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ACADEMIC DISHONESTY: A STUDY IN THE MAGNITUDE OF AND JUSTIFICATIONS FOR ACADEMIC DISHONESTY AMONG COLLEGE UNDERGRADUATE AND GRADUATE STUDENTS

By Bryan Hendricks

A Thesis

Submitted in partial fulfillment of the requirements of the Masters of Arts Degree of
The Graduate School at
Rowan University
May 4, 2004

Approved by		
	Professor	

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ABSTRACT

Bryan Hendricks
ACADEMIC DISHONESTY: A STUDY IN THE MAGNITUDE OF AND
JUSTIFICATIONS FOR ACADEMIC DISHONESTY AMONG COLLEGE
UNDERGRADUATE AND GRADUATE STUDENTS
2003/2004

Dr. John Klanderman and Dr. Roberta Dihoff Master of Arts in School Psychology

The purpose of this investigation was to examine the degree to which college undergraduate and graduate students cheat as well as to examine if the justifications for cheating differed amongst these groups. Cheating behavior scores and justifications for engaging in academically dishonest behavior scores were obtained from 138 college undergraduate and graduate students through the use of a survey. One-way analysis of variance revealed a significant difference between the underclassmen, upperclassmen, and graduate students group reporting cheating behaviors. Post hoc tests revealed that underclassmen reported significantly higher levels of cheating than upperclassmen and graduate students. Graduate students were found to cheat significantly less than college upperclassmen. Scores on the justification scale were obtained and a significant difference was found between the groups. Post hoc tests revealed that college underclassmen and upperclassmen reported significantly higher justification scores. Pearson correlation results indicated that as class standing increases, the prevalence of cheating behaviors and level of justifications for those behaviors decreased significantly.

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Chapter I

The Problem

Need

It has been documented that academic dishonesty is a problem on college campuses and universities throughout the United States. Past research has identified a number of reasons why students cheat; stress, opportunity, personality characteristics, and low academic achievement are often cited (Graham, Monday, O' Brien, & Steffen, 1994). Researchers of student behavior have indicated that a large percentage of undergraduate students cheat (Love & Simmons, 1998). Evans and Craig (1990) suggested that younger college students cheat more than upper-classmen. Despite a growing emphasis on academic integrity in the research literature, there is still little focus on the issue of graduate student cheating. Greene and Saxe (1992) found that 81% of the undergraduates that they surveyed indicated that they had cheated at some point in their undergraduate career and that 77% of their sample intended to attend graduate or professional school. Given the frequency of academic dishonesty at the undergraduate level and the fact that significantly more students are pursuing degrees at the graduate level, there is a need to investigate academic dishonesty at the graduate level. Although the research indicates that the amount of academic dishonesty decreases overtime, it is important to examine the various motives that lead and individual to cheat. Examining and understanding these motives could assist in the development and implementation of alternative academic

evaluation methods, other than multiple choice examinations and simple-subject term papers.

<u>Purpose</u>

The objective of the present study is multi-faceted. Previous research has suggested that the quantity of academic dishonesty decreases along ones college career, however, there hasn't been much emphasis on graduate student cheating behavior. Past research has also explored the various reasons as to why students cheat, but once again, graduate students have not been examined extensively. The purpose of the study was to investigate the degree to which college undergraduate and graduate students cheat as well as to examine if the motives for cheating differ amongst these groups of students.

Hypothesis

The researcher hypothesized that the motives for academic dishonesty and types of cheating behavior vary between college underclassmen (freshmen and sophomores), upperclassmen (juniors and seniors), and graduate students. Consistent with the literature, the researcher suspects that the underclassmen will exhibit more cheating behavior than the other two groups and that the amount of cheating behavior will decrease with each group. The researcher also suspects that the motives for cheating will vary among the groups.

Theory

There are many theories that attempt to explain why people, more specifically college students, cheat. People are frequently tempted to engage in "immoral" activities, that is, they are often persuaded by the prospect of reward to consider violating a moral standard. The disapproved activity may be very enjoyable or the person may stand to gain

considerably from engaging in it (Mills, 1958). Persons may not commit the immoral act due to a fear that the act will be detected and punished, or by an internalized conviction that the act is morally wrong. Prior research has focused on the precursors that determine which choice a person will make when faced with a decision. Festinger (1957) derived the theory of cognitive dissonance to explain how people change their moral attitudes when presented with a temptation.

According to the theory, inconsistent cognitions arouse psychological tension that people become motivated to reduce. The extent of dissonance that exists depends on the completeness of the dissonance. It is greater the larger the proportion of dissonant cognitions. Cognitive dissonance is considered a motivation factor. The presence of dissonance is assumed to lead to attempts to reduce or eliminate it, the strength of these attempts increases with the magnitude of the dissonance. Dissonance can be reduced by changing the dissonant cognitions or by adding new cognitions which are consonant. When a person decides whether or not to violate a moral standard, such as deciding to cheat, dissonance is created. If the person chooses not to cheat, their cognitions about the rewards to be gained from cheating are then dissonant with what they have chosen. The persons cognitions corresponding to the restraints against cheating, cognitions about being caught and punished and whatever belief they have about cheating being wrong, are consonant with being honest (Mills, 1958). If the person has a higher motivation to cheat, then the degree of dissonance that a person will have after deciding not to cheat will be greater. The lower the restraints against cheating, the greater the dissonance will be for a person who chooses to be honest. If the person decides to cheat, their cognitions about the rewards from cheating will be consonant with their cognitions about their

actions. But their cognitions corresponding to the restraints against cheating will be dissonant with it (Festinger, 1957). Just as the person who is honest can reduce dissonance by regarding cheating as wrong, the person who cheats can reduce dissonance by changing their attitude toward cheating so that they feel that it is not as bad as previously believed. This change in attitude, that cheating is not as bad as they previously thought, can lead to a change in behavior. The person cheating with more frequency would exhibit that change in behavior.

Cognitive dissonance theory helps, in part, to explain what happens when a person is confronted with the decision whether or not to cheat. The inconsistent cognitions arouse psychological tension that people are motivated to reduce, but what motivates the person to cheat in the first place? Several studies have examined the impact of motivation on cheating behavior. Recent research supports the claim that students who have a desire to learn or master a particular body of information are less likely to cheat than are students motivated by extrinsic or performance factors, such as academic standing, grades, or some other performance evaluation (Jordan, 2001). According to self-perception theory, people are said to be intrinsically motivated when they engage in an activity for the sake of their own interest, the challenge, or sheer enjoyment. People are said to be extrinsically motivated when they engage in an activity as a means to an end, for tangible benefits (Brehm, Kassin, & Fein, 1999). By examining intrinsic (mastery) and extrinsic motivation, academic dishonesty can be further explained. The student who wants to learn the material for the sheer challenge or interest of the topic (high intrinsic motivation) then the less likely they are to be tempted or motivated to cheat. This lower motivation to cheat would lead to a greater cognitive dissonance when faced with the

notion of cheating. The student who needs to know the material for extrinsic purposes, such as getting good grades or recognition for their academic success, may be more tempted to cheat. With an attitude of academic success being the number one priority, the motivation to cheat may be higher, again leader to cognitive dissonance. However, unlike the intrinsically motivated individual, the extrinsically motivated student may be able to justify why they are cheating and change their cognitions about cheating to reduce the dissonance that they are experiencing.

While discussing the idea of motivation as a factor that can influence someone cheating, the notion of justifying ones behavior came into play. Neutralization theory in the study of delinquency expresses the process of situationally defining deviant behavior. In this view, deviance is based upon an unrecognizable extension of defenses to crime, in the form of justifications, seen as valid by the delinquent but not by society at large (Sykes & Matza, 1957). Through neutralization individuals justify the violation of accepted behaviors. The techniques of neutralization are separated into five categories: denial of responsibility, condemnation of condemners, appeal to higher loyalties, denial of victim, and denial of injury (LaBeff, Clark, Haines, & Diekhoff, 1990). In each case, the individuals acknowledge a conviction about a particular rule, such as academic dishonesty, but argue that there are special circumstances that exist which cause them to violate the rules in a particular instance. These special circumstances quite often arise from the allure of rewards that can be gained from the deviant behavior. More specifically, the person may be more inclined to cheat under circumstances where extrinsic motivation is a major factor.

The theories regarding academic dishonesty have attempted to explain the cognitive processes that exist when one is presented with both the motivation and opportunity to cheat. These theories also examined the various defense mechanisms that people utilize when they violate rules that they have certain convictions about. There is still an important issue that needs to be addressed: How do people develop morality? Kohlberg's theory of morality is the most widely accepted cognitive theory in this area of behavior. Kohlberg viewed moral development as based on cognitive development, such that moral thinking would change in predictable ways as cognitive abilities developed. Kohlberg developed a system for classifying individuals into three levels of moral development, with each level containing two stages. Level 1 is preconventional reasoning. At this level, moral reasoning is based on perceptions of likelihood of external rewards and punishments. What is right is what avoids punishment or results in rewards. In Stage 1, punishment and obedience orientation, rules should be obeyed to avoid punishment from those in authority. In Stage 2, individualism and purpose orientation, what is right is what satisfies one's own needs and occasionally the needs of others, and what leads to rewards for oneself. Level 2 is conventional reasoning. At this level, moral reasoning is less egocentric, and the person advocates the value of conforming to the moral expectations of others. What is right is whatever agrees with the rules established by tradition and authorities. In Stage 3, interpersonal concordance orientation, care of and loyalty to others is emphasized in this stage, and it is seen as good to conform to what others expect in a certain role, such as being a "good husband" or "good boy/girl." In Stage 4, social systems orientation, moral judgments are explained by reference to concepts such as social order, law, and justice. It is argued that social rules and laws must

be respected for social order to be maintained. Level 3 is postconventional reasoning. Moral reasoning is based on the individual's own independent judgments rather than on what others view as right or wrong. What is right is derived from the individual's perception of objective, universal principles rather than the subjective perception of either the individual or the group. In Stage 5, community rights and individual rights orientation, the person reasoning at this stage views society's laws and rules as important, but also sees it as important to question them and change them if they become obstacles to the fulfillment of ideals such as freedom and justice. In Stage 6, universal ethical principles orientation, the person has developed an independent moral code based on universal principles. When laws or social conventions conflict with these principles, it is seen as better to violate the laws or conventions than the universal principles (Arnett, 2001). Kohlberg found that the stage of moral reasoning tended to increase with age. At age 10, most of the participants in his study were in Stage 2 or in transition between Stage 1 and Stage 2; at age 13, the majority were in transition from Stage 2 to Stage 3; by ages 16 to 18, the majority were in Stage 3 or in transition to Stage 4; and by ages 20 to 22, 90% of the participants were in Stage 3, in transition to Stage 4, or in Stage 4. However, even after 20 years, few had proceeded to Stage 5, and none had reached Stage 6 (Arnett, 2001). Kohlberg's research suggested that a majority of college freshmen and sophomores would be in Stage 3, and transitioning into Stage 4. College juniors and seniors would be transitioning into Stage 4 and some would be in Stage 4. However, the research indicated that younger graduate students (those between the ages of 22 and 28) would more than likely be in Stage 4. There may be a few graduate students in Stage 5, but more than likely the vast majority would be in Stage 4.

Kohlberg's theory holds that at Level 2 moral reasoning is less egocentric, and the person advocates the value of conforming to the moral expectations of others. Stage 3 suggests that loyalty to others is emphasized. These two ideals may explain why students would allow a friend to cheat from them (loyalty to others) and why they may cheat themselves (conforming to the moral expectations from friends that cheat).

Upperclassmen and graduate students may be less likely to cheat because they are in Stage 4, where moral judgments are explained by reference to concepts like social order and justice. However this notion of justice could contribute to cheating, such as believing that the professor isn't fair and, in a way, cheating is enacting justice.

Definitions

For the purposes of the present study the researcher had to define various terms. Cheating behavior is defined as: using crib notes on a test; copying from another student during a test; using unfair methods to learn what was on a test before it was given; copying from another student during a test without or without his/her knowledge; helping someone else to cheat on a test; cheating on a test in any other way; copying material and turning it in as your own work; fabricating or falsifying a bibliography or research data; turning in work done by someone else; receiving substantial, unpermitted help on an assignment; collaborating on an assignment when the instructor asked for individual work; copying a few sentences of material from a published source (including the internet) without citing it; turning in a paper obtained from a "paper mill;" or using a false excuse to obtain an extension on a due date or delay a written exam.

The second component to the study was the different motives for academic dishonesty.

The motives were defined as follows: Conformity – knew everyone else was cheating;

Redressing perceived inequality – thought the instructor had treated them unfairly, felt the instructor deliberately made the exam too hard; No harm to self – knew the instructor wouldn't do much if they were caught; Avoid detection – knew they wouldn't get caught; Self-gain – Would be put on academic probation if they didn't pass, needed a good grade to maintain a certain grade point average; Personality/Psychological – person was very competitive by nature, "froze" and couldn't recall the answers; Prior history – had gotten away with it in the past; and Autonomy – didn't think cheating was a big deal.

Finally, it was necessary to define what constitutes membership into the various groups being studied. The college underclassmen group was comprised of both freshmen and sophomores. According to the policy at the university, this group was defined as having accumulated between 0 and 57.9 total earned credit hours. The college upperclassmen group consisted of juniors and seniors. Those participants termed college upperclassmen have accrued 58 or more total earned credit hours. The graduate student group consisted of those students that have already earned a baccalaureate degree upon completion of their program requirements.

Assumptions

It was necessary for the researcher to make several assumptions in regards to the present study. The notion of academic dishonesty is a sensitive issue for many college students but the participants in this study were guaranteed anonymity, therefore it was assumed that they answered all aspects of the survey candidly. Secondly, it is assumed that none of the participants suffered from a mental illness (e.g., sociopath, schizophrenia, etc.) that could have skewed the results of the study. It is also assumed that the environmental conditions surrounding the administration of the survey had no

effect on their results. Specifically, it is assumed that the time of day, the day of the week, and what time during the class that the survey was administered had no impact on the outcome of the study.

Limitations

There were several limitations involved with the present study. The sample sized used for the study was small, impacting the ability to generalize the results to the rest of the population. Only one college campus was used, once again affecting generalization. Also, there is a larger pool of undergraduate subjects available at the university, which made having similar sample sizes between undergraduate and graduate participants nearly impossible. Many of the students participating in the study were volunteers. Volunteers for a qualitative study of academic dishonesty probably differ from the general graduate and undergraduate student population in ways that cannot be determined at present.

Overview

In the forthcoming chapters, the thesis for this research will be outlined using a review of literature, both past and present, the design of the study, the analysis of the results and a conclusion of the study. In Chapter Two, the concentration will be on reviewing relevant literature that addresses the various situational and individual factors that influence academic dishonesty between college undergraduate and graduate students. The initial focus of the literature will be on specific studies that are similar to this one, followed by a more brief review of literature that is indirectly associated to the notion of academic dishonesty among college undergraduate and graduate students.

The focus of Chapter Three will be the design of the study. In this chapter, the sample studied will be discussed and the measurement used will be described. In Chapter Four,

the analysis of the results will be described. The analysis will arise from the data collected and described in the previous chapters. Finally, the focus of Chapter Five will be summarizing the research and findings from the present study. The conclusions drawn from the results will be discussed, as well as the implications the results have on future research.

Chapter II

Literature Review

Academic dishonesty has long been an area of concern in higher education. The interest in how many students cheat at the undergraduate level, why students cheat, and how to deal with dishonest students has continued throughout the past decade.

Undergraduate students have typically been the focus of research on academic dishonesty; with the studies usually using surveys that seek student's self-report of cheating behavior, perceptions, experiences, and attitudes. At the undergraduate level, the relationship between cheating behavior and various factors, such as grade versus orientation, personality type, and membership in extracurricular activities have been examined. Research on academic dishonesty among graduate students has been studied to a much lesser degree. However, of the research regarding academic dishonesty at the graduate level, these studies have examined the behaviors, perceptions, experiences, and attitudes of the students across several disciplines.

The literature review will include five major areas: (a) undergraduate cheating, (b) graduate student cheating, (c) theory explaining college student academic dishonesty, (d) faculty perspectives, and (e) the role of institutional policies. The review of research on undergraduate cheating will discuss the frequency of cheating among college undergraduates, the motives given by college students as to why they cheat, the influence of individual difference factors on academic dishonesty (e.g., age, gender, academic achievement, parents' education, and extracurricular activities) and personality variables on academic dishonesty (e.g., morality, achievement-related variables, impulsivity,

affectivity, etc.). The research review will also investigate the influence of contextual factors on undergraduate academic dishonesty. These factors include the following: fraternity/sorority membership, peer behavior, peer disapproval and peer reporting. The last area of undergraduate cheating that will be explored is the influence of situational factors on academic dishonesty (e.g., perceived work load, competition, class size, and testing environment).

The research review regarding graduate student cheating will begin with research that indicates the prevalence of graduate student academic dishonesty. The research reviewed will come from several different areas of graduate school, including medical school, nursing school, and business school. Past research examining the factors influencing cheating behavior will also be reviewed. External and internal contributing factors will be reviewed as well.

The third section of the literature review entails theory regarding academic dishonesty on both the undergraduate and graduate school level. The research review will include the following: the role of intrinsic and extrinsic motivation on academic dishonesty, cognitive dissonance, and neutralization theory (e.g., denial of responsibility, appeal to higher loyalties, condemnation of the condemners, denial of injury, and denial of the victim). The fourth and fifth sections of review of the research literature examine both faculty reactions to cheating behavior and the influences of institutional policies on academic dishonesty.

Undergraduate Cheating

Frequency of Cheating Among College Undergraduates

Data from early studies on cheating in college show that a smaller percentage of students admitted to cheating in the past than do so today. An early experiment by Drake (1941) revealed a cheating rate of 23% in a group of college students. In his study, Drake studied 126 students in a woman's college who were given six weekly tests in an unnamed subject. The researcher used a method of returning previously scored tests to the students for self-grading. Drake found that 30 of the students cheated on at least one of the tests, 7 students cheated on four of the tests, 1 student cheated on five tests, and 1 student cheated on all six tests.

Hetherington and Feldman (1964) studied what they called "opportunistic individual cheating" and "planned independent cheating" in 78 college students from two child psychology courses. The research design involved three situations. In the first situation, the researchers used five students who were not enrolled in the course as research assistants. These confederates attended class frequently enough to be regarded as peers by the other students. The main role of the confederates was to observe and record various types of cheating during the first hour examination of the semester. The exam consisted of 30 multiple-choice, 30 true-false, and 30 fill-in items. The confederates were widely dispersed throughout the classroom and the observers recorded all instances of cheating (e.g., the use of crib notes, copying, permitting others to copy). In the following class period, the subjects graded their own test papers, unaware that this exam had been graded previously.

The second situation involved the administration of an essay exam consisting of two questions, which the professor told the class would be taken from a list of five essay questions distributed in advance. Students were to complete the exam in blue books.

These blue books were readily available for purchase in the college bookstore. However, to ascertain the degree to which students might complete all five essay questions in advance in a substitute blue book and submit only those containing two assigned examination essays, the blue books distributed for students' use were inconspicuously marked before being distributed for the exam.

The third situation was an individual testing situation. The student expected to take a short oral examination as part of the course requirements. When they arrived at the professor's office, the student was asked extremely difficult, detailed questions. After several minutes, the professor was "unexpectedly" called out of the office. The text from which these questions were taken was in a conspicuous position in a group of several other books on the desk at which the student was sitting. Its position had been carefully marked to enable the experimenter to note if it had been moved or opened while absent from the room.

The opportunistic-individual cheating was thought of as including changing answers in Situation 1 and the use of the book in Situation 3. Planned-independent cheating was conceived of as including the use of crib notes and bringing in blue books. Copying and letting a person copy were called social-active and social-passive cheating, respectively. Across the three situations, 46 of the 78 students (59%) cheated in some fashion.

Cheating was most frequently observed in Situation 1 and Situation 2, in which an equal percentage (50%) cheated. Situation 3 was used only by 22% of these students. Overall,

only 10% of those who cheated in any situation limited their cheating to just one of the three situations.

Baird (1980) cited five studies conducted between 1941 and 1970 that showed a change in the cheating rate from 23% to 55%. In his 1980 study, Baird found that about 75% of undergraduate business, liberal arts, and education majors had cheated in college. Baird concluded that the cheating rate in college had been increasing, and that the data showed a continuation of the upward trend.

Meade (1992) surveyed 6,000 students at 31 prestigious universities in which students were asked if they had cheated at any time during their college career. The researcher found that business students reported the highest percentage of cheating (87%), followed by engineering students (74%), science majors (67%), and humanities majors (63%). Bowers (1964) surveyed 5,280 college students and ranked the incidence of cheating among them: business (66%), engineering (58%), education (52%), social science (52%), art (50%), history (43%), humanities (39%), and languages (37%).

McCabe and Bowers (1994) surveyed students enrolled at nine medium to large state universities that were in Bowers' 1962 sample. In the Bowers' study, 63% of respondents admitted to cheating in college. McCabe and Bowers found that in 1993, the rate of cheating was 70%. Rates of cheating on exams and collaboration on individual work increased. The rate of copying from another student's exam went from 26% to 52%, while collaboration increased from 16% to 27%. However, the researchers indicated that plagiarism and turning in work done by someone else decreased slightly.

Smith, Ryan, and Diggins (1972) surveyed students from two urban colleges. Of the 112 participants, 91% said they had cheated while in college. The researchers also found

that 70% of mean and 63% of women said that they had cheated on at least one exam within the past two semesters. Singhal (1982) surveyed agriculture, technology, and engineering students. Of the 364 respondents, 56% admitted cheating and 2% indicated that they did so on a regular basis. Singhal proposed that the most common form of cheating on tests was the use of crib notes (24%). The researcher found that the most popular form of any kind of cheating was copying homework assignments or lab reports. Numerous surveys have been conducted over the past 10 years, all of which indicating incidences of cheating ranging from 62-89% (Davis, Grover, Becker, & McGregor, 1992; Jendrek, 1992; Greene & Saxe, 1992; Spiller & Crown, 1995).

Academic Dishonesty: Motives Given by College Students

Research on the reason college students give for cheating reveals the same two primary reasons as mentioned by high schools students: concern about grades and time pressures (McCabe, 1999). The survey conducted by Smith, Ryan, and Diggins (1972) was among the first to directly ask college students why they cheated. Students were asked to rate various pressures that might influence them to cheat on a 9-point scale ranging from weak pressure to strong pressure. The pressures rated as strongest by male students included: graduate school requirements, competition for grades, heavy workload, and insufficient study time. Female students cited the same factors, but in a slightly different order. In the study by Baird (1980), students were given a list of eight choices (and permitted to indicate more than one reason) as to why a student would cheat. The researcher identified competition for grades as the primary reason for cheating (35%). Not enough study time (33%) and heavy workload (26%) were other reasons that were frequently cited.

Stevens and Stevens (1987) investigated cheating among 210 business students and identified 14 different categories of motives for cheating. However, the most important explanations for cheating were students' beliefs that cheating required less effort and that it was perceived as the best way to get ahead. Payne and Nantz (1994) followed up the research done by Stevens and Stevens (1987). The researchers analyzed quantitative data from a survey of student beliefs and conducted focused interviews of 19 college students. Their survey revealed that 40% of students admitted cheating at least once on a test and 46% admitted cheating on a quiz. The researchers found that peer pressure, selective definitions of cheating, and the placing of blame on teachers and classroom settings were all important factors contributing to academic dishonesty.

Research by Genereux and McLeod (1995) distinguished between reasons given by college students for two kinds of cheating: planned and spontaneous. The five major reasons were: the perception that the instructor did not care, dependence of financial aid on a students' grades, unfairness of examinations, a lack of vigilance on the part of the instructor, and the impact of course grades on the students' long-term goals.

The Influence of Individual Difference Factors on Academic Dishonesty

The individual differences approach rests on the assumption that individual students have different predispositions to cheat and researchers have examined a variety of variables in their efforts to identify personal characteristics that may be predictive of cheating (McCabe & Trevino, 1996). There has been limited consensus on the variables appropriate for study and little support has been found for any consistently strong relationship between academic dishonesty and any of these variables. However,

demographic variables such as age, gender, and academic achievement have been studied extensively.

Age: Studies of college cheating have typically found that younger students cheat more than older students (Antion & Michael, 1983; Haines, Diekhoff, LaBeff, & Clark, 1986). Studies that have used year in school as a proxy for age have generally found that college upperclassmen cheat less often than lowerclassmen (Baird, 1980; Lipson & McGavern, 1993). Roth and McCabe (1995) found that freshmen and sophomores cheat more than juniors and seniors.

Gender: Most of the earlier research on cheating reported that male students cheated more than females (Bowers, 1964; Hetherington & Feldman, 1964). The most common explanation for this finding is sex-role socialization theory: Women are socialized to obey the rules, whereas socialization for men is less binding in this respect. Even so, some women do cheat when given the opportunity. Therefore, Ward and Beck (1986) investigated a theory that accounts for the fact that women engage in dishonest behavior in spite of the restraining forces of internalized normative expectations. The researchers examined the relationship between excuse-making tendencies and actual cheating, while controlling for sex. Ward and Beck (1986) found that women were significantly more likely to engage in excuse making prior to cheating more than men. According to Kelly and Worrell (1978), males and females may cheat for different reasons. The male transgressor's profile suggested vindictive and opportunistic exploitation of a perceived low-risk situation as the reason to cheat. The researchers indicated that it would seem that status is a potent reinforcer for the male cheater. Females, on the other hand, appear as more socially alienated, impulsive, and conspicuously attention seeking. Kelly and

Worrell (1978) suggested that the act of cheating itself, rather than status accrued from high grades, might be reinforcing for the female cheater.

Academic Achievement: Unlike age and gender, research findings on the relation between academic dishonesty and achievement have been consistent. Using grade-point average as a measure, students of lower academic achievement have been found to cheat more frequently than students with of higher academic achievement (Bowers, 1964; Hetherington & Feldman, 1964; Baird, 1980; Singhal, 1982; Antion & Michael, 1983, Lipson & McGavern, 1993). A theoretical rationale for the difference between the two groups is that lower academic achievement students have more to gain and less to lose by cheating that the higher academic achievement students. Therefore, lower academic achievement students are more likely to undertake the risk and cheat.

Parents' Education: Various indicators of social class, including family income, parents' occupation, and parents' education have been evaluated as possible influences on academic dishonesty. According to Bowers (1964), the interest in such variables is driven by the belief that children from higher social-class background may be better prepared for college work (through better schooling and a more encouraging academic environment at home) and, as a result, have a higher commitment to further education. This higher commitment could be a preventative factor against academic dishonesty. Although the relationship was weak, Bowers (1964) found that children of more highly educated parents are less likely to cheat in college.

Extracurricular Activities: Bowers (1964) and Haines et al. (1986) found support for the hypothesis that students who report higher levels of academic dishonesty are more likely to be involved in extracurricular activities. It was hypothesized that students who are involved in extracurricular activities are less committed to academic pursuits and/or are able to devote less time to such pursuits. Two activities that have been studied extensively are fraternities/sororities and intercollegiate athletics. Fraternity and sorority membership has generally been viewed as a contextual factor because they are thought to provide a context in which cheating is likely to occur. Therefore, fraternities and sororities will be treated as such and discussed later.

Bowers (1964) found that students who were receiving financial aid based on their athletic abilities cheated significantly more often then the general population. Haines et al. (1986) examined both intramural and intercollegiate athletics and found participation in either was associated with higher levels of cheating, and they actually reported a more significant relation in the case of intramural athletics.

Personality Variables on Academic Dishonesty

Morality: Michaels and Miethe (1989) found that students who rated themselves as less honest were more likely to cheat, but studies of the relationship of level of moral development defined in terms of Kohlberg's stages have found only a small relationship. Whitley (1998) reported that neither religiosity nor superego strength have been found to be related to cheating. DeVries and Ajzen (1971) reported no difference in religiosity between cheaters and noncheaters.

Achievement-related Variables: Achievement motivation has been found to have a positive relationship with cheating (Johnson, 1981). However, industriousness, which is the propensity to work hard and to persist in the face of failure, and Type A behavior pattern (e.g., a tendency to drive oneself hard in pursuit of ones' goals) have been found to have small negative relationships with cheating (Eisenberger & Masterson, 1983;

Perry, Kane, Bemesser, & Spicker, 1990). Roig and DeTommaso (1995) examined the relationship between college cheating and procrastination. The researchers administered the Procrastination Assessment Scale for Students and a cheating and plagiarism questionnaire to a sample of 115 college undergraduates. On these self-report measures, scores for cheating on examinations and for plagiarism were positively correlated with self-ratings of procrastination and negatively correlated with self-reported grade point average. The researchers found that students who scored high on procrastination had significantly higher scores for plagiarism than those who scored low on procrastination. The researchers speculated that the pattern of results might indicate that students who are high in achievement motivation but who are reluctant to work hard are among the most likely to cheat.

Houston (1978) examined the relationship between anticipated success and cheating behavior. Forty-five undergraduate subjects were informed that they could earn a \$10 bonus by performing above average on a free-recall task. Following a pretest, they were given a high-, medium-, or a low-success message concerning their recall performance. During a subsequent test, half the words were left "carelessly" exposed in such a way that they could be copied. Cheating was related to anticipated success in a curvilinear fashion with medium-success yielding the most cheating. The researcher did not observe any cheating in the low-success condition and significant cheating occurred in the high-success condition.

Impulsivity, Affectivity, and Other Personality Variables: Roll and Hertel (1974) found small correlations between cheating and measures of impulsivity and ego strength.

Bronzaft, Stuart, and Blum (1973) reported that students who experienced higher levels

of test anxiety were slightly more likely to cheat. Cheating has been found to have a small relation to internal locus of control, which is the expectancy that one can control ones' outcomes. Karabenick and Srull (1978) indicated that students who felt in control of their outcomes are slightly more likely to cheat than students with an external locus of control (e.g., those who feel less in control of their outcomes). However, the researchers have found a strong interaction between locus of control and the type of task the student is working on. Students with an internal locus of control are more likely to cheat on a task when they think the outcome is based on skill rather than chance, and the opposite is true of those with an external locus of control.

The Influence of Contextual Factors on Academic Dishonesty

Fraternity/Sorority Membership: It could be argued that fraternity/sorority membership should be treated as an individual-level factor because there may be differences in individuals who are attracted to the emphasis on social life generally associated with fraternity/sorority life. However, most researchers have treated fraternity/sorority membership as a contextual factor because fraternities and sororities are thought to provide a context in which cheating is more likely. Stannard and Bowers (1970) suggested that fraternities provide illicit opportunity structures for cheating. Fraternities are learning environments were norms, values, and skills associated with cheating can be more easily transmitted. Fraternities and sororities provide access to old copies of completed examinations, term papers, laboratory practical examinations, and other types of academic paraphernalia. These highly guarded resources were to be used as study guides for the pledges, enabling them to make their grades in their first semester and gain active status (Moeck, 2002). Previous studies have generally shown cheating to be higher

among fraternity and sorority members than among independent students (Stannard & Bowers, 1970; Baird, 1980; Haines et al., 1986).

Peer Behavior: McCabe and Trevino (1993) found peer behavior to be an important influence on academic dishonesty. This relationship is supported by social learning theory (Bandura, 1986) and differential association theory (Sutherland, 1947). These theories emphasize that much of human behavior is learned through the influence of example and that close associations with others involved in deviance influence deviant behavior. Therefore, seeing one's peers cheat successfully should increase the tendency of the observer to act in similar ways and engage in similar behaviors.

Peer Disapproval and Peer Reporting: Findings consistent with social learning theory have also been found in studies that consider the influence of peers' attitudes on cheating behaviors (McCabe & Trevino, 1997). Bowers (1964) concluded that peer disapproval was the most important determinant of changes in cheating behavior between high school and college. According to research by Michaels and Miethe (1989), the novice deviant will develop positive attitudes toward deviant before through association with those who participate in it, support it, or reinforce it.

Deterrence theory suggests that misconduct will be deterred if wrongdoers perceive that they are likely to be caught (Gibbs, 1975). Stern and Havlicek (1986) found empirical support for this hypothesis in the case of cheating among college students. Due to the fact that cheating is more likely to be observed by other students than by faculty, McCabe and Trevino (1993) argued that students' perceptions about the likelihood of being caught are likely to depend on whether they believe that another student would report any academic dishonest behaviors.

The Influence of Situational Factors on Academic Dishonesty

Perceived Work Load, Competition, and Class Size: Smith, Ryan, and Diggins (1972) found a moderate relationship between cheating and the degree to which students perceive their academic workload to be heavy and the degree of perceived competition for grades and other rewards. Students with higher workloads who see themselves as being in competition with other are more likely to cheat than students with lower workloads and those who perceive their academic environment to be less competitive. It has also been reported that students are more likely to cheat in larger classes (Houston, 1986; Moffatt, 1990; Nowell & Laufer, 1997).

Testing Environment: Students are more likely to cheat when they think there is relatively little risk of being caught (McCabe & Trevino, 1993; Michael & Miethe, 1989). Houston (1983) found that the risk of being caught was likely to inhibit cheating for high-performing students, but not for poorly performing students.

Graduate Student Cheating

Prevalence

Rates of academic dishonesty at the undergraduate level have been reported in the moderate to high range, and there is evidence that at least a portion of students who cheat do so with the aim of obtaining admission to graduate school. Of the existing research, the fields of medicine and nursing have contributed a great deal. In both fields, academic dishonesty is considered to be a serious problem regardless of how small a percentage of the student body participates due to the potentially dangerous repercussions of a dishonest student becoming a practicing doctor or nurse who is not adequately trained to perform medical procedures (Wajda-Johnston, Handal, Brawer, & Fabricatore, 2001).

In survey research with medical students, Simpson, Yindra, Towne, and Rosenfeld (1989) observed that perceptions of severity of dishonest behaviors were inconsistent across year levels. First-year students saw themselves as less tolerant that fourth-year students saw themselves. However, fourth-year students endorsed items that indicated that there were more likely to confront someone they had observed cheating more so than did first-year students. Baldwin, Daughtery, Rowley, and Schwarz (1996) sampled second-year students in 31 medical schools regarding academic dishonesty. In their sample of 2,459 students, approximately 5% of medical students answered "Yes" when asked a general question of whether they had ever cheated in medical school. In addition, of the students who reported cheating, 16.5% had cheated as an undergraduate in college, and 40.5% had cheated in high school. The researchers had noted a further problem:

Students appeared to be uncertain as to how to respond when witnessing other students' cheating. Glick, Letters, Rennie, and Crosby (2001) concluded that 58% of the 428 medical students surveyed reported cheating during medical school.

A study of graduate business students found that 80% of the 207 students sampled had engaged in at least one of 15 "unethical academic practice" more than infrequently while a graduate student (Brown, 1995). These students also perceived themselves as more ethical than their undergraduate counterparts, although they had similar rates of academic dishonesty.

In the area of nursing, Daniel, Adams, and Smith (1994) examined variables that might influence cheating behavior, such as age, marital status, and seriousness of student.

Although such variables were not found to be significantly related to academic

dishonesty, the ability to gain maximum rewards with minimum effort was strongly related to cheating behavior.

A study by Wajda-Johnston et al. (2001) systematically investigated the definition, prevalence, perceived prevalence, and severity, as well as justifications for and expected responses to, academic dishonesty at the graduate level. Of the 246 students that completed the survey, 28.7% reported that they had cheated in graduate school. It appeared that cheating is most frequent at the beginning of graduate school and diminishes with each succeeding year. Of those students who reported cheating in graduate school, 23.4% did so in the 1st year, 11.5% in the 2nd year, 5.0% in the 3rd year, 2.5% in the 4th year, 1.2% in the 5th year, and 0.8% in each of the 6th and 7th years. *Factors Influencing Cheating Behavior*

Love and Simmons (1998) attempted to identify the factors that influence the behavior of graduate students in a college of education related to cheating and plagiarism. Six first-year master's students (three male, three female) were recruited from three different master's programs in the college of education at a large, public university. There were two students each from health education, rehabilitation counseling, and community counseling. Each student participated in an extensive interview, ranging in length from one to four hours, which included sorting a list from most serious to least serious behaviors that were considered cheating or plagiarizing. The list of behaviors categorized 41 statements of misconduct into five constructs: cheating on tests and assignments, use of illegal resources, quasi-misconduct, subtle manipulation, and bold manipulation.

Analysis of the data revealed a wide range of factors that influenced the participants'

behaviors related to cheating and plagiarism. The five sets of factors that contributed to the likelihood of cheating were divided into external and internal contributing factors.

External Contributing Factors

Pressure was identified as the strongest factor contributing to the possibility of cheating and plagiarizing. The dominant types of pressure were grade pressure, time pressure, and task pressure. These three types were interrelated, for example, in many cases without some time constraints the likelihood of feeling task pressure was lessened (Love & Simmons, 1998). Although none of the participants in the study indicated feeling grade pressure, most of them mentioned grade pressure as a form of pressure that would increase the likelihood of a graduate student cheating. Participants talked about "getting behind in work" and running out of time as another type of pressure that would contribute to the possibility of someone cheating or plagiarizing. Task pressure relates to the number and types of assignments a student is struggling to complete during a given time period. Once again, task pressure was identified as something that would increase the likelihood of a graduate student cheating.

Another contributing factor for graduate school academic dishonesty were professors. Love and Simmons (1998) found that the leniency of professors and a tendency to avoid addressing issues of cheating and plagiarism were seen as factors contributing to cheating and plagiarism among graduate students. The general tendency appeared to place the responsibility for cheating primarily on faculty's unwillingness to confront possible instances of cheating. This failure to confront academic dishonest behaviors was taken by a number of students as permission to continue those behaviors.

Internal Contributing Factors

One of the first internal contributing factors for academic dishonesty is a negative personal attitude. Negative personal attitudes are the contrary of positive professional ethics. Positive professional ethics made a student less likely to cheat, however, negative personal attitudes were part of a mindset that appeared to make cheating and plagiarism more likely. These attitudes were abstracted from statements students made about themselves and from statements they made about other students. Love and Simmons (1998) identified the attitudes as a lack of interest in the topic, a desire to avoid hard work, the notion that cheating or plagiarism as easier than doing work, because you could get away with cheating, and trying to make oneself looks better (e.g., padding a reference list).

A person's intention was identified as a factor in the definition of plagiarism, that is, someone unknowingly or unwittingly using another's work inappropriately was considered "less wrong." In relation to intentionally plagiarizing another's work, one's own lack of awareness of the rules of plagiarism was a contributing factor. Another factor that related to lack of awareness was "ownership of work." This referred to turning in the same paper in two different classes. This is an action that is designated as cheating in most institutional policy statements, but not consciously viewed as academic dishonesty by many students. The students who were aware that this was inappropriate behavior differentiated this behavior from other cheating behaviors because the actual work was their own. The last area concerning internal contributing factors discussed by the researchers was lack of competence. Students indicated that if other students could not do

the work in graduate school these students would be more likely to cheat or that acts of cheating and plagiarism themselves were evidence of lack of competence.

Theory Behind College Student Cheating

The Role of Intrinsic and Extrinsic Motivation on Academic Dishonesty

Several studies have examined the impact of motivation on cheating behavior. According to Jordan (2001), students who have a desire to learn or master a particular body of evidence of information are less likely to cheat than are students who are motivated by extrinsic or performance factors, such as academic standing, grades, or some other performance evaluation. Brehm, Kassin, and Fein (1999) stated that people are said to be intrinsically motivated when they engage in an activity for the sake of their own interest or enjoyment. Those that engage in an activity as a means to an end or from tangible benefits are said to be extrinsically motivated. Anderman, Griesinger, and Westerfield (1988) distinguished between two types of goals (mastery and performance) and three levels of orientation (personal, classroom, and school-wide) among middle school students. Students' personal performance and their personal mastery goals were measured. In addition, the researchers measured the students' perceptions of the classroom and school-wide levels of performance and mastery orientation. It was indicated that the cheating behavior of middle school students correlated positively with performance goals and negatively with mastery goals at all orientation levels. The cheaters displayed significantly higher levels of performance goals and significantly lower levels of mastery goals than did noncheaters at the personal and school-wide orientation levels.

Newtsead, Franklyn-Stokes, and Armstead (1996) reported a relation between goal orientation and cheating for college students in the United Kingdom. In this study, students who identified personal development as a main reason for studying course material reported significantly fewer types of cheating behaviors than did students who studied solely to get a better job or for financial gain. The hypothesis that mastery goals are associated with a narrower range of cheating behaviors and extrinsic goals with a broader range of academic dishonest behaviors was supported.

Jordan (2001) investigated motivation, peer social norms, student attitudes, and student familiarity with institutional policy as they related to cheating behaviors among college students. Anonymous surveys were mailed to a random selection of the student body. One hundred seventy-five students completed and returned the surveys. All class years were represented (26% were freshmen, 22% were sophomores, 19% were juniors, and 33% were seniors). Participants reviewed 17 different cheating behaviors and indicated how many times they engaged in each behavior the previous semester. Participants in this study reported cheating behaviors course by course (e.g., if they had 4 courses last semester than they filled out a survey for each course that they took). The researcher measured mastery and extrinsic motivation using adapted scales by Midgley, Kaplan, Middleton, Maehr, Urdan, Anderman, and Roeser (1998) and Anderman et al. (1998). These scales included measures of personal mastery motivation, personal extrinsic motivation, course mastery motivation, and course extrinsic motivation. Motivation scores for cheaters and noncheaters were compared. Mastery and extrinsic motivation did not appear to be uniform across all courses, and this variability related to cheating. Participants who cheated had lower mastery motivation and higher extrinsic motivation

in the courses in which they cheated than in courses in which they did not cheat.

Cheaters, in courses in which they cheated, also differed on these two motivation variables from noncheaters. Mastery motivation was lower for cheaters, and extrinsic motivation higher, as compared to noncheaters. However, in courses that cheaters did not cheat, cheater and noncheater scores were not significantly different. Cheaters reported increases in extrinsic motivation and simultaneous decreases in mastery motivation, but only in courses in which they cheated.

Cognitive Dissonance and Academic Dishonesty

According to cognitive dissonance theory, inconsistent cognitions arouse psychological tension that people become motivated to reduce. Cognitive dissonance is considered a motivating factor. The presence of dissonance is assumed to lead to attempts to reduce or eliminate it, and the strength of these attempts increases with the magnitude of dissonance. Dissonance can be reduced by changing the dissonant cognitions or by adding new cognitions that are consonant.

Mills (1958) hypothesized that persons who decide not to cheat when tempted will become more severe in their attitudes toward cheating, those who cheat will become more lenient. The researcher predicted that the greater the motivation to cheat, the more those who are honest would increase in severity, the less the motivation to cheat, the more lenient those who cheat would become. It was hypothesized that the lower the restraints against cheating, the more severe those who are honest would become, the higher the restraints, the more lenient those who cheat would become. A field experiment was conducted to investigate changes in moral attitudes following temptation. Attitudes of sixth grad students were measured before and after a contest which presented them

with a decision to violate or comply with the moral standard against cheating. Motivation to cheat was manipulated by offering different rewards for winning the contest. Restraints against cheating were varied by making it easier for some groups to falsify their scores. Over all, the experiment produced the predicted changes. Mills (1958) found that those who did not cheat when tempted had more severe attitudes towards cheating afterwards than did those who cheated.

Cognitive dissonance theory claims that individuals are predisposed to experience psychological discomfort when they behave in ways inconsistent with their internalized values, moral standards or self-conception. In accordance with this theory, high selfesteem should be a deterrent to dishonest behavior. Past research has indicated that subjects low in self-esteem are more prone to engage in dishonest behaviors (Aronson & Mettee, 1968; Ward, 1986). Tang and Zuo (1997) predicted that self-esteem is associated with college examination cheating. The researchers hypothesized that students with a higher level of self-esteem are less likely to cheat in college examinations than students with a lower level of self-esteem. It was also predicted that students with higher selfreported ability are less likely to cheat than students with lower levels of self-reported ability. Tang and Zuo proposed that students with higher GPA's are less likely to cheat than students with lower GPA's. The researchers also hypothesized that GPA and selfesteem interact with one another. Students with a high GPA and high self-esteem are less likely to cheat. Of the 282 students who handed in completed questionnaires, 31.9% were freshmen, 26.9% were sophomores, 21.3% were juniors, and 19.9% were seniors. Although cognitive dissonance theory predicts that self-esteem is a deterrent to dishonest behavior, the findings of the study failed to support the hypothesis that higher levels of

self-esteem deters cheating in college examinations. Contrary to their prediction, Tang and Zuo found that male students with a higher self-reported ability cheated more than those with lower levels of self-reported ability. One possible explanation for this result is that male students with higher self-reported ability tend to have very positive self-images. Due to the fact that poor grades are detrimental to their self-images, they might be more inclined to cheat to keep their self-images intact. As expected by the researchers and consistent with past research, GPA displayed a statistically significant negative linear relationship with the tendency to cheat. That is, the higher the students' GPA, the less likely they were to cheat. The fourth hypothesis was only partially supported. Self-esteem was not related to cheating, and the interaction between GPA and self-esteem was not significant either. Self-reported ability, however, interacted with significantly GPA. A consistency between GPA and reported ability will greatly reduce the propensity to cheat, while a discrepancy between GPA and reported ability (in the direction of low GPA and high reported ability) will greatly increase the penchant to cheat. According to Tang and Zuo, the consistency between GPA and reported ability is sufficient proof that the claimed ability is true, making it unnecessary to resort to cheating to prove one's ability. However, low GPA is negative evidence as to one's claimed high ability, possibly necessitating cheating as a means in the justification of the claimed high ability. Neutralization Theory

The work of LaBeff, Clark, Haines, and Deikhoff (1990) suggests that the concept of situational ethics may be particularly important in understanding student rationalization for cheating. LaBeff et al. (1990) concluded:

"...that students hold qualified guidelines for behavior which are situationally determined. As such, the concept of situational ethics might well describe...college

cheating [as] rules for behavior may not be considered rigid but depend on the circumstances involved (1990, p. 191)."

According to LaBeff (1990), what is wrong in most situations might be considered right or acceptable if the end is defined as appropriate. Sykes and Matza (1957) hypothesized that such rationalizations are common and introduced the concept of neutralization theory as an attempt to explain delinquent behavior. The researchers suggested that neutralization is utilized as a means of protection. Through neutralization, individuals justify the violation of accepted behaviors. The individuals do this neutralization before, during, and after the act. Such techniques of neutralization are separated into five categories: denial of responsibility, condemnation of condemners, appeal to higher loyalties, denial of victim, and denial of injury.

LaBeff et al. (1990) attempted to classify techniques employed by students in the neutralization of cheating behavior into the five categories of neutralization proposed by Sykes and Matza. The researchers distributed a 49-item questionnaire about academic dishonesty at a small southwestern university. Of the 380 undergraduate students who participated in the survey, fifty-four percent indicated that they had cheated during the previous six-month period. Much cheating took the form of looking on someone else's paper, copying homework, and either buying term papers or getting friends to write papers for them. Only five of the 205 students who admitted to cheating reported being caught by the professor. It is important to note that freshmen and sophomores were overrepresented (eighty-four percent of the students surveyed were either classified as a freshman or sophomore). To more fully explore the ways in which students neutralize their behavior, narrative data from admitted cheaters were examined. The narrative

responses were classified into three of the five techniques described by Sykes and Matza (1957).

Denial of Responsibility

Denial of responsibility was the most often identified response. This technique involves a statement by the offenders that they cannot be held accountable for their actions due to circumstances beyond their control. Rather than identifying the behavior as accidental, they attribute wrongdoing to the influence of outside forces. In many instances, students expressed an inability to withstand peer pressure to cheat. The responses indicated recognition of cheating as an unacceptable behavior, which implied that under different circumstances cheating would not have occurred. Other responses demonstrated that the attempt by students to succeed through legitimate means (e.g., taking notes and studying) only to experience failure. In some accounts, students had no intention of cheating, but the opportunity to cheat presented itself (LaBeff et al., 1990). In addition, some students reported accidentally seeing other students' test papers. In such instances, the cheaters chastised classmates for not covering up their answer sheets.

Appeal to Higher Loyalties

Conflicts also arise between peer group expectations and the normative expectations of the larger society. When this occurs, the individual may choose to sacrifice responsibility, thus maintaining the interest of peers. Such allegiance allows these individuals to supercede moral obligations when special circumstances occur. Students who utilize this technique frequently describe their behavior as an attempt to help another student. These students recognized the act of cheating as wrong, but their statements suggested that in some situations cheating could be overlooked.

Condemnation of the Condemners

LaBeff et al. (1990) indicated that cheaters use this technique of neutralization as an attempt to shift attention from their own actions to the actions of others, most often authority figures. By criticizing those in authority as being unethical or unfair, the behavior of the offender seems less consequential by comparison. As a result, dishonest behavior occurs in reaction to the perceived dishonesty of the authority figure. The students that used this technique wrote about uncaring, unprofessional instructors with negative attitudes who were negligent in their behavior. In other instances, students cited unfair teaching practices, which they perceived to be the reason for their behavior. The instructor is thought to engage in a deliberate attempt to fail the students by making the examinations difficult. Also within this category were student accounts that frequently expressed a complaint about being overworked. Although less commonly mentioned, perceived parental pressure and models within the society at large also served as a neutralizing factor for dishonesty.

Denial of Injury and Denial of the Victim

According to LaBeff et al. (1990), denial of injury and denial of the victim did not appear in the student accounts of their cheating. In denial of injury, the wrongdoer states that no one was harmed or implies that accusations are grossly exaggerated. In the second case, denial of the victim, those who violate the norms often portray their targets as legitimate. Due to certain factors such as the societal role, personal characteristics, or lifestyle of the victim, the wrongdoer felt the victim "had it coming." It is possible that some students who are cognizant of the effect of their cheating activities have upon the

educational system might neutralize their behavior in ways which allow them to focus on the act rather than on the consequences of cheating.

The influence of situational ethics on cheating among college students was also examined by McCabe (1992). The research responded to LaBeff et al. (1990) in two ways; first, it answered their call to test the salience of neutralization in more diverse university environments and second, it challenged their dismissal of denial of injury and denial of victim as neutralization techniques employed by students in their justification of cheating behavior. A seventy-two-item questionnaire concerning cheating behavior was administered to students at thirty-one highly selective colleges across the country.

Surveys were mailed to a minimum of five hundred students at each school and a total of 6,096 completed surveys were returned. Once again it is important to note that eighty-eight percent of the respondents were seniors and nine percent were juniors.

According to McCabe (1992), college students used a variety of neutralization techniques to rationalize their cheating behavior, deflecting blame to others and/or the situational context, and the framework of Sykes and Matza (1957) seemed well supported when student explanations of cheating behavior are analyzed. However, unlike the prior research conducted by LaBeff et al. (1990), McCabe suggested that students employ all of the techniques described by Sykes and Matza, including denial of injury and denial of victim. Although there was very limited evidence of the use of denial of victim, denial of injury was not uncommon. Many students felt that some forms of cheating were victimless crimes, particularly on assignments that accounted for only a small percentage of the students' overall course grade. The research affirmed LaBeff et al.'s earlier

findings that denial of responsibility and condemnation of the condemners are the neutralization techniques that are most frequently applied by college students.

Faculty and Academic Dishonesty

Faculty Perception of Academic Dishonesty

Perception of the behavior of others is important as it tends to be reflected in human interaction. One area in which this action occurs is in what society, as a whole, regards as moral behavior. There has not been much research conducted on the perception of a group's moral behavior by others, particularly those in authority. A study by Smith and Nolan (1998) focused on professor perceptions of students' academic honesty. Previous studies have indicated that the majority of students report cheating sometime in their academic career (Baird, 1980; Davis et al., 1992). Although in most cases faculty and students share the same views on cheating behavior, there are exceptions. As a result of this interpretation, faculty and students may have a different view of what are acceptable academic behaviors. Smith and Nolan (1998) examined if differences exist in a professors' evaluations of students' likelihood of cheating and the students' responses to academic cheating situations, and if differences exist based on rank and college professor and evaluation of students' propensity for academic honesty.

Participants were 160 undergraduate students and 50 faculty members of all ranks. The students were given a packet, which consisted of two parts. The first section requested demographic information and the second section gave instructions and nine different moral situations for which they were requested to choose one of two options. One option consisted of a higher moral tone than the other. Students were requested to read the situations and select an option based on how they believed they would react a majority of

select an option according to the way they believed the majority of college students would answer. Although professor and student replies were similar on the majority of situations, some differences were revealed. Professors were more likely to believe that students would turn in papers that had already been submitted at an earlier time. Professors also believed that students would remove a copy of an upcoming test from the office. Smith and Nolan (1998) discovered that the professors' perceptions of student behavior were more negative than reported by the students. The researchers speculated that students answered questions according to their own belief systems, but the professors may have answered based on their own experiences of student behavior.

the time. The faculty members were sent similar packets. Faculty instructions were to

Faculty Reactions to Academic Dishonesty

The magnitude of the cheating problem has led researchers to focus on four issues:

Student and faculty definitions of academic dishonesty, the situational or environmental factors that affect cheating, the personal characteristics of cheaters as opposed to noncheaters, and the reasons students cheat. Faculty members' reactions to academic dishonesty rarely serve as the focus of research. Faculty members have the opportunity to structure situations to either increase or decrease the likelihood of academic dishonesty. Faculty members who use "objective" tests may assign students to alternate rows and seats and may give examinations with questions in different orders to curb the likelihood of cheating (Singhal & Johnson, 1983). Barnett and Dalton (1981) found that faculty members' attitudes and responses to academic dishonesty might create a climate that either fosters or inhibits academic dishonesty. If faculty members are permissive and do little to punish the offender, students may continue to engage in academic dishonesty

without fear of punitive action. On the other hand, if students know that faculty members follow a mandated procedure that requires the punishment of academically dishonesty behavior, they may be less likely to engage in such behaviors.

Wright and Kelly (1974) surveyed university faculty members and reported that approximately 65% of the faculty members at a medium-size, private liberal arts college said that they "had confronted at least one student for cheating in class during their tenure at the university." The faculty considered cheating a matter to be settled between the instructor and the student. Of the faculty surveyed, only 15% reported a student to the academic dean or other member of the administration. The results indicated that faculty members were aware of cheating and that they preferred to resolve the issue without involving university officials.

Nuss (1984) found that 39% of the faculty respondents said that they would report cheating to the appropriate authorities. The researcher also reported that more than half of the faculty members said that they rarely or never discussed with students either the university policy or a faculty member's policy relating to academic dishonesty. Hardy (1982) claimed that faculty members' failure to follow academic codes stemmed from their naïve attitude toward cheating or from their fear of lawsuits. Hardy indicated that many of the faculty members surveyed have boasted, "Nobody cheats in my class."

According to Hardy, this naïve attitude actually may foster cheating. Faculty members become careless in proctoring exams, they are less inclined to create multiple forms of tests, and less likely to construct new exams. The researcher also found that faculty members frequently say that they ignore cheating because of fear of litigation. Hardy (1982) argued that faculty members have become immobilized by the prospect of a

lawsuit and therefore look the other way, rather than involve themselves in what could become a time-consuming courtroom event.

Another sticking point for identifying cheaters is the time. Tracking down plagiarists' sources can take days, sometimes weeks—time the professors can ill afford at the end of a semester, when papers start flooding in (Schneider, 1999). According to the report, "most professors at a place like Northwestern can't be bothered. They're not rewarded for teaching; they're rewarded for research. There's no future in pursuing cheating from the standpoint of a professor's self-interest."

Jendrek (1989) examined the reactions of faculty members (both personal and university policy) to students' cheating on examinations at a university that has a clearly stated policy for defining, punishing, and processing instances of academic dishonesty. All full-time faculty members at the main campus of a public western university received a questionnaire on academic dishonesty. The instrument contained questions on whether the faculty members had seen a student cheat (with follow-up questions if "Yes" was answered), general attitudes toward academic dishonesty, defining academic dishonesty behavior, examination structure, and demographic questions. Approximately 60% of the respondents in this study claimed to have observed cheating. Of the respondents who observed cheating, only 20% met with the student and the department chairperson, the first step mandated by university policy. The researcher suggested that faculty members might not understand the implications of following their university's academic dishonesty policy or bypassing that policy. In reference to the implications of complying with university policy, many faculty members did not know whether or not a report of dishonesty would harm a student's employment opportunities. The research supported the

findings of Wright and Kelly (1974) and Nuss (1984) that declare that faculty members prefer to handle cheating in a one-on-one fashion.

Institutional Policies

The Influence of Honor Codes on Academic Dishonesty

Although still in a significant minority, honor codes can be found in an increasing number of institutions of higher education. Campbell (1933) compared cheating among students under an honor system and a proctor system at the same university and found the students under the honor system were less likely to cheat. Canning (1956) conducted an experiment in five sociology classes before and after an honor system was established over a five-year period. Students were provided the opportunity to cheat by grading their own papers, without knowing that duplicates had been previously made and graded by the instructor. The incidence of cheating was reduced after an honor system was implemented and was reduced by nearly two-thirds after having the honor system in place for five years. A survey of medical students governed by an honor code at the University of Alabama School of Medicine measured student perceptions of and adherence to the code. Ninety-two percent of the respondents reported that they had not observed any code violations, suggesting code effectiveness. However, the lack of a noncode comparison group makes it impossible to attribute the low level of academic dishonesty to the code in the study (Brooks, Cunningham, Hinson, Brown, & Weaver, 1981). Bowers (1964) directly compared academic dishonesty at code and non-code schools. This study found that schools with traditional honor systems—those where students pledge to abide by an honor code and take responsibility for detection and

sanctioning of academic dishonesty when it occurs—had the lowest rate of academic dishonesty.

McCabe and Trevino (1993) reported rates of self-reported cheating at code and noncode schools. The researchers surveyed a total of 6,096 students from 31 U.S. colleges and universities. Fourteen institutions with honor codes and 17 schools without codes participated in the study. Students were asked to indicate how frequently they had engaged in various cheating behaviors using a scale from 1 (never) to 4 (many times). Using crib notes and copying from another student during a test were a few of the behaviors included on this scale. The researchers examined five hypotheses: Honor codes are associated with decreased academic dishonesty, academic dishonesty will be inversely related to understanding and acceptance of academic integrity policies, academic dishonesty will be inversely related to the perceived certainty of being reported by a peer, academic dishonesty will be inversely related to the perceived severity of penalties, and academic dishonesty will be positively related to perceptions of peers' academic dishonesty. McCabe and Trevino (1993) found that the presence of an honor code was positively related to an increased certainty of being caught engaging in acts of academic dishonesty. Second, regarding the increased distribution and awareness of the rules of conduct prescribed by honor codes, the researchers found a positive correlation between the existence of an honor code and the understanding of policies related to academic dishonesty. It was also found that reduced cheating was related to the presence of severe penalties for cheating. Finally, with respect to the hypothesized effect of an academic community where honor codes existed, students had a greater perception of honesty on the part of their peers. Overall, the researchers found significantly lower

levels of self-reported academic dishonest behaviors among students at honor code institutions.

Faculty and Academic Integrity

McCabe, Butterfield, and Trevino (2003) surveyed faculty at honor code and non-code institutions and investigated the influence of honor codes on faculty attitudes and behaviors. The researchers found that honor code faculty have more positive attitudes toward their schools' academic integrity policies and are more willing to allow the system to take care of monitoring and disciplinary activities. Faculty in non-code institutions have less positive attitudes and are more likely to take personal actions designed to both catch and deal with cheaters. The researchers also investigated the potential influence of a student honor code experience on faculty attitudes. In non-code environments, faculty who had an honor code experience as a student were more likely to believe that students should be held responsible for peer monitoring and stated that they deal personally with cheating.

Summary

The review of the research literature regarding academic dishonesty has several implications. Studies by both Baird (1980) and Lipson and McGavern (1993) have found that college upperclassmen cheat less often than lowerclassmen. Similar findings by Roth and McCabe (1995) found that freshmen and sophomores cheat more than juniors and seniors. Consistent with past research, the researcher predicted that graduate students would cheat less than juniors/seniors, and that the juniors/seniors would cheat less than freshmen/sophomores. Another major finding from the research revealed that competition for grades was the primary reason for cheating at the undergraduate level (Baird, 1980).

On the other hand, pressure was identified as the strongest factor contributing to the possibility of cheating and plagiarism on the graduate school level (Love & Simmons, 1998). The researcher also predicted that what motivates people to commit academic dishonest behaviors varies between college freshmen/sophomores, juniors/seniors, and graduate students.

° Chapter III

Design of the Study

Sample

The participants of this study consisted of 138 undergraduate and graduate students from a suburban university in New Jersey. Although two groups are present (undergraduate and graduate students), the sample was divided into three groups. The undergraduate students group was divided into underclassmen, which were defined as freshmen and sophomores, and upperclassmen, which were defined as juniors and seniors. The underclassmen group consisted of 47 students and the upperclassmen group contained 51 students. The third group consisted of 40 graduate students. Of these students, both males and females were represented.

Measures

There were several variables in this study that were measured. The first half of the survey examined how often the participant engaged in various academic dishonest behaviors. The prevalence of academic dishonesty for each group was measured. The second portion of the survey examined the strength of justifications for participating in these various academic dishonest behaviors. Once again, the justification scores were computed and compared among the three groups.

Design

An adapted version of a modified version of The Cheating/Academic Dishonesty Survey was used for the study (Wajda-Johnston, 2001). Modifications from the original survey were initially made in order to update items, such as inclusion of items referring to the Internet and the use of computers. The survey consisted of two sections, the first of which asked the participant to indicate whether or not they have engaged in a variety of academically dishonest behaviors. The participant indicated "YES" if the statement applied to them and "NO" if the statement was inaccurate. A score of 0 was given for a "NO" response and a score of 1 was given if "YES" was indicated. The total was computed to give an academic dishonesty prevalence score. The second section examined under what, if any, conditions when it was justified to engage in academic dishonest behaviors. A score of 0 was given if the participant indicated that the statement was "not a valid justification," a score of 1 for "very weak," a score of 2 for "moderate/strong," and a score of 3 for "very strong." It is important to note that the participants did not have to engage in these academic dishonest behaviors in order to indicate whether or not they felt cheating could be justified.

Testable Hypothesis

College underclassmen are more likely to engage in academically dishonest behaviors than both college upperclassmen and graduate students. The second hypothesis indicated that these college underclassmen were more likely to justify the motives for their academically dishonest behavior. It was suspected that the underclassmen would once again report significantly higher justification scores. The Null hypothesis stated that no significant difference would be found between the three groups in terms of the amount of cheating behavior indicated. That is, the scores reported by the underclassmen, upperclassmen, and graduate students would be equal. The second Null hypothesis stated that no significant difference would be found between the three groups in terms of the

justification score. Once again, the scores for strengths of reasons for cheating for graduate students, upperclassmen, and underclassmen would be equal. A third hypothesis stated that there would be a significant relationship between behavior score and justification scores. The third Null hypothesis stated that no relationship would be found between cheating behavior scores and scores on the justification scales. The fourth hypothesis indicated that as class standing increased, behavior and justification scores would decrease. The fourth null hypothesis designated that there would be no relationship between class standing and behavior and justification scores.

Analysis

The data collected from the surveys were computed in SPSS. The independent variable for the study was class standing and the dependent measures were scores on the academic dishonest scale and scores on the justifications (motives) for academic dishonesty scale. For the purposes of this study, a one-way analysis of variance (ANOVA) was used to test for significance for both academic dishonest behavior scores and justification scores. A Pearson (r) correlation was performed to examine if a relationship existed between engaging in academically dishonest behaviors (academic dishonest scale) and justifying academically dishonest behaviors (justification scale). The Pearson correlation was also performed to examine if a relationship existed between class standing and cheating behavior and justification scores.

Summary

The sample consisted of 138 undergraduate and graduate students from a suburban university in New Jersey. Out of the student sample, 47 students were freshmen/sophomores, 51 students were juniors/seniors, and 40 were graduate students.

The independent variable was class standing and the dependent variables were cheating behavior scores and justification scores. The two scores, academic dishonest and justification, along with class standing were correlated using a Pearson correlation. A one-way analysis of variance (ANOVA) was conducted to test for significance between class rank and the cheating behavior score. A second one-way ANOVA was performed to test for significance between class rank and the justifications scores.

Chapter IV

Analysis of Results

The hypotheses stated the following: H1 – "College underclassmen (freshmen and sophomores) will exhibit more incidence of cheating behaviors than college upperclassmen (juniors and seniors) and these two groups will report higher levels of cheating than graduate students." H2 – "The prevalence of justifying academic dishonesty will vary amongst college underclassmen, upperclassmen, and graduate students." H3 – "There will be a significant relationship between cheating behaviors and justification scores." H4 – "As a student's class standing increases, their cheating behavior scores and justification scores will decrease."

As seen in Figure 4.1, college underclassmen ($\underline{M} = 9.55$, $\underline{SD} = 5.92$) reported higher levels of cheating behaviors than college upperclassmen ($\underline{M} = 7.04$, $\underline{SD} = 5.21$) and graduate students ($\underline{M} = 6.65$, $\underline{SD} = 3.01$).

Figure 4.1 – Means and standard deviations for cheating behavior and justification scores

Group		Behavior	Justification	
Underclassmen Mean		9.5532	26.0638	
	N	47	47	
	SD	5.92272	11.67011	
Upperclassmen	Mean	7.0392	22.8824	
	N	51	51	
	SD	5.20754	14.00378	
Graduate Students	Mean	2.7500	21.9710	
	N	40	40	
	SD	3.01066	12.99112	
Total	Mean	6.6522	21.9710	
	N	138	138	
	SD	5.62535	13.48367	

As shown in Figure 4.2, a comparison between the level of cheating behaviors and their class standing using an analysis of variance (ANOVA) yielded a significant difference between the groups, $\underline{F}(2, 136) = 20.56$, $\underline{p} < .001$.

Figure 4.2 – One-way ANOVA

Dependent Variable: BEHAVIOR (Academic dishonest behavior scores)

	Sum of		Mean		
	Squares	df	Square	F	Sig.
Between	1012.266	2	506.133	20.562	.000
Groups					
Within	3323.039	136	24.615		
Groups					
Total	4335.304	138			

As can be seen in Figure 4.3, a Tukey post-hoc analysis revealed that college underclassmen reported statistically significant higher levels of cheating behaviors than upperclassmen, HSD = 2.51, p = .036, and graduate students, HSD = 6.80, p = .001. The Tukey post-hoc analysis also revealed that college upperclassmen reported significantly higher levels of cheating behaviors than graduate students, HSD = 4.29, p = .001.

Figure 4.3 – Tukey HSD Dependent Variable: BEHAVIOR

		Mean Difference		
(I) Group	(J) Group	(I - J)	Std. Error	Sig.
1.0	2.00	2.5140	1.00318	.036
	3.00	. 6.8032	1.06729	.000
2.0	1.00	-2.5140	1.00318	.036
	3.00	4.2892	1.04787	.000
3.0	1.00	-6.8032	1.06729	.000
	2.00	-4.2892	1.04787	.000

As previously shown in Figure 4.1, college underclassmen ($\underline{M} = 26.06$, $\underline{SD} = 11.67$) recorded higher scores on the justifications for cheating scale than college upperclassmen ($\underline{M} = 22.88$, $\underline{SD} = 14.00$) and graduate students ($\underline{M} = 16.00$, $\underline{SD} = 13.48$). As shown in

Figure 4.4, a significant difference was found, through the use of a one-way analysis of variance, between the scores on the justification for cheating scale and class standing, \underline{F} (2, 136) = 6.72, \underline{p} < .05.

Figure 4.4 – One-way ANOVA
Dependent Variable: JUSTIFICATION (Justification for academic dishonesty score)

	Sum of		Mean		
	Squares	df	Square	F	Sig.
Between	2255.781	2	1127.891	6.722	.002
Groups					
Within	22652.103	136	167.793		
Groups					
Total	24907.884	138			·

As can be seen in Figure 4.5, Tukey post-hoc comparisons of the three groups indicated that only two groups differed significantly. College underclassmen reported significantly higher justification scores than graduate students, HSD = 10.06, p = .001. College upperclassmen also reported significantly higher justification scores than graduate students, HSD = 6.88, p = .035.

Figure 4.5 – Tukey HSD Dependent Variable: JUSTIFICATION

		Mean Difference		
(I) Gro	oup (J) Group	(I - J)	Std. Error	Sig.
1.0	2.00	3.1815	2.61919	.447
	3.00	10.0638	2.78656	.001
2.0	1.00	-3.1815	2.61919	.447
	3.00	6.8824	2.73585	.035
3.0	1.00	-10.0638	2.78656	.001
	2.00	-6.8824	2.73585	.035

A Pearson product-moment correlation revealed a significant relationship between behavior and justification scores, \underline{r} (138) = .40, \underline{p} < .01, as shown in Figure 4.6.

Figure 4.6 – Pearson Correlation Cheating Behavior and Justification Scores

		Behavior	Justification
Behavior	Pearson		
	Correlation	1	.398
	Sig. (2-tailed)	-	.000
	N	138	138
Justification	Pearson		
	Correlation	.398	1
	Sig. (2-tailed)	.000	-
	N	138	138

As can be seen in Figure 4.7, a Pearson product-moment correlation found a significant relationship between class standing and behavior score, \underline{r} (138) = -.48, \underline{p} < .01.

Figure 4.7 – Pearson Correlation Class standing (Group) and Cheating Behavior Scores

		Group	Behavior
Group	Pearson		
	Correlation	1	477
	Sig. (2-tailed)	-	.000
	N	138	138
Behavior	Pearson		
	Correlation	477	1
	Sig. (2-tailed)	$\theta 00.$	-
	N	138	138

As shown in Figure 4.8, a significant relationship was also found between class standing and justification score, $\underline{r} = -.30$, $\underline{p} < .01$.

Figure 4.8 – Pearson Correlation Class standing (Group) and Justification Score

		Group	Justification
Group	Pearson	-	
	Correlation	1	294
	Sig. (2-tailed)	-	.000
	N	138	138
Justification	Pearson		
	Correlation	294	1
	Sig. (2-tailed)	.000	-
	N	138	138

In summary, the results have several implications. College underclassmen reported significantly higher levels of cheating behaviors than both upperclassmen and graduate students. College upperclassmen reported significantly higher levels of cheating behaviors than graduate students. Therefore, the null hypothesis was rejected. Second, college underclassmen and upperclassmen were found to have significantly higher justification levels than graduate students. However, there was no significant difference between college underclassmen and upperclassmen. There was a significant relationship between behavior score and justification level; that is, as the amount of cheating behaviors increase, the justification score increased as well. Also, as class ranking increased, the amount of cheating behavior and the justification scores significantly decreased.

Chapter V

Summary and Conclusions

It has been documented that academic dishonesty is a problem on college campuses and universities throughout the country. The purpose of this study was to investigate the degree to which college undergraduate and graduate students cheat as well as to examine the justifications for cheating among these groups of students. The study also examined the relationship between class standing and the prevalence of cheating along with justifications for academic dishonesty.

Academic dishonesty has long been an area of concern in higher education. Research has focused on how many students cheat at the undergraduate level, reasons that these students cheat, and solutions on how to deal with dishonest students throughout the past decade. McCabe and Bowers (1994) found that the rate of undergraduate cheating was 70%. The researchers also found that rate of cheating on exams and collaboration on individual work increased. The rate of copying from another student's exam went from 26% to 52% while collaboration increased from 16% to 27%. Research by Genereux and McLeod (1995) distinguished between reasons given by college students for two kinds of cheating: planned and spontaneous. The five major reasons were: the perception that the instructor did not care, dependence of financial aid on a students' grades, unfairness of examinations, a lack of vigilance on the part of the instructor, and the impact of course grades on the students' long-term goals. Individual difference factors have been noted as an influence on academic dishonesty. These factors include age, gender, academic achievement, parental education, and involvement in extracurricular activities. Studies of

college cheating have typically found that younger students cheat more than older students. Studies that have used year in school as a proxy for age have generally found that college upperclassmen cheat less often than underclassmen (Antion & Michael, 1983; Lipson & McGavern, 1993). Roth and McCabe (1995) found that college freshmen and sophomores cheated more than juniors and seniors.

Recent studies have examined cheating behaviors, perceptions, experiences, and attitudes of graduate students across several disciplines. Wajda-Johnston, Handal, Brawer, & Fabricatore (2001) systematically investigated the definition, prevalence, perceived prevalence, and severity, as well as justifications for and expected responses to, academic dishonesty at the graduate level. Of the 246 students that completed the survey, 28.7% reported that they had cheated in graduate school. According to the researchers, it appeared that cheating is most frequent at the beginning of graduate school and diminishes with each succeeding year. Several studies have examined the justifications for academic dishonesty in graduate school. Love and Simmons (1998) identified pressure as the strongest factor contributing to the possibility of cheating and plagiarizing. The dominant types of pressure were grade pressure, time pressure, and task pressure. The researchers also found that the leniency of professors and a tendency to avoid addressing issues of cheating and plagiarism were seen as factors contributing to academic dishonesty among graduate students. LaBeff, Clark, Haines, and Deikhoff (1990) classified five techniques used to justify engaging in academically dishonest behaviors. These techniques include denial of responsibility, appeal to higher loyalties, condemnation of the condemners, denial of injury, and denial of the victim. Denial of responsibility was the most often identified response. This technique involves a statement

by the offenders that they cannot be accountable for their actions due to circumstances beyond their control. Rather than identifying the behavior as accidental, they attribute wrongdoing to the influence of outside forces. In some accounts, students have no intention of cheating, but the opportunity to cheat presented itself. In addition, some students reported accidentally seeing other students' test papers. In such instances, the cheaters chastised classmates for not covering up their answer sheets.

Discussion

The study investigated the prevalence of cheating among college underclassmen, upperclassmen, and graduate students. The results indicated a significant difference between class standing and levels of academic dishonesty. College underclassmen engaged in academically dishonest behaviors significantly more than college upperclassmen and graduate students. College upperclassmen engaged in academically dishonest behaviors significantly more than graduate students. The results are consistent with past studies of college cheating that have typically found that younger students cheat more than older students. Baird (1980) used year in school as a proxy for age and found that college upperclassmen cheat less often than underclassmen.

The study also examined scores on a justification for engaging in academic dishonesty scale. The results indicated a significant difference between class standing and scores on the justification scale. College underclassmen reported significantly higher justification scores than graduate students. College upperclassmen recorded significantly higher justification scores than graduate students. It is important to note that there was no significant difference between underclassmen and upperclassmen justification scores.

The results suggested that college underclassmen and upperclassmen are more likely to state acceptable reasons for engaging in academically dishonest behaviors.

The work of LaBeff et al. (1990) on neutralization theory may best describe the justifications given by the students and the prevalence of academic dishonesty in the present study. Through neutralization, individuals justify the violation of accepted behaviors. The individuals do this neutralization before, during, and after the act. These techniques are separated into five categories: denial of responsibility, condemnation of the condemners, appeal to higher loyalties, denial of victim, and denial of injury. The first three techniques are the most common among those engaging in academically dishonest behaviors. Through denial of responsibility, the offender attributes their behavior to external forces and therefore cannot be held accountable for their actions. Some of these external forces include peer pressure to cheat, an unexpected opportunity to cheat, and the experience of failure when legitimate means to study have been used. Appeal to higher loyalties was a method used by many of the students. Students who utilize this technique frequently describe their behavior as an attempt to help another student (e.g., letting another student copy from their test, telling questions to a student who has missed an exam, etc.). These students recognized the act of cheating as wrong, but their statements suggested that in some situations cheating could be overlooked. LaBeff et al. (1990) indicated that cheaters use the technique of condemnation of the condemners as an attempt to shift attention from their own actions to the actions of others, most likely authority figures. By criticizing those in authority as being unfair or overworking the students, the behavior of the offender seems less consequential by comparison.

Lastly, the study explored the relationship between class standing and cheating behavior and justification scores. The results indicated that there was a significantly direct relationship between behavior score and justification score. According to the results, as the prevalence of cheating increased, the reasons for cheating increased as well. An inverse relationship was found between class standing and both cheating score and justification score. The results indicated that as class standing increased the prevalence of cheating decreased significantly. Also, as class standing increased, the level of justifications for engaging in academically dishonest behaviors decreased significantly. Conclusions

As previously stated, there is a need to build research on the prevalence of and justifications for engaging in academically dishonest behaviors not only on the undergraduate level, but on the graduate level as well. Past research has found that as year in school increases, the amount of cheating decreases. However, given the frequency of academic dishonesty at the undergraduate level and the fact that significantly more students are pursuing degrees at the graduate level, there is a need to further investigate academic dishonesty at the graduate level. The majority of literature available on undergraduate and graduate cheating supported the findings from the present study, in terms of prevalence of cheating behaviors. It was also expected that students who engaged in academically dishonest behaviors would be more likely to find acceptable reasons for engaging in academically dishonest behaviors. The results of the present study supported this notion and it was found that as class standing increased, justification scores decreased.

Implications for Future Research

The present study examined academically dishonest behaviors and justifications for engaging in such behaviors in relation to class standing. Future research may inspect these factors as a function of other dependent variables. These variables may include gender, socioeconomic status, and ethnicity or race. The present study did not examine these factors in the context of academic major either. That is, further investigations may inspect the levels of academically dishonest behaviors among academic major as opposed to class standing. Future research may examine if a significant difference exists between class standing and specific answers to behavior and justification questions. The sample size was small and the results could not be generalized, therefore, future research could include a larger sample size with several universities across the country participating in the study.

References

- Anderman, E. M., Griesinger, T., & Westerfield, G. (1998). Motivation and cheating during early adolescence. *Journal of Educational Psychology*, 90(1), 84-93.
- Antion, D. L., & Michael, W. B. (1983). Short-term predictive validity of demographic, affective, personal and cognitive variables in relation to two criterion measures of cheating behaviors. *Educational and Psychological Measurement*, 43(2), 467-482.
- Aronson, E., & Mettee, D. R. (1968). Dishonest behavior as a function of differential levels of induced self-esteem. *Journal of Personality and Social Psychology*, 9(2), 121-127.
- Baird, J. S., Jr. (1980). Current trends in college cheating. *Psychology in the Schools*, 17(4), 515-522.
- Baldwin, D. C., Daughtery, S. R., Rowley, B. D., & Schwarz, M. R. (1996). Cheating in medical school: A survey of second-year students at 31 schools. *Academic Medicine*, 71(3), 267-273.
- Bandura, A. (1986). *Social Foundations of Thought and Action*. Englewood Cliffs, NJ: Prentice-Hall.
- Barnett, D. C., & Dalton, J. C. (1981). Why college students cheat. *Journal of College Student Personnel*, 22, 545-551.
- Bowers, W. J. (1964). *Student dishonesty and its control in college*. New York: Columbia University, Bureau of Applied Social Research.
- Brehm, S. S., Kassin, S. M., & Fein, S. (1999). *Social Psychology 4th ed.* New York: Houghton Mifflin Company.
- Bronzaft, A. L., Stuart, I. R., & Blum, B. (1973). Test anxiety and cheating on college examinations. *Psychological Reports*, 32(1), 149-150.
- Brooks, C. M., Cunningham, R., Hinson, N., Brown, S., & Weaver, B. (1981). Student attitudes toward a medical school honor code. *Journal of Medical Education*, 56(8), 669-671.
- Brown, B. S. (1995). The academic ethics of graduate business students: A survey. *Journal of Education for Business*, 70, 151-156.

- Campbell, W. G. (1933). Measurement in determining the personality and behavior of the college cribber. *Education*, 54, 403-408.
- Canning, R. R., (1956). Does an honor system reduce classroom cheating? An experimental answer. *Journal of Experimental Education*, 24, 291-296.
- Daniel, L. G., Adams, B. N., & Smith, N. M. (1994). Academic misconduct among nursing students: A multivariate analysis. *Journal of Professional Nursing*, 10(5), 278-288.
- Davis, S. F., Grover, C. A., Becker, A. H., & McGregor, L. N. (1992). Academic dishonesty: Prevalence, determinants, techniques, and punishments. *Teaching of Psychology*, 19(1), 16-20.
- DeVries, D. L., & Ajzen, I. (1971). The relationship of attitudes and normative beliefs to cheating in college. *Journal of Social Psychology*, 83(2), 199-207.
- Drake, C. A. (1941). Why students cheat. *Journal of Higher Education*, 12, 418-420.
- Eisenberger, R., & Masterson, F. A. (1983). Required high effort increases subsequent persistence and reduces cheating. *Journal of Personality and Social Psychology*, 44(3), 593-599.
- Festinger, L. (1957). *Introduction to a theory of cognitive dissonance*. Evanston, IL: Row Peterson.
- Genereux, R. L., & McLeod, B. A. (1995). Circumstances surrounding cheating: A questionnaire study of college students. *Research in Higher Education*, 36(6), 687-704.
- Gibbs, J. P. (1975). Crime, Punishment, and Deterrence. Amsterdam: Elsevier.
- Glick, Letters, Rennie, S. C., Crosby, J. R. (2001). Are "tomorrow's doctors" honest? Questionnaire study exploring medical students' attitudes and reported behaviour on academic misconduct. *BMJ: British Medical Journal*, 322(7281), 274-276.
- Greene, A. S., & Saxe, L. (1992, April). *Everybody (else) does it: Academic cheating*. Paper presented at the annual meeting of the Eastern Psychological Association, Boston, MA. (ERIC Document Reproduction Service No. ED 347 941)
- Haines, V. J., Diekhoff, G. M., LaBeff, E. E., & Clark, R. E. (1986). College cheating: Immaturity, lack of commitment, and the neutralizing attitude. *Research in Higher Education*, 25(4), 342-354.
- Hardy, R. J. (1982). Preventing academic dishonesty: Some important tips for political science professors. *Teaching Political Science* 9(2): 68-77.

- Hetherington, E. M., & Feldman, S. E. (1964). College cheating as a function of subject and situational variables. *Journal of Educational Psychology*, 55, 212-218.
- Houston, J. P. (1978). Curvilinear relationships among anticipated success, cheating behavior, temptation to cheat, and perceived instrumentality of cheating. *Journal of Educational Psychology*, 70(5), 758-762.
- Houston, J. P. (1983b). College classroom cheating threat, sex, and prior performance. *College Student Journal*, 17(3), 229-235.
- Jendrek, M. P. (1989). Faculty reactions to academic dishonesty. *Journal of College Student Development*, 30(5), 401-406.
- Jendrek, M. P. (1992). Students' reactions to academic dishonesty. *Journal of College Student Development*, 33(3), 260-273.
- Johnson, P. B. (1981). Achievement motivation and success: Does the end justify the means? *Journal of Personality and Social Psychology*, 40(2), 374-375.
- Jordan, A. E. (2001). College student cheating: The role of motivation, perceived norms, attitudes, and knowledge of institutional policy. *Ethics & Behavior*, 11(3), 233-248.
- Karabenick, S. A., & Srull, T. K. (1978). Effects of personality and situational variation in locus of control on cheating: Determinants of the "congruence effect". *Journal of Personality*, 46, 72-95.
- Kelly, J. A. & Worrell, L. (1978). Personality characteristics, parent behaviors, and sex of subject in relation to cheating. *Journal of Research in Personality*, 12(2), 179-188.
- LaBeff, E. E., Clark, R. E., Haines, V. J., & Diekhoff, G. M. (1990). Situational ethics and college student cheating. *Sociological Inquiry*, 60(2), 190-198.
- Lipson, A., & McGavern, N. (1993, May). *Undergraduate academic dishonesty at MIT:* Results of a study of attitudes and behavior of undergraduates, faculty, and graduate teaching assistants. Paper presented at the 33rd annual forum for the Association for Institutional Research, Chicago, IL. (ERIC Document Reproduction Service No. ED 368 272).
- Love, P. G., & Simmons, J. (1998). Factors influencing cheating and plagiarism among graduate students in a college of education. *College Student Journal*, 34, 539-550.
- McCabe, D. L. (1992). The influence of situational ethics on cheating among college students. *Sociological Inquiry*, 62(3), 365-374.
- McCabe, D. L. (1999). Academic dishonesty among high school students. *Adolescence*, 34(136), 681-688.

- McCabe, D. L., & Bowers, W. J. (1994). Academic dishonesty among males in college: A thirty year perspective. *Journal of College Student Development*, 35(1), 5-10.
- McCabe, D. L., Butterfield, K. D., & Trevino, L. K. (1999). Academic integrity in honor code and non-honor code environments. *Journal of Higher Education*, 70, 211-234.
- McCabe, D. L., & Trevino, L. K. (1993). Academic dishonesty: Honor codes and other contextual influences. *Journal of Higher Education*, 64(5), 522-538.
- McCabe, D. L., & Trevino, L. K. (1996). What we know about cheating in college: Longitudinal trends and recent developments. *Change*, 28(1), 28-33.
- McCabe, D. L., & Trevino, L. K. (1997). Individual and contextual influences on academic dishonesty: A multicampus investigation. *Research in Higher Education*, 38, 379-396.
- Meade, J. (1992). Cheating: Is academic dishonesty par for the course? *Prism*, 1(7), 30-32.
- Michaels, J. W. & Miethe, T. D. (1989). Applying theories of deviance to academic cheating. *Social Science Quarterly*, 70(4), 872-885.
- Midgley, C., Kaplan, A., Middleton, M., Maehr, M. L., Urdan, T., Anderman, L. H., Anderman, E., & Roeser, R. (1998). The development and validation of scales assessing students' achievement goal orientations. *Contemporary Educational Psychology*, 23, 113-131.
- Mills, J. (1958). Changes in moral attitudes following temptation. *Journal of Personality*, 26, 517-531.
- Moeck, P. G. (2002). Academic dishonesty: Cheating among community college students. *Community College Journal of Research and Practice*, 26, 479-491.
- Moffatt, M. (1990). *Undergraduate cheating*. New Brunswick, NJ: Rutgers University Press. (ERIC Document No. 334 931)
- Newstead, S. E., Franklyn-Stokes, A., & Armstead, P. (1996). Individual differences in student cheating. *Journal of Educational Psychology*, 88(2), 229-241.
- Nowell, C., & Laufer, D. (1997). Undergraduate cheating in the fields of business and economics. *Journal of Economic Education*, 28(1), 3-12.
- Nuss, E. M. (1984). Academic integrity: Comparing faculty and student attitudes. *Improving College and University Teaching*, 32(3), 140-144.

- Payne, S. L., & Nantz, K. S. (1994). Social accounts and metaphors about cheating. *College Teaching*, 42(3), 90-96.
- Perry, A. R., Kane, K. M., Bernesser, K. J., & Spicker, P. T. (1990). Type A behavior, competitive student-striving, and cheating among college students. *Psychological Reports*, 66(2), 459-465.
- Roig, M., DeTommaso, L. (1995). Are college cheating and plagiarism related to academic procrastination? *Psychological Reports*, 77(2), 691-698.
- Roll, S., & Hertel, P. (1974). Arrow-dot measures of impulse, ego, and superego functions in noncheaters, cheaters, and supercheaters. *Perceptual and Motor Skills*, 39(4), 1035-1038.
- Roth, N. L., & McCabe, D. L. (1995). Communication strategies for addressing academic dishonesty. *Journal of College Student Development*, 36, 531-541.
- Schneider, A. (1999). Why professors don't do more to stop students who cheat. *The Chronicle of Higher Education*, pp. A8-A10.
- Simpson, D. E., Yindra, K. J., Towne, J. B., & Rosenfeld, P. S. (1989). Medical students' perceptions of cheating. *Academic Medicine*, 64, 221-222.
- Singhal, A. C. (1982). Factors in students' dishonesty. *Psychological Reports*, 51(3), 775-780.
- Singhal, A. C., & Johnson, P. (1983). How to halt student dishonesty. *College Student Journal*, 17, 13-19.
- Smith, J. N., & Nolan, R. F., Dai, Y. (1998). Faculty perception of student academic dishonesty. *College Student Journal*, 32, 305-310.
- Smith, C. P., Ryan, E. R., & Diggins, D. R. (1972). Moral decision making: Cheating on examinations. *Journal of Personality*, 40(4), 640-660.
- Spiller, S., & Crown, D. F. (1995). Changes over time in academic dishonesty at the collegiate level. *Psychological Reports*, 76(3), 763-768.
- Stannard, C. I., & Bowers, W. J. (1970). The college fraternity as an opportunity structure for meeting academic demands. *Social Problems*, 17(3), 371-390.
- Stern, E. B., & Havlicek, L. (1986). Academic misconduct: Results of faculty and undergraduate student surveys. *Journal of Allied Health*, 15(2), 129-142.

- Stevens, G. E., & Stevens, F. W. (1987). Ethical inclinations of tomorrow's managers revisited: How and why students cheat. *Journal of Education for Business*, 61(1), 24-29.
- Sutherland, E. H. (1947). Principles of Criminology, 4th ed. Philadelphia: Lippincott.
- Sykes, G., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American Sociological Review*, 22, 664-670.
- Tang, S., & Zuo, J. (1997). Profile of college examination cheaters. *College Student Journal*, 31(3), 340-347.
- Wadja-Johnston, V. A., Handal, P. J., Brawer, P. A., & Fabricatore, A. N. (2001). Academic dishonesty at the graduate level. *Ethics and Behavior*, 11(3), 287-305.
- Ward, D. A. (1986). Self-esteem and dishonest behavior revisited. *The Journal of Social Psychology*, 126(6), 709-713.
- Ward, D. A. & Beck, W. L. (1986). Gender and dishonesty. *The Journal of Social Psychology*, 130(3), 333-339.
- Whitley, B. E. (1998). Factors associated with cheating among college students: A review. *Research in Higher Education*, 39, 235-274.
- Wright, J. C., & Kelly, R. (1974). Cheating: Student/faculty views and responsibilities. *Improving College and University Teaching*, 22, 31-34.