

## **Advancing cognitive moral development: a field observation of college students**

Cynthia Rodriguez Cano  
Georgia College & State University

Doreen Sams  
Georgia College & State University

### **ABSTRACT**

For the first time, field observation research is conducted in a natural, controlled environment (i.e., classroom) to investigate ethical decision-making of college students. One hundred twelve (112) college students enrolled in four Principles of Marketing classes in a southeastern United States university participated in the study. In two of the four classes, the importance of ethical behavior was discussed in each class meeting (*sensitized groups*); in the other two classes, the importance of ethical behavior was discussed on the first day of class and not mentioned thereafter (*non-sensitized groups*). The findings reveal that given the opportunity to cheat, 100% of students that were not sensitized to the importance of ethical behavior cheated. Furthermore, a number of these students made a conscience effort to cover up their actions. For sensitized students, some engaged in cheating while others did not. Findings of focus group interviews revealed that students engaged in cheating were in the *pre-conventional* stage of cognitive moral reasoning, while those that did not cheat were in the *conventional* stage of cognitive moral reasoning. This finding suggests that *sensitizing* students to the importance of ethical behavior may advance them up the ladder of cognitive moral reasoning.

Keywords: Moral Reasoning, Cheating, Students

## INTRODUCTION

The erosion of ethical decision making continues to plague the United States (US) economy. From the collapse of Enron in 2001 (Pasha, 2006) to the Ponzi scheme of Bernard Madoff in 2009 (Scannell, 2009), fraud in the US remains front page news. Moreover, frauds against the government continue to rise. Qui Tam (i.e., actions in which individual who assists in a prosecution can receive all or part of penalty imposed) settlements and judgments from fraud against the US government totaled \$1.451 trillion in 2007, up 131% from 1997 (\$6.29 million) (Federal Fraud, 2009). In 2009, corporate fraud against the Internal Revenue Service (IRS) resulted in numerous multimillion dollar judgments and criminal prosecutions: Dennis M. Dowd, former senior manager of human resources for Hitachi America, Ltd. was sentenced to 57 months imprisonment and fined \$7 million for fraud against the company's Health and Welfare Plan; Edward M. Okun, former owner of the The 1031 Tax Group, LLP was sentenced to 100 years in prison and forced to forfeit \$40 million resulting from a fraud that involved \$126 million in clients' funds (IRS, 2009). Furthermore, there is evidence that decision-making of US executives is ethically distorted; the chief executive officers (CEO) of Ford, Chrysler, and General Motors did not recognize the ethical dilemma of flying in separate, private corporate jets to Washington, DC to ask for federal stimulus money (Levs, 2008).

Today's college students have grown up in a society where the line between right and wrong has been blurred and where unethical behavior of high-profile individuals is expected. Although universities in the US stress the inclusion of ethics within existing programs [e.g., University of Arizona require freshmen to review E-tegrity oath and accept the terms (Pallack, 2004)], include a required course in ethics, and invest in ethical programs such as The Kennedy Institute of Ethics at Georgetown University (Georgetown University, 2009), dishonesty (e.g., cheating on exams and plagiarizing) among college students continues to be a problem both in the US and in other countries (Becker, Connolly, Lentz, & Morrison, 2006; Rawwas, Al-Khatib, & Vitell, 2004). Rawwas and Isakson (2000) found that 67% of college students confessed to having cheated at least once during their college tenure. Similar to the distorted perceptions of the General Motors, Ford, and Chrysler CEOs, students perceive they are more ethical than business people (Tyson, 1990), while admitting to cheating (Merritt, 2002). The current condition brings forth the importance of research that seeks to understand students' ethical behaviors and develop techniques that promote better ethical decision-making.

For the first time, the current study observes the decision-making of college students when confronted with an ethical dilemma (i.e., cheat or not cheat). Most existing research of cheating among college students relies on self-reporting to establish the existence and degree of unethical behaviors among students (e.g., Chapman, Davis, Toy, & Wright, 2004; Sierra & Hyman, 2006). An exception is research that collects data of actual behaviors in a natural setting. For example, West, Ravenscroft, and Shrader (2004) investigated cheating in a natural setting by testing student behaviors on a take-home accounting exam. However, field observation of actual behavior at the point of decision-making has yet to be undertaken. Using a unique research design, the current study addresses a gap in the literature and provides new insight into the moment of decision-making when college students are not subject to external factors (e.g., peer pressure) and must rely on their internal value system.

The current study proposes that given the opportunity to cheat and faced with an ethical dilemma (i.e., cheat or not cheat), marketing students that have been sensitized to the importance of ethical behavior (i.e., ethical behavior is discussed routinely in class) make better ethical

decisions than those that have not been sensitized. The following discussion begins with the theoretical foundation and reviews of the relevant literature that supports the hypothesized relationships. Next, the methodology of the research, findings, and discussion are presented.

## **THEORETICAL FOUNDATION, RELEVANT LITERATURE AND HYPOTHESES**

### **Cognitive Moral Reasoning**

The study of ethical behavior is grounded in the theory of cognitive moral reasoning. Kohlberg (1969) suggests that moral reasoning is dependent on logical reasoning. Cognitive moral development (CMD) is a process by which individuals move through at least six stages (Goolsby & Hunt, 1992). Skills in ethical decision-making develop sequentially over time and through distinctive cognitive stages (Goolsby & Hunt, 1992; Kohlberg, 1984; Trevino, 1992). In the first two stages or pre-conventional level, decisions are driven by immediate consequences (i.e., reward or punishment). The next level (stages three and four) or conventional level, moral decisions are based on external rules and norms (i.e., family, peers, and society). In the final level, post-conventional (stages five and six), individuals are driven by strong personal commitment to self-selection of universal values.

The sequential aspect of Kohlberg's (1969) CMD is consistent (generalizable) across many populations and cultures (e.g., Blasi, 1980; Snarey, 1985). CMD has been shown to be positively related to age (Rest, 1986) and education (Rest, 1984). Longitudinal research by Rest (1975, 1986) and colleagues (Rest, Davison, & Steven, 1978) support the upward trend in moral development. Traditional college students (i.e., 18-23 years old) who are in the earlier phase of life experiences have been shown to be in the early stages of moral cognitive reasoning, pre-conventional, where decision-making is based on avoidance of failure (e.g., Herington & Weaven, 2007).

### **Theory of Cognitive Dissonance**

Cognitive dissonance theory addresses conflict of cognitions (i.e., a piece of knowledge), which include such things as attitude, emotion, or behavior. Individuals desire consonance (i.e., one cognition follows from or fits with the other). The result of cognitive dissonance is an unpleasant psychological tension, which individuals seek to resolve. In doing so, an individual may change one cognition (e.g., behavior) to make it consistent with the other, add one or more consonant cognitions, or alter the importance of various cognitions. When confronted with an ethical dilemma (i.e., cheat or not cheat), the decision to cheat causes cognitive dissonance (i.e., I cheated, but cheating is wrong), and therefore, individuals will take steps to resolve the psychological tension: justify the unethical behavior (e.g., taking advantage of an opportunity); minimize the degree of significance of unethical act (e.g., not a major infraction); and/or change internal values to be consistent with cheating.

### **Cheating**

Cheating by college students includes a wide range of activities including unauthorized use of notes on exams, plagiarizing, and hiring professionals to write papers. Cheating is defined as *fraudulent behavior involving some form of deception in which an individual's efforts or*

*efforts of others is misrepresented.* Extensive research shows that although college students believe and understand that cheating is wrong, they still engage in dishonest behaviors (e.g., Bernardi et al., 2004). Students believe that they are more ethical than business people (Wood, Longenecker, McKinney, & Moore, 1988), even though students have been found to have lower ethical standards (e.g., Lord & Melvin, 1997; Stevens, 1984). Research by Herington and Weaven (2007) reveal that marketing students are similar to other business majors in their ethical thinking.

A factor that affects students' attitudes about cheating is their beliefs that professors are responsible for widespread cheating (McCabe, 1993; Roig & Ballew, 1992). McCabe (1993) found that students blame widespread cheating on professors' unwillingness to take the time and effort to investigate dishonesty.

The explanation of the ethical paradox among college students may be attributed to the notion that ethics is personal; individuals hold various perceptions of what is right and wrong (Lawson, 2004). Although differences may be attributed to individual perceptions, scholars have crafted a profile of college students that are most likely to find any form of cheating acceptable: "male, young, not a middle child, high scores on tolerance and relativism, low scores on idealism and detachment, and neither an economics nor management major" (Rawwas & Isakson, 2000, p. 328). However, the best predictor of cheating in college students is the opportunity to cheat (Rawwas & Isakson, 2000).

A study by Sheard, Carbone, and Dick (2002) reports that students cheat for six major reasons: 1) not enough time, 2) will fail otherwise, 3) too great a workload at university, 4) cannot afford to fail, 5) assignments are too hard, and 6) afraid to fail. These findings suggest that students' decisions are based on the avoidance of failure, which is consistent with *pre-conventional* level of CMD.

## Hypotheses

In 1980, Arlow and Ulrich found that a significant difference between students that had taken a Business and Society class and those that had not. The current study suggests that sensitizing college students to the importance of ethical behavior serves to advance ethical decision-making upward on the CMD ladder, which in-turn, contributes to better ethical decision-making. As age (i.e., time) is correlated with CMD, life experiences through time contribute to the upward movement of CMD (Castleberry, 2007). It is logical to suggest that continual reinforcement of the importance of ethical behavior contributes to one's life experiences. Without such intervention, students exhibit lower level of cognitive moral reasoning, relying on avoidance of punishment in ethical decision-making. Given that the best predictor of cheating in college students is the opportunity to cheat (Rawwas & Isakson, 2000), the following is hypothesized.

H1: Given the opportunity to cheat, college students who are not sensitized to the importance of ethical behaviors will cheat.

The presence of an ethical dilemma creates cognitive dissonance and initiates efforts to resolve the situation. For example, consider the situation in which a student is able to see the test (and answers) of a fellow student. Although the student knows cheating is wrong, he or she is under pressure to do well (i.e., avoid failure). The opportunity to cheat is present, which is the best predictor to engage in unethical behaviors (Rawwas & Isakson, 2000). Therefore, the situation is set for poor decision-making. The decision to cheat creates cognitive dissonance; I

cheated, but cheating is wrong. The student initiates effort to resolve the dissonance. In doing so, the student may blame the professor (i.e., add another cognition), rationalize the cheating as a socially acceptable behavior (i.e., align cognitions), and/or justify cheating by devaluing the importance of the act (i.e., minimize significance). The student, who is in the pre-conventional level of CMD, attributes external factors to justify ethical decision-making; the motivation is to avoid failure (doing poorly on the exam).

H2: Students who are not sensitized to the importance of ethical behavior and engage in cheating will attribute their behavior to the need to avoid failure.

Research shows that three exposures to a message are necessary to reach a point of attention; the opportunity to encode information (retain) is a matter of repetition (Shimp, 2010). To advance moral reasoning, it is proposed that exposure to the importance of ethical behavior must be continually reinforced. Therefore, the continual exposure to the importance ethical behaviors achieves attention and facilitated retention (i.e., information encoding and retrieval). As ethics is personal<sup>1</sup> [i.e., individuals hold various perceptions of what is right and wrong (Lawson, 2004)], sensitization will not be consistent across college students. However, it is hypothesized that a number of the sensitized students will not cheat.

H3: Given the opportunity to cheat, some college students who are sensitized to the importance of ethical behavior will not cheat.

People move through stages of CMD through life experiences accumulated over time. The continual exposure to the importance of ethical behavior becomes part of one's life experiences and acts to mature cognitive moral reasoning. Given the opportunity to cheat, a number of the sensitized students will resolve their cognitive dissonance by not cheating (i.e., change cognition). This suggests that students have moved upward on the CMD ladder (from *pre-conventional* to *conventional*) and the decision not to cheat will be attributed to rules and norms.

H4: Given the opportunity to cheat, students who are sensitized to the importance of ethical behavior and do not cheat will attribute their decisions to rules and norms.

## METHODOLOGY

A unique contribution of the current study is the research design. The goal of this study is to observe decision-making at the moment of recognition of an ethical dilemma, while limiting external influences (i.e., opportunity to collaborate, peer pressure) and forcing students to rely on their individual value systems. To accomplish this goal, two studies were conducted: 1) field observation to capture cheating behaviors, and 2) focus groups to understand the cognitive moral reasoning engaged in ethical decision-making.

### Study 1: Field Observation

There were several challenges for testing the hypothesized relationship using field observation. To assure decision-making in a relevant setting, a natural environment was essential. That is, the situation must be consistent with the typical activities of college students. To eliminate variance created by external forces such as peer pressure, the point of decision-making must be controlled. Finally, students could not be aware that their behaviors were being

<sup>1</sup> It is acknowledged that factors that make up personal ethical values vary widely. However, the investigation of these factors is not within the scope of the current study.

observed. A natural, controlled environment was accomplished by testing decision-making during an exam. An argument for the net benefit of the study (i.e., research findings outweigh cost of deception) allowed for institutional review approval of the research without prior consent of students. The following discussion provides details of the studies.

### **Study 1: Sensitization**

Sensitization was accomplished by continual reinforcement of the importance of ethical behavior. Students in two of the four Principles of Marketing classes were sensitized; students in the other two classes were not. For the sensitized group, the dishonest policy was thoroughly reviewed at the beginning of the semester and the importance of ethical behavior was discussed during every class meeting. For the non-sensitized group, the dishonest policy was mentioned at the beginning of the semester, but the importance of ethical behavior was never discussed thereafter.

### **Study 1: Test Environment**

An environment that was natural and controlled was accomplished by observing ethical behavior during an exam. In this situation, the classroom is the ultimate natural setting for a college student, while an exam provides a means of controlling external influences such as interaction with fellow students. An assessment exam was included in the course syllabus and described as an accumulative assessment that would be administered during the last week of the semester. The point value of the exam was enough to make it an important factor in the overall performance evaluation (i.e., 5%). The assessment exam consisted of 15 multiple choice questions that were difficult for an introductory course in marketing (i.e., what is the difference between gross rating points and target rating points?) making successful completion difficult.

### **Study 1: Opportunity to Cheat**

The professors assisting in the study routinely use two versions of an exam and provide scantrons that identify the version (i.e., A or B). Therefore, students were accustomed to the two-version format. The opportunity to cheat was created by attaching the answer key (presumably in error) to Version A of the assessment exam. Therefore, half of the participants in each of the four classes received exams with the answer key attached (given the opportunity to cheat) and half received exams without the answer key attached (no opportunity to cheat) (see Table 1 in the Appendix).

### **Study 1: Procedures**

The procedures used by the participating professors were consistent across the semester to control for hypothesis testing. The professors did not assign seats, so students were free to choose any available seat when entering the classroom. The two versions of the exams (i.e., no answer key and answer key attached) were organized in alternating order and distributed after all students were seated. As customary, the exams were color coded; one version printed on orange paper and one version on white.

After distributing the exams and before students were allowed to begin, the professor reminded students that questions would not be entertained during the exam. Students were instructed to turn-in only the scantrons to the graduate assistant who was proctoring the exam; the professor left the classroom. To assure confidentiality, the graduate assistant removed the students' names from the scantrons before delivering them to the professor. All participants to the study were awarded 100% of the points allocated to the assessment exam.

### **Study 1: Sample**

One hundred twelve (112) undergraduate students enrolled in four Principles of Marketing classes in a southern US university participated in the study. Business students were selected for several reasons. First, today's business majors represent tomorrow's business leaders (Rawwas & Isakson, 2000). As such, this group has the potential to substantially impact the future of business and the US economy. Second, business majors have been shown to be more likely to cheat than most other majors (Riley, 2004), making this group relevant to the study at hand.

### **Study 2: Focus Group**

The purpose of the focus group was to determine what level of moral reasoning students use during the decision-making process (i.e., cheat or not cheat). The routine class meeting following the administration of the exam was used to debrief students and engage them in conversation (i.e., focus group). Because prior consent was not obtained (i.e., deceptive nature of the study), the focus group conversation was not tape-recorded; the professor and graduate assistant made a written record of the conversation. The script for the focus group consisted of four questions: 1) why was the answer key attached to the exam, 2) is there anything that is absolutely unethical, 3) was it ethical to use the answer key, and 4) why did you use the answer key.

## **FINDINGS**

### **Study 1: Field Observation**

Of the 112 students that participated in this study, 64 were male and 48 were female (see Table 2 in the Appendix). Almost half of the sample (47%) represented marketing (31 students, 27%) and general business majors (i.e., 20 students, 22%). The remainder or 53% included declared majors in management, accounting, mass communications, management information systems, economics, and international business.

Graduate assistants proctoring the exam were instructed to observe test-taking strategies employed by students. Two strategies of test taking were observed: 1) sequential strategy where students sequentially read and answers questions without first reviewing the exam; 2) holistic strategy where students reviewed the entire exam before answering the questions. Students that were given the opportunity to cheat (exam printed on orange paper for visual identification) and used the sequential strategy were not aware of the answer key until they had already completed the exam. These students were observed changing answers on the scantrons after discovering the

answer key was attached. Students that engaged in a holistic strategy were observed referring to the answer key before completing the scantron.

Differences between sensitized and non-sensitized students were observed. For the non-sensitized classes, all students regardless of test-taking strategy used the key (i.e., cheated). Observations of the sensitized group were mixed; most students use the key while some did not.

One hundred percent (100%) of the students in the non-sensitized group that were given the opportunity to cheat (i.e., answer key attached to the exam) cheated; used the answer key and did not report such to the professor or graduate assistant. Therefore, H1 was supported.

A number of students in the sensitized group did not cheat. After completion of the exam and during normal office hours, seven of the 62 students in the sensitized group that were given the opportunity to cheat (i.e., received the exam with answer key) reported the opportunity to cheat to the professors. Students assumed the key was stapled to the exam in error. Therefore, H3 was supported.

## Study 2: Focus Group

Ten of the participants to Study 1 were not included in the focus group (i.e., did not attend class) rendering a sample of 102. The ten participants were from the non-sensitized groups (i.e., two from class four and eight from class 3 - refer to Table 2).

Before debriefing participants, students were told there was an irregularity in the assessment exam. When asked if anyone had observed the problem, several students replied that the answer key was attached to orange exams. Next, participants were asked their opinion as to why the answer key was attached to the exam. Students unanimously agreed it was a clerical error. Student did not consider the idea that they were participants in a study or that their behaviors were observed.

Students were then presented with the questions “are there any actions that are absolutely wrong.” Students were unable to distinguish any behavior that is absolutely, without equivocation, wrong. Responses included the following.

“Murder is okay under some circumstance...if you are about to be killed yourself.”

“Lying that doesn’t hurt anyone is not really lying,”

Students were unanimous in the belief that cheating is wrong (unethical). However, students were not consistent in their reason for using the answer key. Findings suggest that cognitive dissonance was resolved using various methods.

“Everybody does it to some degree...it’s the American way of life” (alter cognition).

“Look at the news...it [unethical behavior] is expected in business” (alter importance).

When asked if cheating was morally wrong, student held the belief that cheating was wrong. This is consistent with the existing research that students believe that they are ethical even though they have been found to have lower ethical standards than people in the workforce (e.g., Lord & Melvin, 1997; Stevens, 1984).

When asked “why” of the decision to cheat, students that were given the opportunity to cheat (answer key attached) and cheated rationalized their decision as avoidance of failure. Responses included the following.

“The answer key was an opportunity...you take what you are given.”

“It was your [professor] mistake, not mine.”

“I cannot afford to be suspended....and lose money [state assistance].”

“It was a gift.”

The finding is consistent with cognitive dissonance theory that suggests the psychological tension created by cognitive dissonance must be resolved (i.e., justified). The finding is also consistent with research that suggests that students tend to blame the situation for cheating behaviors (McCabe & Trevino, 1996) and/or the professor (McCabe, 1993). Therefore, H2 was supported.

Of the students that were given the opportunity to cheat and did not (i.e., reported the answer key was attached to the exam to the professor), these students attributed their actions to rules and norms. Responses included the following.

“It just isn’t right.”

“I don’t want to be a cheater.”

For these students, an internal perspective was revealed; the responsibility focuses inward instead of outward (i.e., professor’s fault or social structure). The finding suggests that continual reinforcement of the importance of ethical behaviors (i.e., sensitizing) can move some students upward on the CMD ladder; from pre-conventional (i.e., avoidance of failure) to conventional (i.e., compliance with social norms). Hence, H4 was supported.

## **DISCUSSION AND IMPLICATIONS**

The current study is the first to construct a setting that allows for the observation of actual behaviors in a natural, but controlled setting. Because the benefits of the findings were greater than the cost of deception (i.e., obtaining prior approval for participation), it was possible to obtain institutional approval to construct a unique environment to test ethical decision making (i.e., cheat or not cheat) and the affect of sensitization. The importance of the findings and contributions to the marketing discipline are now discussed.

An encouraging finding is that some students that were sensitized to the importance of ethical behaviors relied on societal norms when making ethical decisions. This finding suggests that continual exposure to the importance of ethical decision-making helps to move students up the ladder of moral reasoning (from pre-conventional or conventional). The importance of this finding cannot be overstated, considering the limited success of integrating ethics in the college curriculum. This new knowledge provides a means of ethically maturing marketing students and making a substantial impact on the way business is conducted in the future. It is recommended that continual emphasis of the importance of ethical behavior in all classes be considered as a first step in the complex process of building ethical mindsets in tomorrow’s business leaders.

The cheating of all students that were not sensitized to the importance of ethical behaviors was expected and consistent with existing literature (i.e., pre-conventional level of moral reasoning). Given the opportunity to cheat, which is the best predictor of dishonesty, students did indeed cheat. Therefore, without intervention such as sensitizing students to the importance of ethical behavior, the opportunity to cheat is the perfect predictor (i.e., 100% of students in this group cheated) of cheating behavior among business students. This creates a challenge for marketing faculty. College students are creative and attention must be paid to the opportunistic environment. For examples, creative cheating methods include writing notes on the inside label of a plastic soda bottle that are not visible when the bottle is full, but become visible when the liquid is consumed. For international students, language aids can become a tool for cheating (i.e., writing notes in a translation dictionary). Technology presents an array of opportunities to cheat. Cell phone earpieces camouflaged by long hair can connect students with outside sources. Although all cheating situations cannot be anticipated, marketing educators must

be diligent in limiting opportunities to cheat. Although literature exists on antecedents of cheating behaviors, little research investigates cheating techniques used by marketing students in the classroom. It is recommended that qualitative research that gathers such data would provide valuable insight into potential opportunities for unethical decision making in the classroom and offers a valuable tool for marketing faculty to control the opportunistic environment.

The focus group discussions provided rich data into how students rationalize their decisions to cheat. The findings suggest that continual exposure to the importance of ethical behavior sensitizes students and increases the probability of reliance on rules and social norms in ethical decision-making. Consistent with CMD theory, age and moral development is directly related; younger individuals tend to make ethical decisions based on fear of failure. Furthermore, the findings suggest that the pressure to succeed in the land of opportunity (i.e., USA) influences the justification for cheating (e.g., “the answer key was an opportunity...you take what you are given”). The discovery of a fraud receives front-page news, while the consequences of such actions rarely do. It is recommended that educators emphasize the consequences of unethical behaviors in addition to the act. For example, Eli Lilly’s mass marketing fraud in which the company ghostwrote articles (i.e., company wrote medical journal studies and then asked doctors to put their names on the article) cost the company \$1.42 billion in fines (MSNBC, 2009).

An unexpected finding was the “cover-up” behavior associated with cheating. Seven students in the non-sensitized group that were given the opportunity to cheat (i.e., used the answer key), purposively answered one or two questions wrong. This finding suggests that student intentionally took steps to disguise their behaviors. This finding suggests that students seek to resolve cognitive dissonance by not completely benefiting (100% on the exam) by their actions (i.e., add new cognition). It is possible that students feel that getting a 100% would not be ethical, but getting some help on the exam is acceptable. An alternative explanation is students wanted to create variation in the grade allocation to avoid suspicion. It is recommended that future research consider the motives to “cover up” behaviors.

The finding that participants did not see anything in absolute terms, suggests that marketing students see ethical behavior as shades of grey versus absolutes of black and white. Unfortunately, justifying degrees of dishonesty might allow for a greater degree of rationalization such that anything and everything can be seen as “right.” This creates a considerable challenge for marketing educators. Although sensitizing students improves ethical decision-making, it is recommended that additional training in ethical concepts is necessary. For example, courses in business ethics should challenge students to conceptually analyze ethical dilemmas to understand where you draw the line between right and wrong.

## **DIRECTION FOR FUTURE RESEARCH AND LIMITATIONS**

The current research is a preliminary investigation into a very complex issue. However, the ability to create a natural, controlled environment to test ethical decision-making by marketing students provides essential new insight into ethical decision-making. Future research should consider situational variables that might account for ethical decisions, as well as methods that create a less opportunistic environment.

- Because the scantrons could not be matched to students, a comparison between marketing students and other business students was not possible. Future research that incorporates this data should be undertaken.

- How does the magnitude of the result (i.e., won't graduate if I fail the class versus a zero for the exam) influence ethical decision-making?
- What other pedagogical methods can effectively move students from the pre-conventional level to the conventional level of moral reasoning?
- What roles do influencers (i.e., family, religion, school culture) play in how students evaluate ethical decisions?
- How might professors align students' perceptions (i.e., more ethical than business people) to reality?
- How can the opportunities to cheat be minimized in the college environment?
- How does the degree of sensitizing (between every class and not at all) impact ethical decision-making?
- How might the teaching of ethics (i.e., incorporation in classes) in high school impact moral reasoning in college?

As with all research, the current study has limitations. First, because of the nature of the research, attitudinal data (i.e., attitude toward cheating) and norm data (i.e., income, ethnicity) could not be collected. Furthermore, dyadic analyses were not possible (i.e., matching those that did not cheat to demographics, etc.) limiting the understanding of other variables that might attribute to ethical/unethical behaviors. Second, the data were collected in the southeastern US and may not be generalizable across geographic areas. Finally, the data were collected in Principles of Marketing classes and findings may vary across courses.

## REFERENCES

- Arlow, P., & Ulrich, T. A. (1980). Business ethics, social responsibility, and business students: An empirical comparison of Clark's study. *Akron Business and Economic*, 17-23.
- Becker, D., Connolly, J., Lentz, P., & Morrison, J. (2006). Using the business fraud triangle to predict academic dishonesty among business students. *Journal of the Academy of Educational Leadership*, 10, 37-55.
- Bernardi, R. A., Metzger, R. L., Scofield-Bruno, R. G., Wade-Hoogkamp, M. A., Reyes, L. E., & Barnaby, G. H. (2004). Examining the decision process of students' cheating behavior: An exploratory study. *Journal of Business Ethics*, 50, 397-414.
- Blasi, A. (1980). Bridging moral cognition and moral actions: A critical review of the literature. *Psychological Bulletin*, 88, 1-45.
- Castleberry, S. B. (2007). Prison field trips: Can white-collar criminals positively affect the ethical and legal behavior of marketing and MBA students? *Journal of Marketing Education*, 29, 5-17.
- Chapman, K. K., Davis, R., Toy, D., & Wright L. (2004). Academic integrity in the business school environment: I'll get by with a little help from my friends. *Journal of Marketing Education*, 26, 236-249.
- Federal Fraud. (2009). Statistics. Retrieved October 20, 2009 from [http://federalfraud.com/content\\_statistics.htm](http://federalfraud.com/content_statistics.htm).
- Georgetown University. (2009). The Kennedy Institute of Ethics. Retrieved October 20, 2009 from <http://kennedyinstitute.georgetown.edu/index.htm>.
- Goolsby, J. R., & Hunt, S. D. (1992). Cognitive moral development in marketing. *Journal of Marketing*, 56, 55-68.
- Herington, C., & Weaven, S. (2007). Does marketing attract less ethical students? An assessment of the moral reasoning ability of undergraduate marketing students. *Journal of Marketing Education*, 29, 154-163.
- IRS. (2009). Examples of corporate fraud investigations: Fiscal year 2009. Retrieved October 20, 2009 from <http://www.irs.gov/compliance/enforcement/article/0,,id=187268,00.html>.
- Kohlberg, L. (1969). The cognitive developmental approach to socialization. In D. A. Goslin (Ed.), *Handbook of socialization: Theory and research*. San Francisco, CA: Rand McNally.
- Kohlberg, L. (1984). *Essays on moral development: Volume 2, The psychology of moral development*. New York, NY: Harper & Row.
- Lawson, R. A. (2004). Is classroom cheating related to business students' propensity to cheat in the real world? *Journal of Business Ethics*, 49, 189-199.
- Levs, J. (2008). Big three auto CEOs flew private jets to ask for taxpayer money. Retrieved October 9, 2009 from <http://cnn.com/2008/US/11/19/autos.ceo.jets>.
- Lord, A. T., & Melvin, K. B. (1997). The attitudes of accounting students, faculty, and employers toward cheating. In L. A. Ponemon, M. J. Epstein, J. C. Caa, & R. C. Ruland (Eds.), *Research on accounting ethics, Volume 3* (pp. 1-20). New York, NY: JAI Press, Inc.
- McCabe, D. L. (1993). Faculty responses to academic dishonesty: The influence of student honor codes. *Research in Higher Education*, 34, 647-658.
- McCabe, D. L., & Trevino, L. K. (1996). What we know about cheating in college: Longitudinal trends and recent development. *Change*, 28, 28-33.

- Merritt, J. (2002, December 9). You mean cheating is wrong? *BusinessWeek*, p. 8.
- MSNBC. (2009, January 15). Eli Lilly settles \$1.42 billion Zyprexa suit: Drugmaker pleads guilty to illegally marketing drug for unapproved use. *The Associated Press*. Retrieved October 10, 2009 from <http://www.msnbc.msn.com/id/28677805/print/1/displaymode/1098/>.
- Pallack, B. (2004, February 29). Tuscon, Arizona university program seeks to instill business ethics. *Knight Rider Tribune Business News*, p. 1.
- Pasha, S. (2006). Skilling gets 24 years. Retrieved October 1, 2009 from <http://money.com>.
- Rawwas, M. Y. A., Al-Khatib, J. A., & Vitell, S. J. (2004). Academic dishonesty: A cross-cultural comparison of U. S. and Chinese marketing students. *Journal of Marketing Education*, 26, 89-100.
- Rawwas, M. Y. A., & Isakson, H. R. (2000). Ethics of tomorrow's business managers: The influence of personal beliefs and values, individual characteristics, and situational factors. *Journal of Education for Business*, 75, 321-330.
- Rest, J. R. (1975). Longitudinal study of the defining issues test of moral judgment: A strategy for analyzing developmental change. *Developmental Psychology*, 11, 718-748.
- Rest, J. R. (1984). The major components of morality. In W. M. Kurtines & J. L. Gerwitz, *Morality, moral behavior, and moral development* (pp. 24-38). New York, NY: John Wiley & Sons, Inc.
- Rest, J. R. (1986). *Moral development: Advances in research and theory*. New York, NY: Praeger Publishers.
- Rest, J. R., Davison, M. L., & Robbins, S. (1978). Age trends in judging moral issues: A review of cross-sectional, longitudinal, and sequential studies of the defining issues test. *Child Development*, 49, 263-279.
- Riley, S. (2004, April 15). Teachers combat high-tech cheating: Software aims to help. *Investor's Business Daily: Internet & Technology*.
- Roig, M., & Ballew, C. (1992, April 3 - 5). Attitudes toward cheating by college students and professors. Proceedings from 63<sup>rd</sup> Annual Meeting of the Eastern Psychological, Boston, MA.
- Scannell, K. (2009, September 24). SEC caught Madoff in lies in 2005 exam. *The Wall Street Journal*. Retrieved October 1, 2009 from <http://online.wsj.com/article/SB125211472134588207.html>.
- Sheard, J., Carbone, A., & Dick, M. (2002). Determination of factors which impact on IT students' propensity to cheat. In T. Greening & R. Lister (Eds.), *Proceedings of Australasian Computer Education Conference*.
- Shimp, T. A. (2010). *Advertising, promotion, and other aspects of integrated marketing communications, 8<sup>th</sup> edition*. Mason, OH: South-Western Cengage Learning.
- Sierra, J. J., & Hyman, M. R. (2006). A dual-process model of cheating intentions. *Journal of Marketing Education*, 28, 193-204.
- Snarey, J. (1985). Cross-cultural universality of social moral development: A critical review of the Kohlbergian research. *Physiological Bulletin*, 97, 202-232.
- Stevens, G. F. (1984). Business ethics and social responsibility: The response of present and future managers. *Akron Business and Economic Review*, 15, 611-616.
- Trevino, L. K. (1992). Moral reasoning and business ethics: Implications for research, education, and management, *Journal of Business Ethics*, 11, 445-459.
- Tyson, T. (1990). Believing that everyone else is less ethical: Implications for work behaviors and ethics instruction. *Journal of Business Ethics*, 9, 715-721.

- West, T., Ravenscroft, S. P., & Shrader, C. B. (2004). Cheating and moral judgment in the college classroom: A natural experiment. *Journal of Business Ethics, 54*, 173-183.
- Wood, J. A., Longenecker, J. G., McKinney, J. A., & Moore, C. W. (1988). Ethical attitude of students and business professionals: A study of moral reasoning. *Journal of Business Ethics, 7*, 24 -257.



**Table 1: Allocation of Exams**

Description		Number of Students			
		<i>Sensitized Classes</i>		<i>Non-Sensitized Classes</i>	
		Class 1	Class 2	Class 3	Class 4
<b>Type of Exam</b>	Opportunity to Cheat (answer key attached)	18	12	14	12
	No Opportunity to Cheat (answer key not attached)	18	12	14	12



**Table 2: Sample by Gender and Group**

Description		Group			
		<i>Sensitized</i>		<i>Non-Sensitized</i>	
		Class 1	Class2	Class 3	Class 4
Gender	Male	19	15	13	17
	Female	17	9	15	7

