommendations of how to prevent future occurrences. Student teams presented their own case and saw at least four additional cases presented by other case teams (six other cases in the MBA class). Organizations and their managers studied included Erpenbeck, Enron, Adelphia, Morgan Stanley, Global Crossings, Tyco, Martha Stewart, Kidder Peabody, HealthSouth, Lucent Technologies, Sunbeam, Qwest and WorldCom. Most of these received national publicity, with the exception of Erpenbeck, which was more local in nature.[4] Following the presentations and discussions of the cases, students again completed the survey on ethical perceptions.[5] After completing the survey the second time, students were provided with the average responses from the pre-case study and students were asked whether they thought their responses changed and if so how.

Case studies were chosen specifically to increase student knowledge about recent ethical scandals and their awareness of their own values as they apply to business situations. Brenner and Molander (1977) in an update of Baumhart's (1961) prior study of ethical attitudes of Harvard Business Review readers suggest that respondents have become more cynical about ethical conduct of their peers over time.

Cynicism is also discussed in Smith and Cole (1996), who report that for both student and business respondents there is a gap between what is ethical and what the typical businessperson would do. Luthar et al. (1997) suggest increased cynicism results from newspaper headlines about insider trading on Wall Street, financial and personal scandals on the part of public figures, and questionable legal and ethical practices in organizations. There was some concern that the assignment of ethics case studies might increase this cynicism.

Given that prior research indicates differences in ethical perception can be explained by sex, age, academic status and exposure to ethics education of respondents (Luthar, 1997), *t*-tests of differences in means between groups and regression analysis are used to discern the influences of these variables. Ethical and typical businessperson responses, male and female responses, and undergraduate and MBA student responses are compared. We also estimated the following regression:

$$Y_i = \beta_0 + \beta_1 \mathrm{GENDER}_i + \beta_2 \mathrm{AGE}_i + \beta_3 \mathrm{MBA}_i + \beta_4 \mathrm{POST\text{-}CASE}_i + e_i \quad (1)$$

where Y_i is the response to one of the ten scenarios or the average response for student i, and e_i is the error term.

Results

Fifty-four undergraduates and 32 MBA students responded to the survey. Females were 34% of the respondents and males were 66% of the respondents, and the average age of the respondents was 25. The undergraduate respondents were 37% female and the average age for undergraduates was 23. The MBA respondents were 28% female and the average age was 29.

Table I provides the results of finance student's ethical standards and perception of ethics in business prior to the ethics case study. A mean answer of one indicates the strongest possible agreement and a mean answer of six the strongest possible disagreement with each statement. For all ten questions and the average response to the ten questions, a significant gap exists between what the students believe to be the ethical response and the response of the typical businessperson. These results may be indicative of the general public cynicism business ethics and belief that business practitioners are less ethical. These results are consistent with Cole and Smith (1996) who report gaps for both student and business practitioners.

Results for gender

Table II provides results concerning the role of gender in ethical standards and perceptions of business ethics prior to the ethics case study. There were a number of questions in which male and female responses differed in regards to what they believed to be the ethical response. Females indicated a statistically higher degree of disagreement for five questions (1–5) and their average across all ten questions. Female and male MBA students responded differently to more questions than did undergraduate students. Female MBA students had a statistically higher level of disagreement than male MBA students for seven of ten scenarios and the average of the ten scenarios, while female undergraduate students had a statistically higher level of disagreement than male undergraduate students for the first three scenarios.[6] These results are consistent with Cole and Smith (1996) and Luthar et al. (1997) who also found male students were more accepting of questionable behavior. Female and males students responded statistically similarly to the questions for the typical businessperson, with the exception of question 1.[7] Females more strongly disagreed with that statement than males and that difference was significant at the 0.02 level.

Results for age

When the sample of students was segregated into those at or above the median age of 23 and those below the median age of 23, there were no statistically significant differences in the responses. However, the average response was higher for those with an age at or above the median. Since no statistically significant responses occurred for either ethical perceptions or perceptions of business ethics, these results based on groups segregated by median age are not reported.[8] While students' ages ranged from 21 to 47, the median age of 23 indicates little variation in the age variable. In fact, the average age for

TABLE I

Students' ethical standards and perceptions of how businesspersons meet that standard all student responses prior to ethics Case Study in finance class

	Mean ethical response (standard deviation)	Mean typical businessperson response (standard deviation)
1. It is okay for supervisor to ask employee to support someone else's incorrect viewpoint.	5.39 (0.86)	4.04*** (1.28)
2. It is sometimes necessary for company to engage in shady practices because the competition is doing so.	5.45 (0.92)	3.87*** (1.37)
3. Employee should overlook someone else's wrongdoing if in best interest of company.	5.34 (0.92)	3.83*** (1.40)
4. Supervisor should not care how results are achieved as long as desired outcome occurs.	5.36 (0.87)	3.81*** (1.46)
5. There is nothing wrong with supervisor asking employee to falsify a document.	5.75 (0.71)	4.75*** (1.28)
6. Profits should be given priority over product safety.	5.57 (1.16)	4.24*** (1.44)
7. Employee may need to lie to customer/client to protect company.	5.14 (1.10)	3.42*** (1.46)
8. Employee may need to lie to co-worker to protect company.	5.04 (1.20)	3.34*** (1.43)
9. Employee may need to lie to supervisor/manager to protect company.	5.37 (0.91)	3.88*** (1.47)
10. Employee may need to lie to another company's representative to protect the company.	4.19 (1.35)	2.94*** (1.52)
Average of above questions	5.32 (0.73)	3.64*** (1.10)

***The difference between the two mean scores was significant at $p < 0.001$.

undergraduates and MBA students differed by only 6 years. The insignificant results for age are consistent with the majority of studies discussed in the meta analysis by Borkowski and Ugras (1998).

Results for level of education

It is interesting to compare undergraduate and graduate student results, since the vast a majority of graduate students in our sample work full-time and have more experience in the business world.[9] When undergraduate and graduate student ethical responses are compared there is no significant difference between their responses for the ten questions or the average of the ten questions. Therefore, undergraduate and graduate students in this sample tend to have similar standards. This contrasts with Cole and Smith (1996) who report higher ethical standards for business practitioners, Parsa and Lankford, 1999 who report higher ethical standards for undergraduates compared to MBAs, and Borkowski and Ugras (1992) who show that freshmen and juniors rely on a justice framework while MBAs tend to use a utilitarian framework for decisions. However, the average age for undergraduate and graduate respondents in our sample differs by 6 years, possibly too small a difference to reveal maturity or work experience effects.

There were significant differences in undergraduate and graduate student responses for the typical businessperson for questions 7 and 8, both of which dealt with the need for an employee to lie to protect the company.[10] Graduate students perceived the typical businessperson as having higher level of disagreement with these questions than undergraduate students. These results contrast somewhat with Luthar et al. (1997) who reported seniors were more cynical about the current business climate than freshmen. In our case, graduate students shared

TABLE II

Students' ethical standards and perceptions of how businesspersons meet that standard: the role of gender all student responses prior to the ethics case study in finance

	Mean ethical response (standard deviation)		Mean typical businessperson response (standard deviation)	
	Female	Male	Female	Male
1. It is okay for supervisor to ask employee to support someone else's incorrect viewpoint.	5.61 (0.68)	5.10*** (0.92)	4.37 (1.28)	3.87** (1.25)
2. It is sometimes necessary for company to engage in shady practices because the competition is doing so.	5.63 (0.88)	5.35* (0.93)	3.67 (1.41)	3.97 (1.35)
3. Employee should overlook someone else's wrongdoing if in best interest of company.	5.54 (0.75)	5.24** (0.99)	3.94 (1.4)	3.76 (1.39)
4. Supervisor should not care how results are achieved as long as desired outcome occurs.	5.61 (0.74)	5.23*** (0.92)	3.85 (1.51)	3.79 (1.44)
5. There is nothing wrong with supervisor asking employee to falsify a document.	5.89 (0.32)	5.68** (0.84)	4.70 (1.40)	4.77 (1.22)
6. Profits should be given priority over product safety.	5.70 (0.82)	5.51 (0.76)	4.19 (1.47)	4.26 (1.43)
7. Employee may need to lie to customer/client to protect company.	4.95 (1.08)	4.87 (1.11)	3.26 (1.49)	3.50 (1.44)
8. Employee may need to lie to co-worker to protect company.	5.20 (1.20)	4.95 (1.19)	3.26 (1.49)	3.38 (1.41)
9. Employee may need to lie to supervisor/manager to protect company.	5.52 (0.77)	5.29 (0.97)	3.89 (1.51)	3.59 (1.45)
10. Employee may need to lie to another company's representative to protect the company.	5.02 (1.22)	4.71 (1.40)	2.78 (1.60)	3.02 (1.48)
Average of above questions	5.50 (0.65)	5.23** (0.76)	3.79 (1.15)	3.82 (1.08)

***The difference between the two mean scores was significant at $p < 0.01$.
**The difference between the two mean scores was significant at $p < 0.05$.
*The difference between the two mean scores was significant at $p < 0.10$.

similar views to undergraduates for most scenarios, and for two responses were less cynical.

Results for pre- versus post-case study

Table III provides comparison of student perceptions of business ethics before and after a case study in finance ethics. Student teams chose a topic on which to do a case study involving finance and ethics and provided a written report and oral presentation of their analysis. Each class was exposed to at least six different case studies, their own case analysis and those of other groups. For all ten questions, students had greater disagreement with the statements after completing the case studies, indicating an increase in their ethical standards. For five statements, and the average of all ten statements, the difference in means is statistically significant. Research and presentations that increased student awareness of the impact on others of ethical breaches appears to cause them to re-think what is ethical.

That the finance ethics case study affected students' ethical standards contrasts with Cole and Smith's (1995) finding that completion of ethics courses didn't significantly affect student's ethical perceptions. Cole and Smith (1996) in noting the higher ethical standards of older business practitioners relative to younger employees suggest that companies "expose workers to ethical practices to protect the long-term integrity of the company." That students' ethical standards changed after the

TABLE III

Effect of ethics case study in finance on ethical perceptions of students; all student pre- and post-case responses

	Mean ethical response (standard deviation)		Mean typical businessperson response (standard deviation)	
	Pre-case study	Post-case study	Pre-case study	Post-case study
1. It is okay for supervisor to ask employee to support someone else's incorrect viewpoint.	5.28 (0.92)	5.51* (0.77)	3.99 (1.14)	4.10 (1.41)
2. It is sometimes necessary for company to engage in shady practices because the competition is doing so.	5.32 (1.03)	5.58* (0.77)	3.70 (1.32)	4.04 (1.41)
3. Employee should overlook someone else's wrongdoing if in best interest of company.	5.16 (1.02)	5.53** (0.77)	3.52 (1.37)	4.14*** (1.37)
4. Supervisor should not care how results are achieved as long as desired outcome occurs.	5.24 (0.91)	5.49* (0.82)	3.51 (1.38)	4.13*** (1.49)
5. There is nothing wrong with supervisor asking employee to falsify a document.	5.72 (0.88)	5.92 (0.47)	4.62 (1.19)	4.88 (1.36)
6. Profits should be given priority over product safety.	5.56 (0.69)	5.59 (0.87)	3.97 (1.50)	4.51** (1.32)
7. Employee may need to lie to customer/client to protect company.	5.11 (1.07)	5.17 (1.14)	3.20 (1.45)	3.64* (1.44)
8. Employee may need to lie to co-worker to protect company.	4.95 (1.20)	5.13 (1.20)	3.13 (1.36)	3.64* (1.44)
9. Employee may need to lie to supervisor/manager to protect company.	5.28 (1.00)	5.46 (0.81)	3.75 (1.42)	4.01 (1.52)
10. Employee may need to lie to another company's representative to protect the company.	4.63 (1.38)	5.01* (1.29)	2.66 (1.39)	3.22** (1.60)
Average of above questions	5.23 (0.71)	5.43* (0.74)	3.60 (0.98)	4.02** (1.18)

***The difference between the two mean scores was significant at $p < 0.01$.
**The difference between the two mean scores was significant at $p < 0.05$.
*The difference between the two mean scores was significant at $p < 0.10$.

case study suggests that higher education too may serve this role. Instructional methods can influence students' ethical perceptions as indicated by these results and leads us to accept the fourth hypothesis that case studies of ethics scandals make students less tolerant of questionable behavior.

Further, the case study experience changed student's perceptions of business ethics. For all ten statements there is more disagreement with the statements. This disagreement is significant for six of the ten questions, and the average of all ten questions. Through the case study, students were exposed to more information than the media headlines regarding these scandals. They had greater understanding of the pressure involved in managing businesses. Many groups mentioned the "pressure to reach Wall Street estimates" in their presentations and papers. This seems to be recognition that not just greed drives unethical behavior, but also fear. In addition, students were exposed to heroes of business ethics that tried to do something to stop the wrongdoing in their firms. Courageous examples like Sherron Watkins and Cynthia Cooper seemed to have somewhat offset cynicism about business ethics.

It is interesting that this favorable change in student's perception of business ethics was inconsistent with what student's thought had happened after the case study experience. The majority of students did not think their responses had changed, and a few indicated they had become more pessimistic about the state of business ethics.

Cross-sectional results

Table IV provides the results of regression analysis to examine the effects of sex, age, academic status, and exposure to the ethics case study simultaneously on student's ethical standards. Female students are found to have greater disagreement than male students to three questions and the average of the ten questions. This is consistent with females being less likely to accept questionable behavior as discussed above and leads to acceptance of the first hypothesis (H1). While AGE had a positive coefficient in all cases, indicating values strengthen with maturity, the coefficients were not significantly different from zero at conventional levels of significance. The negative coefficient for eight of ten questions and the average is consistent with undergraduates being more ethical than MBA students, but again the coefficients were not statistically different than zero. We are unable to accept the second hypothesis (H2) or third hypothesis (H3) based on the lack of significance for the AGE and MBA coefficients.

The main focus of the study is the effect of the case study on students' ethical perceptions. The indicator variable for POST-CASE is positive and significant for five of the ten questions and the average. These results suggest exposure to the ethics cases favorably influences students' ethical standards. Therefore, the case method appears to be an effective means to affect students' ethical perceptions and leads us to accept the four hypothesis (H4). This is inconsistent with Feldman and Thompson's (1999) study that suggests a specific course in business ethics has minimal impact on students' attitudes toward corporate social responsibility. This might argue for incorporating ethics instruction throughout the curriculum, rather than teaching a specific business ethics course.

Students' views of the state of business ethics are examined using the regression results in Table V. Male and female responses are largely similar, with the exception of question one. Female students more strongly disagreed that the typical businessperson would believe it is okay for a supervisor to ask and employee to support someone's incorrect viewpoint. Similarly, AGE did not appear to impact students' views of business ethics, except with question ten dealing with the need to lie to the representatives of another company to protect the company. More mature workers more strongly disagreed with this statement. MBA and undergraduate students shared similar views of business ethics.

Again, our focus in this study is the effect of the ethics case studies on students' perceptions. Interestingly, not only were student's ethical standards favorably influenced by the ethics case study, but also their views of business ethics. The coefficient for POST-CASE is positive and significant for six of ten questions and the average. The in-depth research on the scandals appears to override the cynicism factor. Thus, ethics case studies favorably influence students' ethical standards and make them more optimistic about the state of business ethics. The results for the four hypotheses are summarized in Table VI.

Conclusion

Results of this study support the use of the case study method in ethics instruction in finance. Students' ethical perceptions were examined before and after completing a case study on an ethics scandal. Controlling for age, sex, and academic status of the students, the results indicate students' values were strengthened by the case study experience. Therefore, ethics instruction can be effective in influencing students' attitudes. Further, students' cynicism regarding the state of business ethics was eroded by the case study. Students had a more favorable view of the ethics of the typical businessperson after completing their own team case study and seeing the presentations of other teams.

We had been concerned that the case studies of financial scandals might increase students' cynicism, leading them to believe that businesspeople were highly unethical. Our results show this was not the case. One possible explanation is that students gained a greater appreciation for the complexity of ethical issues in organizations, and in many of the cases studied students observed one or more individuals taking a strong ethical position against the wrongdoing (e.g., Sherron Watkins at Enron). We were not able to test this idea in our study, but future research should examine whether using cases with a strong ethical role model positively impacts ethical

TABLE IV

Cross-sectional regression results – ethical response

Dependent Variable is response to scenario	Coefficient estimates: Intercept	Gender	Age	MBA	Post-case	Model F statistic	Adj. R^2
1. It is okay for supervisor to ask employee to support someone else's incorrect viewpoint.	4.70***	0.32**	0.02	-0.09	0.23*	2.38**	0.035
2. It is sometimes necessary for company to engage in shady practices because the competition is doing so.	4.57***	0.24	0.03	−0.30	0.26*	2.27*	0.032
3. Employee should overlook someone else's wrongdoing if in best interest of company.	4.33***	0.28*	0.03	−0.11	0.35**	3.13**	0.053
4. Supervisor should not care how results are achieved as long as desired outcome occurs.	4.46***	0.35**	0.03	−0.27	0.24*	3.19**	0.054
5. There is nothing wrong with supervisor asking employee to falsify a document.	5.10***	0.18	0.02	−0.15	0.07	1.36	0.010
6. Profits should be given priority over product safety.	5.10***	0.20	0.04	0.05	0.03	1.05	0.001
7. Employee may need to lie to customer/client to protect company.	4.43***	0.15	0.02	0.06	0.06	0.74	−0.007
8. Employee may need to lie to co-worker to protect company.	4.32***	0.23	0.02	−0.10	0.18	0.80	−0.005
9. Employee may need to lie to supervisor/manager to protect company.	4.67***	0.20	0.02	−0.20	0.18	1.28	0.007
10. Employee may need to lie to another company's representative to protect the company.	3.48***	0.26	0.05	−0.27	0.38*	1.77	0.020
Average of above questions	4.51***	0.24**	0.03	−0.15	0.20*	2.59**	0.040

***$p < 0.01$.
**$p < 0.05$.
*$p < 0.10$.

TABLE V

Cross-sectional regression results – typical businessperson response

Dependent Variable is response to scenario	Coefficient estimates					Model F statistic	Adj. R^2
	Intercept	Gender	Age	MBA	Post-case		
1. It is okay for supervisor to ask employee to support someone else's incorrect viewpoint.	3.18***	0.46**	0.03	−0.27	0.11	1.72	0.018
2. It is sometimes necessary for company to engage in shady practices because the competition is doing so.	2.63***	−0.32	0.05	0.03	0.35	2.11*	0.028
3. Employee should overlook someone else's wrongdoing if in best interest of company.	2.71***	0.16	0.03	−0.05	0.62***	2.47**	0.037
4. Supervisor should not care how results are achieved as long as desired outcome occurs.	3.10***	0.03	0.02	−0.16	0.62***	1.90	0.023
5. There is nothing wrong with supervisor asking employee to falsify a document.	4.77***	−0.05	−0.01	0.24	0.26	0.64	−0.009
6. Profits should be given priority over product safety.	4.07***	−0.05	−0.01	0.33	0.53**	1.74	0.019
7. Employee may need to lie to customer/client to protect company.	2.55***	−0.23	0.03	0.28	0.44*	2.09*	0.027
8. Employee may need to lie to co-worker to protect company.	2.16***	−0.13	0.04	0.16	0.43*	1.98*	0.025
9. Employee may need to lie to supervisor/manager to protect company.	3.18***	0.019	−0.003	0.04	0.27	0.32	−0.018
10. Employee may need to lie to another company's representative to protect the company.	1.34	−0.29	0.06*	−0.24	0.57**	2.40**	0.035
Average of above questions	3.03***	−0.04	0.02	0.04	0.42**	1.89	0.023

***$p < 0.01$.
**$p < 0.05$.
*$p < 0.10$.

TABLE VI
Summary of results

Hypotheses	Result
H1: Female students will be less willing to accept unethical or questionable behavior than male students.	Supported
H2: Older students will be less willing to accept unethical or questionable behavior than younger students.	Not supported
H3: Undergraduate students will be less willing to accept unethical or questionable behavior than MBA students.	Not supported
H4: In-depth case studies of ethics scandals will positively affect students' ethical perceptions, making the students less willing to tolerate unethical or questionable behavior.	Supported

perceptions even in cases of fairly widespread corporate wrongdoing

More research is needed to discern the impact of various pedagogies on students' ethical standards. We do not know whether our results for cases researched in-depth by students vary from those that would be obtained from using already-compiled case studies: does the process of compiling data on a situation of corporate wrongdoing have a stronger impact on ethical decision making than analyzing a pre-existing case? Researchers should also compare different types of assignments with a case study methodology, to see which approaches have a stronger, positive effect on ethical decision making. Further, more information is needed about the characteristics of the cases that work to enhance student's ethical perceptions. Many ethics cases focus on negative practices or decisions, such as scandals or other types of wrongdoing while others depict ethical best practices in a corporation, but we do not know whether one of these approaches works better than the other.

Our study has several limitations. Students were asked to identify themselves on the surveys. Identification was necessary to track changes pre- and post-cast study. While there is some concern that this led to bias, it seems unlikely since students reported they believed they had not changed their responses at the beginning of the debriefing discussion. They would likely have tried to shift to more ethical responses if they were attempting to curry favor with the instructor. Further, the pre- and post-case surveys were more than three months apart and students indicated they could not recall their intial responses.

We do not know to what extent our results can be generalized to other courses. The ethics case studies positively impacted students' ethical perceptions in the finance course, but we do not know whether accounting, marketing or other courses would obtain the same results. Additionally, we investigated students at a private, Jesuit university where undergraduates are required to take courses in philosophy, religion and so forth. Our case studies may have reinforced this prior education, leading to a stronger positive impact than might be observed in other university settings. However, since the MBA students in our sample did not differ significantly from the undergraduate students – and MBA students at our university are not required to take the Ethics, Religion and Society four course curriculum – we believe our results should generalize to other university settings.[11]

Our sample consisted of MBA students with an average age of 29, most of who work fulltime, and undergraduate students with an average age of 25 and varying in their amount of work experience. This limited our ability fully to test relationships among age and ethical perceptions and business experience and ethical perceptions. In the future, researchers need to investigate these relationships using a more diverse sample of undergraduate and MBA students.

The results of our research should encourage faculty in finance and other disciplines to incorporate ethics into their courses. Students responded positively to the use of in-depth case studies, and as we have shown, this pedagogy seems to improve their ethical decision making. This study also points to the benefit of having students research and present their own real-world cases, focusing on and discussing major corporate ethics situations in the current business environment. We believe the process of researching and thinking through the complexities of cases such as Enron, Tyco and so forth help improve students' understanding of ethical and unethical conduct. This process may also enhance their ethical or moral reasoning skills, something that should be tested in future research.

Notes

[1] The instructor in the finance courses is formally trained in finance not ethics, but has attended a number of on-campus business ethics teaching workshops. Presenters have included Marianne Jennings and John Boatright. Xavier's Williams College of Business integrates ethics throughout the program of study rather than relying on a stand-alone business ethics class. Undergraduate students are exposed to ethical theory in 12 hours of required core courses in Ethics, Religion and Society (including an introductory ethics course in philosophy). They also learn about various ethical frameworks in the required principles of management and business law courses. MBA students take a required legal, ethical and regulatory environment course. Discipline-specific courses in the business school focus on the practice of business ethics as it relates to that discipline.

[2] The courses in which the case study assignment was made begin with a discussion of ethics and the goal of the corporation, arguing that a firm must satisfy its stakeholders in the long run to be able to maximize shareholder wealth. Ethical discussions continue throughout the semester related to current business news and course content such as agency conflicts between managers and shareholders and between shareholders and creditors.

[3] The instructor required the case to be related to finance and the students to provide references that indicated adequate availability of information related to the case. Student teams had deadlines to receive topic approval from the instructor, to provide an outline of the case study to the instructor for feedback, and to turn in the completed written report of the case study. Student teams then presented their cases in class and participated in discussions of ethical issues in the cases and lessons learned.

[4] The Erpenbeck Companies were local builders. The CEO of the building company deposited checks made out to lenders into the builder's account. Thus, liens on properties by lenders and subcontractors were not removed. Both Ohio and Kentucky considered legislation to change loan-closing procedures following the Erpenbeck scandal.

[5] This was more than 3 months after they had completed the pre-case study survey. Students commented during the debriefing that they did not recall their earlier responses and in some cases, did not remember filling out the survey earlier in the semester. This supported our belief that sufficient time had passed so students could not bias their responses based on the initial survey.

[6] Female and male MBA students differed on scenarios 1, 4–7, 9, and 10.

[7] These results were driven by the undergraduate class. Female and male MBA students did not differ statistically in their response to question 1.

[8] Results are available from the authors upon request.

[9] Tests of difference in means for undergraduate and MBA students are not reported here, but are available from the authors upon request.

[10] The mean response for question seven was 3.2574 for undergraduates versus 3.7091 for graduates. The p-value for the dierence in means was 0.0645. The mean response for question eight was 3.198 for undergraduates versus 3.6 for graduates. The p-value for the difference in means was 0.0946.

[11] Both undergraduates and MBA students are required to take a course that includes ethical theory. Of the undergraduate student respondents, 94% had completed or were currently enrolled in this course, while 70% of MBA respondents had completed or were currently enrolled in this course.

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