So We Teach Business Ethics—Do They Learn?

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Abstract. A study was done with incoming freshmen, sophomore, senior, and graduate business students (n = 185) to assess the effects of moral development, gender, education level, and context on the moral choices in a simulated business situation, a potential hostile takeover of a fictional company. The results indicated that level of moral development did affect the decisions of students; however, main effects for gender, the level of education, and context were not significant. The results did find significant interaction effects between context and moral development and gender and moral development. Students with lower levels of moral development were less likely to consider the contextual situation when making their decisions. The effect of moral development was more pronounced for female business students than for male business students. The implications of these results for ethics education in business schools are discussed.

Keywords: moral development, decision making, education process.

1. Introduction

In 2001, the high-profile scandals at Enron, Arthur Andersen, Worldcom, Tyco, and Martha Stewart (among others) dramatically elevated the profile of business ethics. The major media outlets reported at great length about the problems of ethical behavior and the lack of morality among business executives. There was much concern expressed about the lack of ethics in managerial decision-making and the effects of such lapses in moral judgment on people in organizations. As the decade draws toward a close, this same concern is surfacing again, due in large measure to the collapse of financial markets worldwide and the perceived effects of unethical behavior among firms such as Bear Stearns and AIG (Podolny 2009).

Business schools were caught in the crossfire of charges and counter charges that occurred while trying to analyze the causes of such egregious lapses in ethical behavior (Blake 2006). Some suggested that the process of business education, if not immoral, was at least amoral; and that the nature of business education, emphasizing increasing profits and maximizing shareholder value, did not provide students with a framework for making ethical choices (Ghoshal 2005; Mitroff 2004; Swanson & Frederick 2005). National organizations, such as the American Association of Collegiate Schools of Business (AACSB), jumped into the debate, seeking to deflect criticism from business schools by insuring that students had proper exposure to ethics in the curriculum (Evans & Robertson...
Many business schools began to re-emphasize the role of ethics in the curriculum (Swanson 2004).

Critics of the role of education in shaping the moral judgments of students assert that schools are “guilty of having provided an environment where the Enrons and Andersens of the world could take root and flourish” (Mitroff 2004, p. 185), and must be considered culpable in such scandals. Ghoshal (2005) for example, asserts that contemporary business education, “by propagating ideologically inspired amoral theories...[has] actively freed students from any sense of moral responsibility” (p. 76). However, Pfeffer (2005)—likewise critical of the role of education in moral development—suggests there is an unanswered question in terms of self-selection: is the immoral behavior the result of moral development molded by the university education process, or do students already enter the university with amoral attitudes and are thus predisposed toward those programs and educational experiences that enhance or support such views?

What was noticeably absent from these critiques was any data on the morality of the business students themselves. Since many (but certainly not all) of the executives involved in these various scandals had once been business students, there was an (untested) assumption that something in their business education process either encouraged unethical behavior or prevented them from recognizing the ethical component in their decisions. Otherwise, why would they have seen fit to engage in such behaviors? But with an increased emphasis on outcome-based education, and assurance of learning programs, is this actually the case?

A recent article by Neubaum et al. (2009), intended to respond to these criticisms, found empirical support for the effect of business education on students’ personal moral philosophies. They found that the personal moral philosophies of business and non-business students showed no significant differences; likewise, there were no differences between the personal moral philosophies of freshmen and senior business students. They concluded that blaming ethical scandals on business education was not wholly appropriate, based on the evidence presented in their surveys of students. However, their research only looked at student attitudes and self-reports of beliefs; the research did not address the issue of moral reasoning and decision making. While students might espouse moral attitudes, whether this affects their actual judgments and behaviors in a business setting has not been empirically examined.

This latter issue is crucial, as it goes to the question of the effectiveness of programs of moral education in business schools, a subject of ongoing concern among business educators (Desplaces, Melchar, Beauvais, & Bosco 2007; Geary & Sims 1994; Pamental 1989). Is it enough to provide students with an understanding or cognitive competence regarding business ethics, or should business ethics education seek to affect behavioral competencies with respect to ethical issues? Furthermore, should such classroom education transfer to actual corporate managerial moral competence? Should business ethics education
improve not only students’ knowledge of moral issues but their competency to function as moral managers (Rossouw 2002)?

The purpose of this study is to begin to address these issues by examining not only the moral knowledge and attitudes but the moral development and decision making of business students, in an effort to determine if the higher education process does in fact affect moral behaviors. We seek to make two important contributions to the literature and ongoing discussion of this issue. First, this research seeks to examine the impact of business education on students’ moral reasoning and moral competence, and to apply these concepts to the issue of business ethics education. Second, the study is intended to provide a preliminary inquiry into the effect of business ethics education on the moral decisions of students. By so doing, the research seeks to address Pfeffer’s call for further research that examines the influence of education on student behaviors, as well as extend the research of Neubaum et al. (2009) by examining moral behaviors, not just moral attitudes and philosophies. Thus we pose the question: assuming that we do indeed teach business ethics to our students, do they learn?

2. Background: Ethics Education in the Business School

The impact of the university experience and college education on students’ ethical beliefs and attitudes is well established (Astin 1977; Churchill 1982). Students’ ethical beliefs are affected not only through classroom instruction but through the socialization process that occurs during the college years (Clikeman & Henning, 2000; Desplaces et al. 2007). The framework that underlies much business school education, focused as it is on improving organization effectiveness, may not provide students with a broad enough perspective on ethical issues (Giacalone & Thompson 2006). However, the overall conclusion from the literature is that business education plays a central role in the ethical development of students and future executives (Muijen 2004; Procario-Foley & Bean 2002).

Most people in higher education accept the notion that it is possible to teach ethics, though what this actually means is not always clear (Piper, Gentile, & Parks 1993). Does “teaching ethics” mean that students have a better understanding of ethical frameworks? More knowledge of ethical reasoning and philosophy? Or that students’ decisions and actions will be influenced by the results of classroom instruction? There are differing opinions among educators. What is clear, however, is that teaching ethics is a desirable part of a program of business study.

Education in ethics and social responsibility has been included in the business curriculum for many years, though the effectiveness of such courses has been a matter of some debate (Collins & Wartick 1995). Approaches range from integrating ethics into the core curriculum (Baetz & Sharp 2004) to stand-alone
classes. The prevailing view has been that issues of ethics begin “where the law ends” (Crane & Matten 2004), though some have suggested that ethics includes the law but extends beyond it (Trevino 1992). Though the emphasis placed on ethics instruction has been questioned over the years (Pizzolatto & Bevil 1996), the recent spate of business scandals has elevated the perceived importance of ethics in the business curriculum (Evans & Robertson 2003).

The teaching of business ethics employs numerous techniques, ranging from case studies, ethical dilemmas, experiential exercises, scenarios, as well as more traditional readings and lecture formats (Adams, Harris, & Corley 1998; Furman 1990; Jones 2009; Koehn 2005; Mathison 1988; Rossouw 2002; White 1993). This diversity of instructional methods reflects the broad scope of coverage of most business education. Apart from a separate course in ethics, topics on business ethics are often included in foundation courses within specific disciplines, and as a result the instructional methods vary with the core curriculum.

Numerous studies over the years have examined students’ attitudes and beliefs about ethics. In general, the results suggest that students are aware of the ethical issues that are relevant to business experience and are desirous of behaving in an ethical manner (Gaedeke, Kelley, & Tootelian 1992; Johns & Strand 2000; Peterson, Beltramini, & Kozmetsky 1991). Though concerned with the pressures to behave in an unethical manner and with the impact of management and organization practices on ethics (Beltramini, Peterson, & Kozmetsky 1984), generally students’ attitudes toward ethics are not necessarily inconsistent with faculty, graduates, community leaders, and professional norms (D’Aquila, Bean, & Procario-Foley 2004; Davis & Welton 1991; DuPont & Craig 1996; Stevens, Harris, & Williamson 1993).

The education process does appear to be effective at influencing students’ perceptions of business ethics (Cole & Smith 1995) and enhancing their awareness of ethical issues (Gautschi III & Jones 1998). While Neubaum et al. (2009) found no evidence that the higher educational process had a measurable effect on students’ personal moral philosophies, they were also able to demonstrate that the business education did appear to positively influence students’ attitudes toward profit and sustainability. Evidence suggests that ethics education can impact behaviors in the short term (Harris & Guffey 1991), but longer term effects are somewhat more uncertain (Murphy & Boatright 1994). Whether or not the effects of business education will translate in later years to ethical choices and moral decisions is, of course, difficult to assess (Weber, 1990). Still, the overall conclusion that can be drawn from the literature is that ethics education is capable of impacting students’ perceptions and understanding of ethical issues in business.

This review of research and writing on ethics education in business does leave an important question somewhat unresolved, however: Are there observable differences in the moral choices made by business students as a result of ethics education throughout the business curriculum? With an increasing trend toward
learning assurance, measurable outcomes and educational assessment (e.g., AACSB Assessment Resource Center, 2006; U.S. Department of Education standards), it would seem that there will be increasing concerns for business schools to demonstrate that the education process is developing future managers who understand the ethical issues in business and who are capable of making ethical choices. To date, this has often been accomplished by demonstrating that ethics and ethical issues were covered in the core business curriculum. But whether coverage of material equates to demonstrable learning outcomes is another issue.

3. From Ethics Education to Moral Development

If we view the purpose of business ethics education as the development of moral managers and business people, then it is useful to consider the process of moral development. Drawing on the work of Jean Piaget (Piaget 1932), Kohlberg (Kohlberg 1964, 1981, 1984) developed one of the more well-known frameworks of moral development. In Kohlberg’s view, moral development proceeds through 3 distinct levels, each with 2 stages. Level 1, Preconventional Morality, has two stages. In Stage One, moral choices are determined from a sense of obedience to authority and/or a fear of punishment. Stage Two of moral development occurs when the person makes moral decisions based on their own self-interest and needs; individual morality is relative to the needs of each actor. Level 2, Conventional Morality, includes Stage 3—moral choices are determined by interpersonal relationships and a desire to be seen as “good” by others. Stage 4 occurs when moral decisions are driven by a desire to do what is best for society as a whole, and includes following the rules of social order. Finally, Level 3, Postconventional Morality, incorporates Stage 5 moral determinism, wherein choice is based upon the social contract and individual rights, in a contractual or legalistic framework; and Stage 6, at which moral decisions are based upon universal principles, wherein there are assumed to be norms that are held to be internalized within the conscience of the individual.

The stages of moral development emerge from how individuals think about moral problems (Kohlberg 1981; Kohlberg, Levine, & Hewer 1983). In the process of reasoning, individuals form ways of thinking about their experiences which come to include understandings of moral concepts such as justice, rights, equality, and human welfare. Over time, this process can enable individuals to develop higher and more complex modes of moral reasoning. Hence moral reasoning becomes an important process within the cognitive moral development of individuals.

In addition to moral reasoning, Kohlberg also noted that individuals must possess moral competence—the ability to make an ethical decision (Kohlberg 1964). This involves not only the moral reasoning of the individual, but the
knowledge and skills to incorporate such reasoning into the assessment of situations and the development of a moral response (Catalano et al. 1999). It is this combination of moral reasoning and moral judgment that makes possible the development of moral competence (Kohlberg 1964).

Kohlberg’s theory has been used extensively in research, reviewed, and subjected to critical evaluation (e.g., Derry 1989; Forte 2004; King & Mayhew 2002). Criticism of Kohlberg’s theory have addressed the possible effects of gender (Gilligan 1982), the social context of moral reasoning (Turiel 1983), and the need to include various perspectives on moral reasoning (Carpendale 2000; Krebs and Denton 2005). Despite these concerns, the model of moral development and moral reasoning posited by Kohlberg is still widely used and accepted within contemporary research (e.g., Baxter & Rarick 1987; King & Mayhew 2002).

Kohlberg’s approach to moral development and moral reasoning has been applied to college students and found to be efficacious. Specific research has examined behaviors such as cheating and academic dishonesty, and found moral reasoning to be predictive of such behaviors (McCabe 1997; McCabe, Butterfield, & Trevino 2006; McCabe & Trevino 1995; West, Ravenscroft, & Shrader 2004). A meta-analysis of research on college business students found age and gender to be predictive of stronger ethical attitudes (Borkowski & Ugras 1998). In an extensive review by King and Mayhew (2002) of studies using Kohlberg’s theory on college students, they concluded that participation in higher education does have an impact on moral reasoning, even after controlling for age.

Using Kohlberg’s framework of moral development and the discussion of business ethics education, it is possible to suggest that one potential goal of the higher education process is to increase the moral development of individuals—to enable students to develop a higher level of moral reasoning, resulting in more ethical choices and behaviors (Nucci 2001). But unless this leads to real behavioral outcomes and choices, the knowledge of business ethics may not lead to moral managers.


To align the goals of ethics education with moral development presumes that increasing the students’ ability to make moral judgments will impact their choices and decisions. Before designing such a curriculum and pedagogy for ethical instruction, it would seem appropriate to ask whether or not moral development does in fact affect moral choice in a business situation—and whether or not traditional ethics education can enhance moral development.

There does appear to be some evidence that moral development does affect the moral choices of individuals (Kohlberg 1984; Rest 1986). Rest (1986) suggested that there are four basic psychological processes that an individual
performs when behaving morally: (1) the person interprets the situation in terms of the possible actions and the effects of those actions on the self and others; (2) the person judges which course of action is morally right; (3) the person gives priority to what is right over other considerations present in the situation; and (4) the person demonstrates the strength to follow through and behave morally. Based upon this framework, Rest (1993) developed the Defining Issues Test, or DIT, to measure the degree to which individuals’ moral judgment is indicative of various stages of moral development. In this procedure, subjects are provided with case studies in the form of moral dilemmas and asked to evaluate the outcomes. The test measure is the Principled score, or P score, which is calculated based upon the relative importance respondents place on the highest levels of cognitive-moral development. There has been research evidence that exposure to programs of business ethics training and education can impact students’ scores on such measures of moral development (Boyd 1982; Desplaces et al. 2007; Fraedrich, Cherry, King, & Guo 2005).

There is research evidence that the level of moral development affects the decisions and behaviors of individuals (Greenburg 2002; Kohlberg 1984; Loe, Ferrell, & Mansfield 2000; Rest 1986; Trevino & Youngblood 1990; Weber 1990). The linkage between moral reasoning, moral judgment, and moral competence within the framework of Kohlberg’s theory has been tested empirically and appears to be present (Malinowski & Smith 1985). This research has been employed within business environments and has been found to offer general support for the idea that moral development and moral reasoning will affect the decisions of business students and managers (Derry 1989; Forte 2004). Though there are some concerns about the linkage (Marmburg 2001; Weber & Green 1991), the strength of the theory and the weight of the existing empirical evidence does suggest that business education can increase moral reasoning, and that such increases in moral reasoning will result in moral decisions. Accordingly, we developed the following hypothesis:

**H1: Students’ moral judgments will be affected by their level of moral reasoning; different levels of moral development will be associated with different moral decisions in a business context.**

The extant research also indicates, however, that moral development is influenced by other factors, such as gender. Women have been found to have stronger ethical attitudes than males (Borkowski & Ugras 1998; Crow, Fok, Hartman, & Payne 1991; Gilligan 1982). This has been found to occur in business settings as well (Betz, O’Connell, & Shepard 1989; Cohen, Pant, & Sharp 1998; Galbraith & Stephenson 1993). In fact, there is substantial evidence to suggest that women tend to be more ethical when making ethical decisions in a business setting (Harris 1989; Robin & Babin 1997; Sikula & Costa 1994; Tsalikis & Ortiz-Buonafina 1990). Since we were focused on the effect of moral
judgments on actual decision making, and given the preponderance of the empirical evidence, we developed a second hypothesis:

H2: Students’ moral judgments in a business situation will be affected by gender; female students will make different moral decisions than males in a business context.

It has been suggested that education leads to higher levels of moral reasoning (McCabe 1994). Neubaum et al. (2009) found no differences between seniors and freshmen business students with respect to personal moral philosophies, but did find that seniors were more likely to believe that business should be evaluated on social performance as well as profitability. While this evidence is not very strong, it would nonetheless appear that, contrary to critics, the process of business education is more likely to lead students to develop more moral attitudes with respect to business organizations. We might therefore expect students to develop higher levels of moral reasoning and moral competence during the course of their collegiate business education, which would in turn affect their moral judgment. In addition to education, age and experience have been found to affect moral reasoning and ethical decision making (Borkowski & Ugras 1998; Kohlberg 1984; Thoma, Rest, & Davidson 1991). The results in business settings have been inconclusive (Borkowski & Ugras 1998), but, consistent with some research findings (e.g., (McCuddy & Peery 1996; Ruegger & King 1992), older students with work experience in addition to formal education may be more likely to exhibit higher levels of moral reasoning than students entering the business education process. Consistent with this research and the discussion of the impact of education and experience on moral development, we developed a third hypothesis:

H3: Students’ moral judgments in a business situation will be affected by their education level; students with higher levels of educational attainment and experience will make different moral decisions than students with lower levels of educational attainment and experience in a business context.

Finally, the business context or situation has been found to affect moral choice (Forte 2004; McCabe 1994; McNichols & Zimmermer 1985; Smith & Rogers 2000; Turiel 1983). Specifically, the nature of individual or personal choice versus the choice made when functioning as an agent for others (as often occurs in business settings) or as a steward of others’ property can have an effect on moral decision-making (Davis, Schoorman, & Donaldson 1997; Eisenhardt 1989; Heath 2009). Managers must often act as agents of corporate bureaucracy when making decisions (Hine & Preus 2009). In such circumstances, managerial choice may be constrained by corporate requirements. According to Eisenhardt (1989), the agency problem occurs in those situations where the interests of the
agent do not coincide with those of the principal. Conversely, the stewardship theory of Davis et al. (1997) suggests that managers will choose to serve the interests of the principal even if it means foregoing some of the manager’s personal interests.

When acting in an agent role with a corporate fiduciary responsibility, individuals may feel that choices are constrained by the context and their decisions will reflect the external role orientation rather than the individuals’ moral development; indeed, the psychic conflict of such moral dilemmas may be a significant issue in moral choice (Moberg 2006). Marytnov (2009) reviewed the existing frameworks of agency and stewardship theory. He suggested that how managers view their role—as agent or steward for the principals—would affect their moral decisions. Further, he linked this to the concept of moral development, suggesting that the organizational role orientation—agent or stewardship—would interact with individuals’ levels of moral development and affect their choices; though how this might manifest itself in actual decisions was not defined. The prevalence of agency theory in business schools has been thought to have an effect on the moral choices of students and managers, though the nature of this relationship is likewise unclear (Heath 2009). Based on this review of the literature, and given that this is an area that is relatively untested empirically in the business ethics literature yet seems to be of theoretical interest, we developed a final hypothesis:

**H4:** Students’ moral judgments in a business situation will be affected by context; when acting as an agent for others, decisions will be based on the obligation to others resulting in different moral decisions than those made by individuals acting according to their own perceived personal moral standards in a business context.


To begin to address this question of measuring the effectiveness of ethics education, moral development, and moral choices, a study was conducted with business students. The study was designed to place the students into a hypothetical business situation that involved a moral choice, and to examine the effect of moral development and moral judgment on the students’ moral decision process.

5.1. Subjects

The subjects for this study were students enrolled in a College of Business at a medium-sized private university located in a medium-sized city in the
Midwestern United States. The majority of the students came from Midwestern states, and virtually all were U.S. citizens. The total sample size for this study was 185 students.

5.2. The Study

*Ethics Education.* The College of Business at the University at which these students were enrolled is accredited by the AACSB, and as such incorporates ethics education into the business curriculum, based on the AACSB guidelines. As part of the College’s ongoing accreditation process, the Dean of the College commissioned a committee of faculty to review the ethics education process within the school. A survey was sent to all faculty with responsibility for teaching courses in the core business curriculum. Faculty were asked to indicate the amount and type of ethics coverage that was provided within the courses they taught in the core curriculum. The results of the survey indicated that students were exposed to over 48 hours of ethics coverage within the courses that are required in the College’s business core curriculum, with additional ethics coverage within the individual majors. Coverage included specific lectures, reading book chapters, in-class discussions and presentations, and case studies. These results indicate that by the time students graduate from the College, they have—on average—been exposed to over 50 hours of ethics education; however, as incoming freshman, there would be little to no formal exposure to ethics education—particularly in the initial class session.

*The Business Scenarios.* As part of the initial class lecture period, in each of the classes, students were randomly given a single sheet of paper that described a realistic business situation: an attempted hostile takeover of a mid-sized Massachusetts manufacturing company by a large, New York-based investment firm. There were 3 different situations into which the students were placed. In the first situation, the student was a private investor with 100 shares of common stock. In the second situation, the student was a private investor with 100,000 shares of common stock. And in the third situation, the student was a manager of a mutual fund that held 100,000 shares of common stock of the company. In the final analysis, 59 students had 100 shares, 64 students had 100,000 shares, and 62 students had 100,000 shares under their management in a mutual fund.

In addition to being given their investor status, the students were provided with some information and background on the company, and selected financial data on the firm’s recent performance. At the conclusion of the situation description there was a ballot with the names of the 2 competing Boards of Directors vying for control of the company, along with a space in which the students could indicate their vote. A copy of the scenario description is shown in Appendix A.
These three scenarios were presented to alter the context and to control for differences in the perception of the context. In the first situation, the 100 shares were seen as financially insignificant within the individual’s investment portfolio, thereby reducing the financial impact of the choice. In the second situation, the 100,000 shares were financially significant and could have an impact on the value of the individual’s investment portfolio. And in the third situation, the 100,000 shares represented the same level of financial value to control for financial perceptions; but the addition of the mutual fund management role made the student an agent for the investors, with a fiduciary responsibility to the mutual fund shareholders.

The students were asked to read the scenario description and familiarize themselves with the business situation. After a short period of time to allow the students to digest the material, the students were shown a scene from the motion picture “Other People’s Money”. Based on the stage play by Jerry Sterner that opened off-Broadway in 1988 and ran for nearly two and a half years, the film depicts the fictional struggle between the current management of the fictitious New England Wire & Cable Company, led by the CEO, Andrew Jorgenson (played by the actor Gregory Peck) and the Wall Street firm of Garfield Investments, led by CEO Lawrence Garfield or “Larry the Liquidator”, portrayed by actor Danny DeVito. In the portion of the film shown to the students, the company is holding its annual meeting at which the Board will be elected. The current CEO, Jorgenson, argues that the company is worth more than the price of its stock, that firms have more value to people that can be captured by the share price. Garfield, by contrast, argues that the purpose of owning stock is to get a return on investment, and that when corporations no longer can fulfill that purpose, investors need to cash out and transfer their funds elsewhere. This film has been previously reported to be an effective teaching tool for business ethics, presenting two contrasting views of corporate America: the corporation as social institution versus the corporation as financial investment (Chan, Weber, & Johnson 1995). The purpose of showing the video was to enhance the nature of the business scenario.

After the students viewed the video, they were asked to vote their shares based on the information that had been made available to them, both in writing and at the “shareholder’s meeting” which they had just viewed. After allowing a short time period for the students to vote, the students were then asked to turn their scenario descriptions and ballots over and, on the back of the sheet, to complete the following sentence: “I voted the way I did because…” This was done to determine the type or form of moral reasoning the student used in making the decision, based on Kohlberg’s three levels. In the study of ethics, the word “because” is critical, for what follows is the “cause of” or the explanation for the decision, and provides the justification for the choice. This technique is a variation on the use of moral narratives as a method for assessing moral reasoning which has been established in the literature (Carpendale & Krebs 1995; Narvaez
The use of film and video in ethics education has been likewise reported to be effective (Chan, Weber, & Johnson 1995; Nofsinger 1995; Serey 1992). Moberg (2006) in particular notes that the use of films can enhance ethics training by providing a narrative context for ethical consideration.

**Measurement.** To establish a consistent coding method, we performed a pilot test on a small sample of students in the college to determine the types of responses we were likely to obtain. We then analyzed these responses using Kohlberg’s framework to establish basic protocols for analyzing and coding the responses. In developing the coding protocols for the raters, two individuals with expertise in moral reasoning were used to determine the types of responses that would be representative of Kohlberg’s levels. This was done so that, in addition to the face validity of the various responses, expert validation of the coding protocols was provided a priori as a basis for enhancing the validity of the instrument. Once these were developed, we provided the coding protocols and data to two research assistants and asked them to code the data from the pilot study as a means of training these individuals in the coding of the data. This allowed us to establish a consistent methodology for measurement.

The assistants, along with the researchers, then independently read the self-reports of the moral rationale for the students’ Board vote and coded the responses based on Kohlberg’s model as Level 1, Level 2, or Level 3. It must be emphasized that the coding was independent of the students’ vote; for example, two different students might have voted for Jorgenson or Garfield because “you have to do what’s right, regardless of how you may feel personally about it.” In this instance, both students were coded as Level 2 in terms of Kohlberg’s model of moral development, since both are appealing to a sense of duty and right apart from personal feelings of instrumental gain. Some of the respondents voted for Garfield because “in business, you have to make money, and selling the company will make me the most money.” This was coded as Level 1 moral development. However, there were students who voted for Jorgenson because “I think the current management will be able to make me the most money.” This, too, was coded as a Level 1 response.

Thus, it was NOT the students’ voting behavior that was determined to be moral or immoral, for a moral argument could be made for either position. Rather, we were interested in the level of moral reasoning that students applied to explain their behavior. (A table with sample statements used in coding is shown in Appendix B.) To insure that the coding of responses was independent of the respondent’s vote, we did not provide the coders with the actual forms from the students. Instead, we numbered the responses and made copies of the self-reported moral reason for their vote. In this way, the coding of moral development was completely independent of the students’ actual voting behavior. We then matched the coded response to the voting behavior when entering the data for statistical analysis.
In making the final determination regarding the level of Moral Development displayed, the coders had to agree on the level of moral reasoning represented by the student’s self-report statement of the justification of their choice. For this study, all four coders were in agreement as to the level of moral reasoning as indicated by the self-report statement in 92% of the cases. The high level of inter-rater agreement suggested a fairly high level of reliability in the rating and gave further support to the validity of the measurement and analysis of the results. The remaining cases indicated a rater agreement of 75%.

Based upon the variables under investigation in the study, the 185 subjects were divided into groups as follows: to examine the effects of gender, there were 98 male and 87 female students enrolled in the classes. There were 50 freshman students and 50 sophomore students enrolled in an entry-level Introduction to Business course; 67 seniors enrolled in a Business Planning and Strategy class, in their last semester of study; and 18 graduate students enrolled in a Business Planning and Strategy class in the College’s evening MBA program, almost all of whom were full-time working professionals. The structure of the study, then, resulted in 2 groups based on gender, 4 groups based on class/year in school, 3 groups based on the scenario/situation, and 3 groups based on the level of moral development.

5.3. Independent Variables: Measurement

Based on the research hypotheses proposed for this study, and the research design, there are four independent variables, measured as follows:

Level of Moral Development—was based on the raters’ coding of the students’ self-reports of the moral reasoning and justification for their choice.

Gender—was based on the students’ self-report of gender, male or female.

Class Level—was based upon the students’ self-report of their class ranking. This study used students from four academic class levels. The Introduction to Business class included both freshman and sophomore students. The undergraduate capstone Business Planning and Strategy course had seniors in their final semester of study. The graduate Business Planning and Strategy course was composed entirely of graduate students.

Context—was based on the specific situation to which the student was assigned. Note: These scenarios were designed to look identical to one another and were randomly distributed throughout the classes; thus students were randomly assigned into one of the 3 groups.
5.4. Dependent Variable: Measurement

The dependent variable was the students’ Board vote from the sample ballot. The students either voted for current management (the Jorgenson group) or for the acquiring company (the Garfield slate).

6. Results

Table 1 presents the results of the Analysis of Variance (ANOVA) test of the main effects of the study and the 2, 3, and 4-way interactions among the variables. As seen from the Table, there were significant main effects reported for Gender, Level of Moral Reasoning, and the Context. Table 2 reports the results for each of the four hypotheses under investigation, showing the number of subjects in each treatment condition voting for the respective candidates and the percentage of those subjects voting for the candidates.

Table 1: Analysis of Variance of the Study Variables (with interactions)

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<tr>
<th>Source</th>
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<th>MS</th>
<th>F</th>
<th>Sig</th>
<th>p</th>
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<td>Moral Reasoning</td>
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<td>10.277</td>
<td>117.402</td>
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<td>&lt; .001</td>
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<td>0.048</td>
<td>0.241</td>
<td>0.624</td>
<td>n.s.</td>
</tr>
<tr>
<td>Class</td>
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<td>0.257</td>
<td>1.304</td>
<td>0.275</td>
<td>n.s.</td>
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<tr>
<td>Context (Scenario)</td>
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<td>0.009</td>
<td>0.042</td>
<td>0.958</td>
<td>n.s.</td>
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<td><strong>2-Way Interactions</strong></td>
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<td></td>
</tr>
<tr>
<td>Moral Reasoning x Gender</td>
<td>0.653</td>
<td>2</td>
<td>0.327</td>
<td>3.935</td>
<td>0.022</td>
<td>&lt; .05</td>
</tr>
<tr>
<td>Moral Reasoning x Class</td>
<td>0.887</td>
<td>6</td>
<td>0.148</td>
<td>1.760</td>
<td>0.108</td>
<td>n.s.</td>
</tr>
<tr>
<td>Moral Reasoning x Context</td>
<td>1.198</td>
<td>4</td>
<td>0.300</td>
<td>3.609</td>
<td>0.008</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>Gender x Class</td>
<td>0.033</td>
<td>3</td>
<td>0.011</td>
<td>0.134</td>
<td>0.939</td>
<td>n.s.</td>
</tr>
<tr>
<td>Gender x Context</td>
<td>0.027</td>
<td>2</td>
<td>0.014</td>
<td>0.165</td>
<td>0.848</td>
<td>n.s.</td>
</tr>
<tr>
<td>Class x Context</td>
<td>0.344</td>
<td>6</td>
<td>0.057</td>
<td>0.691</td>
<td>0.658</td>
<td>n.s.</td>
</tr>
<tr>
<td><strong>3-Way Interactions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral Reasoning x Gender x Class</td>
<td>0.094</td>
<td>2</td>
<td>0.047</td>
<td>0.565</td>
<td>0.570</td>
<td>n.s.</td>
</tr>
<tr>
<td>Moral Reasoning x Gender x Context</td>
<td>0.152</td>
<td>2</td>
<td>0.076</td>
<td>0.917</td>
<td>0.402</td>
<td>n.s.</td>
</tr>
<tr>
<td>Moral Reasoning x Class x Context</td>
<td>0.193</td>
<td>5</td>
<td>0.039</td>
<td>0.466</td>
<td>0.801</td>
<td>n.s.</td>
</tr>
<tr>
<td>Gender x Class x Context</td>
<td>0.617</td>
<td>5</td>
<td>0.125</td>
<td>1.487</td>
<td>0.198</td>
<td>n.s.</td>
</tr>
<tr>
<td><strong>4-Way Interaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moral Reasoning x Gender x Class x Context</td>
<td>0.309</td>
<td>2</td>
<td>0.155</td>
<td>1.864</td>
<td>0.159</td>
<td>n.s.</td>
</tr>
</tbody>
</table>
Table 2: Tests of Hypothesis: Board Vote by Moral Reasoning, Gender, Education Level, and Scenario

<table>
<thead>
<tr>
<th>Hypothesis 1: Moral Reasoning (supported)</th>
<th>Voting for Jorgenson</th>
<th>Voting for Garfield</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Kohlberg Level 1</td>
<td>10</td>
<td>7.4%</td>
</tr>
<tr>
<td>Kohlberg Level 2</td>
<td>9</td>
<td>56.3%</td>
</tr>
<tr>
<td>Kohlberg Level 3</td>
<td>31</td>
<td>91.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis 2: Gender (not supported)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Males</td>
<td>25</td>
<td>25.5%</td>
</tr>
<tr>
<td>Females</td>
<td>25</td>
<td>28.7%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis 3: Education Level (not supported)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>Freshmen</td>
<td>18</td>
<td>36.0%</td>
</tr>
<tr>
<td>Sophomores</td>
<td>12</td>
<td>24.0%</td>
</tr>
<tr>
<td>Seniors</td>
<td>14</td>
<td>20.9%</td>
</tr>
<tr>
<td>Graduate</td>
<td>6</td>
<td>33.3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis 4: Scenario (not supported)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>%</td>
</tr>
<tr>
<td>100 Shares</td>
<td>16</td>
<td>27.1%</td>
</tr>
<tr>
<td>100,000 Shares</td>
<td>18</td>
<td>28.1%</td>
</tr>
<tr>
<td>Mutual Fund Manager</td>
<td>16</td>
<td>25.8%</td>
</tr>
</tbody>
</table>

Hypothesis 1
Hypothesis 1 suggested that the students’ level of moral reasoning would have an effect on moral choice. The main effect of level of moral reasoning on the dependent variable of the board vote was significant ($F = 117.402, p < .001$). This hypothesis was supported. These results indicate that the higher the level of moral reasoning, the more likely the student was to vote to retain the current Board of Directors, accepting the view that the corporation was a social institution and was worth more than the financial return offered by the stock price.

Hypothesis 2
Hypothesis 2 suggested that the gender of the students would have an effect on the moral choices, with observable and significant differences in voting behavior. The main effect of gender on the Board vote was not significant ($F = 0.241, n.s.$). This hypothesis was not supported by the study. These results indicate that female students were somewhat more likely to vote to retain the current Board of Directors than were the male students in the study; the difference was not statistically significant.

Hypothesis 3
Hypothesis 3 suggested that the students’ year in school would have an effect on moral choice. The main effect of class (year in school) on the Board vote was not significant ($F = 1.304, n.s.$). This hypothesis was not supported by the data. Though not statistically significant, it can be observed from the data that
freshman students and graduate MBA students had a higher percentage of students voting to retain the current Board than did the sophomore and senior business students.

**Hypothesis 4**

Hypothesis 4 suggested that the business context (size of investment and individual investor versus mutual fund manager) would have an effect on moral choice. The main effect of context on the Board vote was not significant (F = 0.042, n.s.). This hypothesis also was not supported. These results indicate that students in the small investor and individual investor context were no more likely to vote to retain the current Board of Directors, accepting the view that the corporation was a social institution and was worth more than the financial return offered by the stock price, than were the students who were large investors with the fiduciary responsibilities of mutual fund managers.

6.1. Interaction Effects—Moral Reasoning

In addition to the main effects of the independent variables, the research also examined possible interactions among the variables in the study. While we did not explicitly develop any hypotheses pertaining to potential interaction effects, we wanted to determine if there might be any significant interactions among the study variables. There were two interactions that were significantly significant. These interactions were the 2-way interactions between Moral Reasoning and Gender, and between Moral Reasoning and Context. The results of these interactions provide further evidence for the research hypotheses. The 2-way interaction between moral reasoning and gender was significant (F = 3.935, p < .05). The results of this interaction are displayed graphically in Figure 1:

*Figure 1: Moral Reasoning x Gender Interaction*
The interaction shows that female students were more likely to vote to retain the current Board of Directors at higher levels of moral reasoning. At lower levels of moral reasoning, female students were more likely to vote for the opposition Board and in favor of the sale of the company. This suggests that, while gender in and of itself was not found to affect moral behavior, the effect of gender at different levels of moral reasoning may be significant.

The 2-way interaction between moral reasoning and context was significant \( (F = 3.935, p < .05) \). The results of this interaction are displayed graphically in Figure 2:

**Figure 2: Moral Reasoning x Context Interaction**

![Graph showing moral reasoning and context interaction](image)

Note: “Average Share Vote” refers to the tendency of individual subjects to vote for Garfield or Jorgenson. The higher the average share vote, the greater the number of persons voting for Garfield. The maximum value is 2 (if all subjects voted for Garfield). The minimum value is 1 (if all subjects voted for Jorgenson).

The interaction shows that all 3 groups were similar in their voting behavior at Level 1 moral reasoning. However, as the level of moral reasoning increased, all 3 groups were more likely to vote to retain the current Board of Directors. This effect was most pronounced for the “mutual fund manager” subjects; at Level 3 moral reasoning, the “mutual fund managers” were more likely to support the current Board of Directors than were the individual investors. Note also that both the “small private investor” and “large private investor” subjects were less likely to vote to retain the current Board at higher levels of moral reasoning. Since the overall main effect for context suggested that the “mutual fund manager” subjects were less likely to vote to retain the current Board, the primacy of the level of moral reasoning and its effect on decision making seems even more pronounced in these results.
7. Discussion

If, as some have suggested, there is an underlying flaw in the focus of business ethics education—emphasizing an “organization-centered worldview” (Ghoshal 2005; Giacalone & Thompson 2006) with a limited and, some would argue, distorted view of human nature (Mitroff 2004)—how can this be addressed? First, the good news/bad news—after nearly 50 hours of educational exposure to business ethics, the students’ level of moral development was no more highly developed (as seniors) than incoming freshmen. The “good news” in this situation is that the education the students received in the business school does not appear to affect moral development. Seniors were no more likely to have higher levels of moral development (using Kohlberg’s framework) that the freshmen; so it might be argued that the business education was not creating “amoral” or “immoral” managers from inherently moral students, but instead was having no effect on moral reasoning and development. The “bad news” is the same—their education had no apparent effect on the level of moral reasoning; the exposure to ethics education did not significantly impact the business decisions the students’ made.

What are we to make of these findings? The students are apparently no worse for the educational process—the argument that business education is distorting students’ moral decision-making tendencies is not supported by these results. However, neither is the students’ business education enhancing moral development—the differences in moral development were not significant by education level. If the purpose of ethics education is to develop higher levels of moral reasoning leading to more ethical choices, it would appear that simply having ethics “coverage” in the business curriculum is not sufficient. We must ask what ought to be the desired goal or purpose of ethics education. Is it merely descriptive and analytical, to teach students about ethical issues, frameworks, and the types of ethical situations that will be encountered in business? Or is it to increase students’ level of moral development and reasoning, thereby resulting in moral ethical choices and managers? It would seem—at least from the results of this study—that incorporating ethics into business education does not necessarily lead to moral development. The content and nature of ethics education needs to be more carefully considered.

Of course, this is fraught with difficulties. If one suggests that ethics education requires a more “normative” approach in order to increase moral development and reasoning, which norms ought to be applied? In the contemporary business school, college or university this is a difficult question. For instance, suppose we want to establish a norm among U.S. business students that giving potential customers gifts or financial payments in order to secure a contract or a sale is normatively “bad” or “unethical”. This may be appropriate within the U.S. context, as generally accepted norms of business behavior would suggest that gratuities or gifts can be viewed as a form of bribery. However, in other cultural settings (notably the current situation in China), such gift-giving is
viewed as a normal business practice. Which ethics ought we to use—the U.S., China, neither?

Well, (it might be argued) it would be best to apply certain “universal” norms of business behavior. But what are these “universal” norms? And are these truly “universal” in all cultural or business contexts and at all times? For instance, in past years “sustainability” was not a norm of business behavior; but today many corporations provide “sustainability reports” along with the annual corporate report to indicate the company’s efforts at environmental awareness and stewardship. Is “sustainability” a universal business norm? If we say “yes”, what are we to make of the entrepreneur whose business objective is to offer a service until her or his retirement? This is not a “sustainable” business model, yet might provide a very valuable service for the local community. Does this violate the “norm” of sustainability?

This study suggests that ethics education programs that do not lead to increases in moral development may not lead to more “moral” choices on the part of managers. Simply providing students with an understanding of ethical frameworks or the ethical issues involved in business settings does not necessarily affect students’ behaviors or decisions. How to address this issue is an area for future research and investigation.

The findings support previous research on business ethics. Students with higher levels of moral reasoning were more likely to see the corporation as more than simply an instrumental means of financial gain, and thus were more likely to support the current Board in the proxy fight. Likewise, the study supports the findings by Neubaum et al. (2009) that business education does not appear to make students more amoral over time. We note that these results provide a preliminary perspective on Pfeffer’s (2005) call for research that examines students’ moral behavior. By explicitly asking the students to make a choice, to vote their shares, we are able to examine the moral actions of business students, albeit in the educational setting. However, the findings suggest that business education per se does not necessarily make students more amoral or unethical. However, the results do not seem to suggest that the educational process in and of itself has a material impact on moral choice—freshmen were no more likely to vote in a particular manner than were graduate students. It would appear, in answer to the question we posed, that while we can teach business ethics, more work will be needed to determine what and how the students’ learn.

Perhaps one of the more significant findings of this study was the effect of moral development on students’ moral decisions and voting behavior. We note that the level of moral development was the only main effect found to have a material impact on voting behavior, and that the level of moral development interacted with gender and context to likewise affect how students cast their votes. The gender findings were of interest in that previous studies have posited that women have higher levels of moral reasoning than males (e.g., Gilligan 1982). The results from the interaction analysis show that at lower levels of moral development, women were more likely to vote for Garfield than Jorgenson; at
higher levels of moral reasoning the voting behavior of women was more likely to favor Jorgenson. One possible reason for the lack of a gender main effect on the students’ moral behavior (their vote) is ultimately due to the primacy of moral reasoning. At lower levels of moral reasoning, there was no difference in the moral behavior of the students. At higher levels of moral reasoning, there was a difference in behavior, and this behavior was more pronounced for the female subjects. This might suggest that the effect of gender is to increase the level of moral reasoning. Further research is needed to examine these issues.

The relationship of context and moral development is even more interesting. Martynov (2009) has suggested that the level of moral development affects the nature of the agent-steward relationship for individuals within organizations. Specifically, he asserts that managers and lower levels of moral development are more likely to behave as agents and make decisions based upon their own interests, while managers at higher levels of moral development are more likely to behave as stewards and make decisions that are in the principals’ interests. The pattern of results found here indicates that at lower levels of moral reasoning, the context does not appear to affect behavior; all students were more likely to vote for Garfield. However, as the level of moral development increased, the students’ voting behavior begins to disperse and differences are observed in how the votes are cast. The context may be more of a consideration for those with higher levels of moral reasoning, who are more cognizant of their responsibilities to others. The result is the observed differences in the pattern of voting behavior. Hence, this study would seem to give support to Martynov’s (2009) proposition that moral development does in fact impact how individuals view their roles within a business organizational context. There is a need for additional research to examine the nature of the moral development—context relationship.

These findings may be highly significant, for taken as a whole the results suggest a possible need for an increased on programs of moral development. If, in fact, moral development can affect moral choice and behavior, and if moral development can affect how individuals view the moral choice (affecting how managers understand the organizational context of ethical decisions), then business schools may very well need to develop programs and curricula to enhance the moral competency of students. As suggested by Trevino (1992), enhancement of students’ moral reasoning capability may be an important goal for programs of business ethics. Business ethics education may need to consider emphasizing the cognitive, behavioral, and managerial competencies that will enhance moral competence in organizations (Rossouw 2002). Approaches that increase students’ moral competency, such as the individual and team case-based training presented by Jones (2009) may merit further consideration. In addition, schools need to consider institutional factors such as codes of ethics, perceptions of the ethical culture of the school, and ethics pedagogy, as these have likewise been found to impact moral judgment competence (Desplaces et al. 2007).

As with any study, care needs to be taken in interpreting the results. The study examined students at a single College of Business at a single University in
the U.S., and applications to other settings—particularly in cultures outside North America—could differ significantly, particularly to the extent that ethics is culturally bound. Before generalizing these findings, additional work replicating the study needs to be undertaken. It might also be instructive to perform this study on high school or even middle school students with no exposure or interest to business practices or business ethics, as well as college students in other disciplines outside of the College of Business to determine if there are any differences in decision-making or moral development.

Likewise these were business STUDENTS, not practicing executives. It would be interesting to extend this research by replicating the experiment on a group of managers with several years of experience in organizations (although the use of the graduate MBA students did attempt to include at least some individuals with work experience in the study). Whether or not the exposure to actual business situations and decisions would affect these results would be an area for additional investigation. The study took place within the classroom setting of the business school. While this can offer some insights as to the impact of ethics education, these results cannot necessarily be extended outside the educational setting.

A further limitation of the study is the artificial nature of the situation. Clearly, students did not have any “real” money at stake; the students were all in a classroom setting, and, while the situation was presented as part of the normal classroom learning process, nonetheless the study was still within the relatively “safe” confines of the classroom. No grades were at stake, students did not have any resources invested in the situation. The only thing the students were told was that this was part of the process of business education. The results of the study (in terms of the Board vote) were shared with the students, and there was follow-on class discussion about the situation. However, whether or not the classroom findings would translate to actual business practice is, of course, a matter of speculation.

These limitations aside, the results of this research do offer some issues for thought and consideration as regards ethics education within the business school. What type of pedagogy might be needed in order to develop moral managers? Does mere exposure to ethical frameworks and situations develop managers who think, reason, and make decision in a more ethical manner?

This study suggests that we need to consider the content of ethics education along with the knowledge domain and the processes applied in developing pedagogical methods for instruction. To suggest, as some have done, that business schools are a significant cause of the unethical behavior of managers in organizations is probably overstating the point. But to suggest that schools are not complicit is probably likewise understating the nature of the challenge. To develop managers with higher levels of moral reasoning, managerial education must apply the best knowledge and tools of our trade. Those of us who teach ethics in the business schools need to take a leadership role in ensuring that our educational efforts develop students prepared to accept the ethical challenges of management.
References:


Appendices

Appendix A: Sample Scenario from the Study

New England Wire & Cable Company

You are a resident of Gardner, Massachusetts, a small town about 10 miles from Fitchburg. Fitchburg is the home of New England Wire & Cable Company, a medium-sized manufacturer of steel wire and cable for various applications—construction, telecommunications, utilities, and the like. Currently, your investment portfolio is worth about $100,000, and includes 100 shares of New England Wire and Cable that you bought four years ago for $32 per share and which is currently trading at $26 per share.

You have recently received notification as a stockholder that Garfield Investments, Inc., has offered to buy the company at an offering price of $34 per share; the stated intention of Garfield Investments is to downsize the company, transfer most of the manufacturing overseas, and sell off underutilized assets in order to realize the value in the company. The current management of the company has put forth an alternative plan to reinvest in the plant, training, and in core operations in order to restructure the company and improve performance. Management of the company is resisting the offer; the situation has become one of a hostile takeover. Over the last four years, the performance of the company has been as shown:

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales (Revenues)</td>
<td>272,000,000</td>
<td>242,000,000</td>
<td>217,000,000</td>
<td>223,000,000</td>
</tr>
<tr>
<td>Less: Cost of Goods Sold</td>
<td>223,040,000</td>
<td>203,280,000</td>
<td>173,600,000</td>
<td>180,630,000</td>
</tr>
<tr>
<td>Gross Profit</td>
<td>48,960,000</td>
<td>38,720,000</td>
<td>43,400,000</td>
<td>42,370,000</td>
</tr>
<tr>
<td>Less: Selling and Administrative Costs</td>
<td>40,240,000</td>
<td>41,360,000</td>
<td>42,600,000</td>
<td>42,070,000</td>
</tr>
<tr>
<td>Earnings Before Interest and Taxes</td>
<td>8,720,000</td>
<td>(2,640,000)</td>
<td>800,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Less: Taxes</td>
<td>3,750,000</td>
<td>0</td>
<td>0*</td>
<td>0*</td>
</tr>
<tr>
<td>Net Profit (Loss)</td>
<td>4,970,000</td>
<td>(2,640,000)</td>
<td>800,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Number of Shares Outstanding</td>
<td>2,750,000</td>
<td>2,830,000</td>
<td>2,520,000</td>
<td>2,670,000</td>
</tr>
<tr>
<td>Earnings (Loss) Per Share</td>
<td>$1.81</td>
<td>($0.93)</td>
<td>$0.32</td>
<td>$0.11</td>
</tr>
</tbody>
</table>

* No taxes were due because of the carry-forward of the loss in 2001.

Today is the Annual Shareholders Meeting of New England Wire and Cable in Fitchburg. You have driven there from your home in Gardner to hear the presentations by management and by Garfield Investments. At the conclusion of the presentations, you will need to vote your 100 shares on the following ballot:
New England Wire & Cable Company
Annual Meeting – Election of Directors

Directions: Place an X in the block next to the slate of directors for whom you wish to vote.

The following Directors are recommended by Management of the Company:
A. Jorgensen (Chair), W. Coles, S. Jorgensen, R. Duncan, G. Caswell, J. Lawrence

The following Directors are recommended by Garfield Investments, Inc.:
L. Garfield (Chair), T. Rowe, C. Bunsen, J. Baker, G. Campbell, R. Miller

Number of Shares: 100
Appendix B: Kohlberg’s Moral Stages-Applications to the Study

<table>
<thead>
<tr>
<th>Level 1: Preconventional/Premoral</th>
<th>Stage 1: Obedience and punishment orientation</th>
<th>Stage 2: Naively egoistic orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral values reside in external, quasi-physical events, or in bad acts. The actor is responsive to rules and evaluative labels, but views these in terms of pleasant or unpleasant consequences of actions, or in terms of the power of those who impose the rules.</td>
<td>Stage 1: Obedience and punishment orientation</td>
<td>Stage 2: Naively egoistic orientation</td>
</tr>
<tr>
<td>Stage</td>
<td>Description</td>
<td>Example Statements</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Stage 1: Obedience and punishment orientation</td>
<td>• Egocentric deference to superior power or prestige, or a trouble-avoiding set</td>
<td>• I need to do the best for my investors in order to keep my job.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Objective responsibility</td>
<td>• My investors will hold me responsible for what I do with their money.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Management deserves a chance, and if it doesn’t work they can be replaced later.</td>
</tr>
<tr>
<td>Stage 2: Naively egoistic orientation</td>
<td>• Right action is that which is instrumental in satisfying the self’s needs; occasionally others’</td>
<td>• I’m in business to make money, and this will make me the most money.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Relativism of values to each actor’s needs and perspectives</td>
<td>• I need to maximize my own personal wealth.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Orientation to exchange and reciprocity</td>
<td>• Business is about making the most you can for yourself, not about what’s good for someone else.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• It will be better for me and my town if we keep the plant open for now.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2: Conventional/Role Conformity</th>
<th>Stage 3: Good boy/good girl orientation</th>
<th>Stage 4: Authority and social-order-maintaining orientation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moral values reside in performing the right role, in maintaining the conventional order, and expectancies of others as a value in its own right.</td>
<td>Stage 3: Good boy/good girl orientation</td>
<td>Stage 4: Authority and social-order-maintaining orientation</td>
</tr>
<tr>
<td>Stage</td>
<td>Description</td>
<td>Example Statements</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Stage 3: Good boy/good girl orientation</td>
<td>• Orientation to approval, to pleasing and helping others</td>
<td>• As an investor, I have to make the most money I can.</td>
</tr>
<tr>
<td></td>
<td>• Conformity to stereotypical images of majority behavior</td>
<td>• In business, you have to make a profit.</td>
</tr>
<tr>
<td></td>
<td>• Action is evaluated in terms of intentions</td>
<td>• This will maximize the return to my shareholders.</td>
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<td></td>
<td></td>
<td>• The people in the plant will be better off if they can keep their jobs.</td>
</tr>
<tr>
<td>Stage 4: Authority and social-order-maintaining orientation</td>
<td>• Orientation to “doing duty” and showing respect for authority</td>
<td>• I have a duty/obligation to make the most I can for my investors.</td>
</tr>
<tr>
<td></td>
<td>• Maintaining the social order</td>
<td>• In business, everyone needs to concentrate on making the most they can.</td>
</tr>
<tr>
<td></td>
<td>• A sense of obligation to rules</td>
<td>• When the market comes back, the company will be all right, like management says.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 3: Postconventional/Self Accepted Moral Principles</th>
<th>Stage 5: Contractual/legalistic orientation</th>
<th>Stage 6: The morality of individual principles and conscience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morality is defined in terms of conformity to shared standards, rights, or duties apart from supporting authority. The standards conformed to are internal, based on thought and judgment or right and wrong.</td>
<td>Stage 5: Contractual/legalistic orientation</td>
<td>Stage 6: The morality of individual principles and conscience</td>
</tr>
<tr>
<td>Stage</td>
<td>Description</td>
<td>Example Statements</td>
</tr>
<tr>
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<tr>
<td>Stage 5: Contractual/legalistic orientation</td>
<td>• Norms of right and wrong are defined in terms of laws or institutionalized rules which are perceived as having a rational basis</td>
<td>• I have a fiduciary responsibility to the shareholders.</td>
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<tr>
<td></td>
<td>• Laws or contracts prevail over individual needs</td>
<td>• It will maximize the good for the society as a whole, even though some workers might be hurt in the process.</td>
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<td></td>
<td>• I don’t think an outsider really knows more about the business than the current managers do.</td>
</tr>
<tr>
<td>Stage 6: The morality of individual principles and conscience</td>
<td>• Orientation not only toward existing social rules, but also toward the conscience</td>
<td>• No matter what anyone else says, you have to do what’s right.</td>
</tr>
<tr>
<td></td>
<td>• Action controlled by internalized ideals, regardless of reactions of others</td>
<td>• I don’t think it is necessary to always have to make the most profit.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• You have to think of the workers and the community as well as yourself.</td>
</tr>
</tbody>
</table>