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Student Attitudes and Behaviors Regarding Academic Dishonesty

by

Kelly A. Pearson

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
in Curriculum and Instruction with an emphasis in
Higher Education Administration
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DEDICATION

This dissertation is dedicated to my mother, father, and sister.

To my mom, Janet, who has been my greatest example of strength, selflessness, and unconditional love. Without your constant support and belief that I could accomplish more, I would never have thought getting this far was possible. You challenged me to be a better version of myself, to stand up for what I believe in, and to face obstacles head on. Thank you for always being my home base, my shoulder to cry on, and for never doubting me, even when I doubted myself.

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ABSTRACT

This research study investigated the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors. Additionally, the study investigated the potential differences between gender and the academic variables class level and cumulative GPA and both students' attitudes toward academic dishonesty and their self-reported cheating behaviors. This quantitative study analyzed secondary data from a Spring 2014 administration of the Academic Integrity Student Survey (AISS) to examine the attitudes and behaviors of undergraduate level students ($N = 574$) at a large, four-year, public, research intensive institution in West-Central Florida.

Results indicated a statistically significant correlation between students' attitudes toward academic dishonesty and their self-reported cheating behaviors. Although weak, the negative correlation suggested that as students' attitudes toward academic dishonesty (i.e. the perceived severity of specific behaviors) increased, their self-reported cheating behaviors decreased. Additionally, the results indicated that there were no significant differences in either students' attitudes or cheating behaviors based on the independent variables of gender or class level. Finally, while not statistically significant, the results suggested a weak positive correlation between students' attitudes toward academic dishonesty and cumulative GPA and a weak negative correlation between self-reported cheating behaviors and cumulative GPA.

Although this study found the relationship between students' attitudes and cheating behaviors to be statistically significant, the lack of significant results as they relate to the individual factors of gender, class level, and cumulative GPA, indicate that more research is

needed into other possible factors, such as moral development and institutional culture, that impact students' attitudes and behaviors. Finally, further research is needed to determine the potential impact of changes in the landscape of higher education, such as increased access and the increase in non-traditional teaching methods, on academic integrity and students' moral reasoning and ethical decision-making as they relate to attitudes and behaviors.

CHAPTER ONE

Introduction

The system of higher education has been built on the quest for knowledge, the ability to engage in research, and the desire to produce enlightened and well-rounded scholars. The foundation of these goals is based on the concept of academic integrity, which according to the Center for Academic Integrity (2007), encompasses five fundamental values: honesty, trust, fairness, respect, and responsibility. In the academic setting, specifically within the classroom, integrity is central to success and growth. "It prepares students for personal and professional challenges as well as providing a blueprint for future fulfillment and success" (International Center for Academic Integrity, 2012).

Within higher education, integrity is often measured in relation to acts of academic dishonesty (i.e. violations of the ethical and moral principles associated with integrity). While the present-day academic integrity movement in higher education can be traced to the 1960s, recent studies suggest that students engage in academically dishonest behaviors in more frequent, new, and sophisticated approaches (Strom & Strom, 2007, International Center for Academic Integrity, 2016, Vencat, Overdorf, & Adams, 2006). In addition to the variety of methods in which cheating takes place, the perceived lack of seriousness associated with engaging in these behaviors has become pervasive. (Bates, Davies, Murphy, & Bones, 2005; McCabe & Treviño, 1996; Stephens, Young, & Calabrese, 2007). Ultimately, these dishonest behaviors negatively impact an institution's ability to reach educational goals, among which the development of student's moral maturity is a primary focus.

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Statement of the Problem

Researchers began to closely study academic dishonesty in the 1960s, and the body of literature on the topic has grown considerably over the last 50 years. Early findings suggested that as many as three out of four students admitted to engaging in at least one questionable academic behavior while in college (Bowers, 1964). A study conducted by McCabe and Treviño (1993) found that the prevalence of engaging in these academically questionable behaviors remained relatively consistent over a 30 year timeframe, with two out of three students admitting to having engaged in at least one academically dishonest behavior while in college. While Bowers (1964) argued that the percentage of students who openly admitted to engaging in cheating behaviors, or other academically dishonest behaviors, might well be under-represented, Pulvers and Diekhoff (1999) suggested that the high incidence of those reporting having cheated may be due to a number of factors; including differences in the definition of cheating, differences in samples, and differences in the types of institutions surveyed.

In the first large-scale study on academic cheating in higher education, Bowers (1964) surveyed more than 5,000 students across 99 institutions. The results of this early multi-level study were staggering, indicating that approximately 75% of students reported engaging in one or more act of academic dishonesty (McCabe, Treviño, & Butterfield, 2001). Since Bowers' original study, conversations about the cheating pandemic and how to address the cheating behaviors of students have taken place at institutions of higher education across the country and a significant amount of research has been conducted in the area of academic dishonesty.

The literature indicates that student cheating in higher education, particularly among undergraduate students, is commonplace and widespread (Bowers, 1964; Engler, Landau, & Epstein, 2008; Gaberson, 1997; Gallant, 2008; Hulsart & McCarthy, 2011; McCabe & Treviño,

1993; McCabe et al., 2001; Whitley, Nelson, & Jones, 1999). With the overwhelming evidence involving the prevalence of academic dishonesty at the college level, it is important for institutions of higher education to examine the trends at their individual institutions. Researchers have looked at both institutional and individual student characteristics that impact students' attitudes and behaviors. While many studies have looked at characteristics across multiple institutions (Bowers, 1964; McCabe & Treviño, 1993), research specific to individual institutions is much more limited.

Purpose of the Study

Given the scope of the current research on academic integrity and cheating behaviors, this study is intended to help fill a gap in the literature surrounding academic dishonesty at a large, public, research-intensive institution with a large transfer and commuter student population. The study will focus on areas of the Academic Integrity Student Survey (AISS) (McCabe, 2003), that identify students' attitudes toward academic dishonesty and self-reported cheating behaviors.

The study seeks to explore the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors at the University of South Florida (USF). Additionally, the study will examine the relationship between both gender and academic variables (class level and cumulative GPA) and students' attitudes toward academic dishonesty and cheating behaviors.

Guided by the results of the study, the ways in which moral development and moral maturity may be potentially integrated in to the curriculum in order to tackle these attitudes and behaviors will be addressed. Additionally, it is the hope that the study can contribute to educating faculty on ways in which they are able to curb academic dishonesty in the classroom, including making the classroom environment more personalized, task oriented, satisfying, and

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individualized (Boehm, Justice, & Weeks, 2009; Gaberson, 1997; Hulsart & McCarthy, 2011; Pulvers & Diekhoff, 1999; Williams, Tanner, & Beard, 2012). Therefore, regardless of what has been done in the past, it is important that institutions of higher education continue to address academic dishonesty on their campuses. This study endeavors to supplement the research on how institutions of higher education can accomplish this goal.

Research Questions

The current study will investigate the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors. Additionally, it will examine the relationships between both gender and academic variables (class level and cumulative GPA) and students' attitudes toward academic dishonesty and cheating behaviors. The following questions will guide this study:

1. What is the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors?

2. What is the relationship between gender and students' attitudes toward academic dishonesty?

3. What is the relationship between gender and students' self-reported cheating behaviors?

4. What is the relationship between self-reported academic variables (class level and cumulative GPA) and students' attitudes toward academic dishonesty?

5. What is the relationship between self-reported academic variables (class level and cumulative GPA) and students' self-reported cheating behaviors?

Theoretical Framework

Although many theories have addressed moral judgment (Piaget, 1932), moral development (Gilligan, 1982), Social Learning Theory (McCabe & Treviño, 1993; Michaels & Miethe, 1989), and labeling theory (Ward & Tittle, 1993), Lawrence Kohlberg's Theory of Moral Development provides the theoretical framework for the study (see Table 1). Kohlberg's theory comprises six stages in which individuals advance based on their cognitive development. This development occurs in times when moral conflict is introduced in to one's current value system (Hersh, Paolitto, & Reimer, 1979). In higher education, exposure to diverse experiences can help a student move from one stage to another (Pascarella and Terenzini, 1991).

Moral development was initially defined by Piaget's (1932) study on the moral judgment of children (Kurtines & Greif, 1974). This early cognitive-developmental approach provided the foundation for much of the psychological research that has been conducted over the years in the area of moral thought and reasoning. In 1958, Kohlberg began expanding on the work of Piaget by using a behavioral lens to look at moral development and reasoning (Kurtines & Gewirtz, 1995). Probably the most well-known theory that expands on the work of Piaget, Kohlberg's Theory of Moral Development reflected the way a person's moral development shifts as the structure of his or her thinking transforms (Gaberson, 1997; Kohlberg & Hersh, 1977; Kurtines & Greif, 1974).

After a 20-year longitudinal study, Kohlberg developed a sequential six stage theory of moral development. Kohlberg and Hersh (1977) outlined the following characteristics about stages and their relation to cognitive development:

1. Stages are "structured wholes," or organized systems of thought. This means individuals are consistent in their level of moral judgment.

2.	Stages form an invariant sequence. Under all conditions except extreme

trauma, movement is always forward, never backward. Individuals never skip

stages, and movement is always to the next stage up.

3.	Stages are "hierarchical integrations." Thinking at a higher stage includes or

comprehends within it a lower stage thinking. There is a tendency to function

at or prefer the highest stage available (p. 54).

The stages of moral development that make up Kohlberg's theory are characterized and

defined by different types of moral reasoning. A brief overview of these stages is outlined in

Table 1.

While Kohlberg's theory is often criticized for its bias toward males, it has been widely

generalized across genders and referenced in studies of academic dishonesty at the collegiate

level (Diekhoff, LaBeff, Clark, Williams, Francis, & Haines, 1996; Fraedrich, Thorne, & Ferrell,

1994; Haines, Diekhoff, LaBeff, & Clark, 1986). In a study by Haines et al. (1986), students

were asked to rate the effectiveness of various deterrents to cheating; thereby allowing

researchers to assess their moral development. Results suggested that students who engaged in

academically dishonest behaviors tended to operate from Kohlberg's "preconventional" stages of

moral development; whereas students who did not engage in these behaviors were more likely to

operate from the "postconventional" stages of moral development. Diekhoff et al. (1996)

reported similar results but indicated that deterrents such as embarrassment and other negative

social consequences led to the predominance of Kohlberg's "conventional" stages among all

students, regardless of whether or not they engaged in academically dishonest behaviors.

Using Kohlberg's theory, this study seeks to connect moral reasoning and ethical

decision making with students' perceptions of, attitudes toward, and likelihood of engaging in

Table 1

Kohlberg's Theory of Moral Reasoning

Level	Stage	Description
I. Preconventional	1. Punishment and obedience orientation	Action is deemed good or bad based on its physical consequences. Deference to authority and avoidance of punishment are valued in their own right, not because of their underlying moral order.
	2. Instrumental-relativist orientation	Right is chosen based on meeting one's own needs. Elements of fairness, reciprocity, and equal sharing are present, but are only acted upon out of need, not out of loyalty, gratitude, or justice.
II. Conventional	3. Interpersonal concordance or "good boy – nice girl" orientation	Good behavior is judged by intention and is meant to satisfy and please others. Approval is important.
	4. "Law and order" orientation	Tendency toward authority, rules, and maintaining social order. Adhering to these tendencies constitutes "right" behavior.
I. Postconventional, Autonomous, or Principled	5. Social-contract, legalistic orientation	Individual rights and standards have been examined and agreed upon by society. What is right is based on personal values and opinions. Emphasis on legality with the ability to change laws based on social utility.
	6. Universal-ethical-principle orientation	Right is based on conscience and self-chosen ethical principles. Emphasis on universal principles of justice, of the reciprocity and equality of human rights, and of respect for the dignity of human beings as individual persons.

(Kohlberg & Hersh, 1977)

academically dishonest behaviors. Specifically, it will examine whether a connection can be made between gender and the academic variables of class level and cumulative GPA, and Kohlberg's level and stage of moral development. Dependent on the ability to codify student's moral development and its connection to academic integrity, it is hoped that this study can then be used to help create, modify, or expand future practice at this institution.

Significance of the Study

As early as the 1940s, competition and increased academic pressure have been identified as significant contributing factors to cheating in higher education (Drake, 1941). This competition has continued to grow, especially during times of economic and employment instability. As the landscape of higher education has changed, the method of engaging in academically dishonest behavior has also evolved. This is due, in large part, to advancements in technology, which make it easier to access material (Baird & Dooey, 2014; Carroll, 2007; Flowerdew & Li, 2008; Park, 2004; Sutherland-Smith, 2008). Examples of these technological advances include constant access to the internet and electronic devices used in the classroom setting (ex. clickers).

The ever-changing academic environment, along with the ambiguity of defining acts of academic dishonesty, have prompted the need for constant research in to what constitutes student cheating. Zernike (2002) outlined the results of the Center for Academic Integrity's 2001-2002 survey and the methods in which students indicated cheating is taking place are numerous. The results are as follows:

> 27 percent of students questioned said that falsifying laboratory data happened often or
> very often on campus. Forty-one percent said the same for plagiarism on written
> assignments, 30 percent for cheating during tests or exams, and 60 percent for

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collaborating on work when a professor has instructed students to work alone. Moreover, 55 percent of the students said it was not serious cheating to get questions and answers from a student who had previously taken a test, and 45 percent said falsifying lab or research data did not fall in to that category either. (p. A10)

Arhin and Jones (2009) argued that one of the primary concerns surrounding cheating is its pervasiveness, to the point of being seen by many students as commonplace. "Most students do not see their cheating actions as out of the ordinary or morally wrong" (Arhin & Jones, 2009, p. 710). This process, termed neutralization, is a considerable concern for higher education and refers to when cheating becomes a part of "normal" student culture (Bates, et al., 2005).

However, former President of Harvard University, Derek Bok (1976), argued that colleges have a duty to contribute to the moral development of students. Additionally, Rest & Narvaez (2014), indicated that the commitment to academic integrity can be linked to an institution's desire to help students develop morally. In an effort to address the importance of academic integrity at institutions of higher education, researchers have looked at how the campus climate may impact student behavior and many have taken to implementing programs that aim to meet this goal.

One method that is being used to help strengthen an environment of integrity is the implementation of an honor code. Supported by McCabe and his various colleagues (McCabe & Treviño, 1993, 1996; McCabe et al., 2001), research suggested that institutions that have implemented a campus honor code experience fewer incidents of cheating (McCabe & Treviño, 1997). For example, the University of South Florida has adopted a Commitment to Honor as a part of their efforts to promote an ethical community. As a part of this commitment, members of the USF community are expected to resolve toward the following:

- Maintain the honor and integrity of the university community in pursuit of student development, academic learning, scholarship and research.

- Respect the dignity and intrinsic value of all persons.

- Contribute to the progress and greater good of the community

- Strive for excellence and discovery for myself, others, and the University (EIC, 2018).

Unfortunately, the incidence of cheating has continued to be a problem in higher education and the perception of the seriousness of these acts continues to change (McCabe & Treviño 1996; Stephens et al., 2007). Semerci (2006) found that students who had reached higher stages of moral development were more likely to recognize the seriousness of cheating in the academic context than those in lower moral development stages. Although there appears to be a positive relationship between higher moral development and lower engagement in acts of academic dishonesty, more research needs to be done in the area.

Definition of Terms

The following terms have been defined for clarification of use throughout this study:

1. **<u>Academic integrity:</u>** Adherence to the principle of being honest and trustworthy in all academic endeavors.

2. **<u>Academic dishonesty</u>**: Definitions vary across institutions of higher education. Refers to an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization. Acts of academic dishonesty include, but are not limited to, cheating on exams, plagiarism, and unapproved collaboration.

3. **Cheating:** Refers to engaging in behaviors that are dishonest or deceptive and that have a direct impact on academic performance. "Cheating" and "Academic Dishonesty" will be treated as interchangeable for the proposed study.

4. **Class level:** Refers to a student's academic class standing based on earned credit hours. Freshmen students have earned 0-29 credit hours; Sophomore students have earned 30-59 credit hours; Junior students have earned 60-89 credit hours; and Senior students have earned 90+ credit hours.

5. **Cumulative grade point average (GPA):** Refers to the average of all grades received for courses completed at any institution of higher education a student has attended. These grades are typically measured on a 4.0 scale.

6. **Honor code:** A statement values, standards, and beliefs about academic integrity which requires the signing of a pledge, defines acts of academic dishonesty, requires self- and peer-reporting of violations, and outlines consequences for violations.

7. **Moral development:** Refers to the concern for rules and relationships which guides individuals in how they will resolve dilemmas and interactions with others.

8. **Neutralization:** Refers to when students justify and normalize dishonest cheating behaviors as customary.

Limitations

1. The Academic Integrity Student Survey was administered at USF in the Spring of 2014. The age of the data could be seen as a limitation for the study, as institutional practices and/or trends may have changed in the years since the data were collected.

2. The Academic Integrity Student Survey comprises self-reported data from the students who participated in the study. Although identifying information is not disclosed, and

responses cannot be tied to individual participants, students may have been apprehensive about providing candid responses to each question. This could lead to a misrepresentation of the number of students who engage in cheating behaviors.

3. This study utilized secondary data, which can be seen as a limitation. The data collection process was managed by another party; therefore, the researcher did not have control over the data.

Delimitations

1. The study is delimited to data collected from the Academic Integrity Student Survey in the Spring 2014 semester. Although the survey was administered to all undergraduate and graduate students across the USF Tampa campus, the sample only includes those students who are at the undergraduate level (Freshman, Sophomore, Junior, or Senior).

2. The study will focus on the attitudes and behaviors of students at the University of South Florida Tampa Campus. Because the sample has been selected from one institution, external validity may be limited (Gall, Gall, & Borg, 2007). While the USF student population is diverse and represents a range of student characteristics, results may prove difficult to generalize to other institutions because of unique features attributed to the USF student population.

Summary and Organization of Remaining Chapters

Academic dishonesty continues to be a widespread concern across institutions of higher education. Prevailing research has examined both the characteristics of students who engage in academically dishonest behaviors as well as why students engage in these behaviors; however, most of the studies conducted over the years have focused on large-scale and multi-institutional data collection. This study, on the other hand, seeks to add to existing research on the

relationship between students' attitudes toward academic dishonesty and cheating behaviors at a large, public, research intensive, largely commuter institution.

This study has the potential to supplement both the existing literature and future studies and has the ability to inform the practice of administrators in the field of higher education who design and implement interventions and programming related to academic integrity. Since the study focused on students at the University of South Florida, there is also the opportunity to tailor educational opportunities for students, faculty, and staff. Finally, the study seeks to identify areas in which moral development and moral maturity can be incorporated in to the social and academic curriculum in order to reduce the incidence of academic dishonesty.

Chapter Two provides a review of the literature concerning moral development and academic dishonesty in higher education. In particular, the literature explores the correlation between gender and academic variables (class level and cumulative GPA) and students' attitudes toward academic dishonesty and cheating behaviors. Chapter Three provides an overview of the methods used in the current study, including the population and sample, variables, instrument administration, the methods, as well as more information regarding the instrument and the data set that was used for the study. Chapter Four summarizes the analysis and results of the five research questions. Finally, Chapter Five examines the potential implications for practice and recommendations for future research.

CHAPTER TWO

Review of the Related Literature

Introduction

This chapter reviews the current body of literature on academic integrity and academically dishonest behaviors in higher education. The review of the literature includes an examination of how academic integrity is defined, its connection to moral development, the prevalence of academic dishonesty in higher education, and the impact of students' perceptions on cheating behaviors. Additionally, the roles of gender, academic classification (class level), and academic success (grade point average) are examined in relation to academic integrity. Finally, the literature surrounding the methods students use to engage in academically dishonest behaviors, as well as how institutions and faculty can address these behaviors, are explored. The information presented in this review helps to demonstrate how the study contributes to the current body of knowledge on academic integrity, student perceptions and attitudes, and academically dishonest behaviors.

Defining Academic Integrity

For over fifty years, researchers and administrators have focused on the issue of academic integrity in the higher education setting. A review of the literature suggests that the number of students who self-reported engaging in academically dishonest behaviors ranged from as low as one percent to as many as 90 percent. These behaviors included plagiarism, unauthorized collaboration, and cheating on examinations, among others (Brimble & Stevenson-Clark, 2005; Christensen, Hughes & McCabe, 2006; Gallant, 2008; McCabe & Treviño, 1997). However, one

of the major concerns present throughout the research on academic dishonesty is the lack of a universal definition for the term.

Across higher education, academic integrity programs are commonly defined by the violations to policy and acts of academic dishonesty that are perpetrated; the effects of which are detrimental and can cause a breakdown across institutional systems (Baker, Berry, & Thornton, 2008). Student cheating, however, can take on any number of forms, making it difficult for students, faculty, and institutional administrators to clearly outline behaviors that are unacceptable. Pincus and Schmelkin (2003) asserted that, according to the current body of literature surrounding academic integrity, much of the difficulty in understanding and defining academically dishonest behavior can be attributed to the varying, and often contradictory, interpretation of the term by members of the academic community.

Gehring and Pavela (1994) attempted to define academic dishonesty as:

an intentional act of fraud, in which a student seeks to claim credit for the work or efforts of another without authorization, or uses unauthorized materials or fabricated information in any academic exercise. We also consider academic dishonesty to include forgery of academic documents, intentionally impeding or damaging the academic work of others, or assisting other students in acts of dishonesty. (p. 5)

This definition was echoed by the Center for Academic Integrity (2007), which defined cheating as any act that misrepresents the work of another as representing his or her own work product in completing a course-related assignment.

Other definitions respond to a concept in which situational ethics are employed. That is, students respond to situations based on the context in which they take place. LaBeff, Clark, Haines, and Diekhoff (1990) found that students excused cheating behavior if they felt the

situation warranted it. "The concept of situational ethics might well describe…college cheating [as] rules for behavior [that] might not be considered rigid but depend on the circumstances involved" (p. 191). Hulsart and McCarthy (2011) offered this suggestion to those who seek to define academic dishonesty:

> to define student cheating is to put a transitory label on a process that is as ever changing and evolutionary as education itself. Rigid definitions of student cheating may, in fact, exacerbate the detection and the ongoing effort to detect and eliminate the possibility of cheating in the academic system. (p. 93)

Inconsistency is similarly present when defining terms associated within the larger scope of academic dishonesty, including plagiarism. Simon, Cook, Sheard, Carbone, & Johnson (2014) argued that, although some researchers used the term "plagiarism" to address acts of both plagiarism and collusion/unapproved collaboration, separate and distinct definitions were necessary in the research:

> Both plagiarism and collusion entail using the work of others without properly attributing that work. With plagiarism, the 'others' are typically people that the writer does not know, and the writer has found their work in some public medium such as a book, a journal, or the web. With collusion, the 'others' are typically people that the writer knows, and who tend to collaborate with the writer to produce the finished work. (p. 107)

Given the lack of a standardized definition of academic dishonesty, institutions of higher education are likely to struggle with recognizing, addressing, and preventing instances of academically dishonest behavior.

Academic Dishonesty and Moral Development

When viewed in the context of a student's moral and ethical development, the inability to clearly define academically dishonest behaviors, and the prevalence of these behaviors across colleges and universities, is particularly concerning. Kohlberg and Hersh (1977) indicated that the higher education setting is often considered an ideal environment for moral development, as "the aim of education ought to be the personal development of students toward more complex ways of reasoning" (p. 55). As this progression to higher levels of moral development occurs, Kish-Gephart, Harrison, and Treviño (2010), found that more ethical choices are made.

As exhibited by Kohlberg's stages and the characteristics of movement through these stages, progression most often occurs at times of increased exposure to more complex developmental issues (Pascarella & Terenzini, 1991). When people are exposed to situations in which they are forced to question their current thinking, they must either make the situation fit in to what they already know or change the way they think so that they are able to work through the conflict (Hersh et al., 1979). Within the scope of higher education, students are exposed to significant periods of transition (ex. from high school to college, from lower-level undergraduate to upper-level undergraduate, decision to change of major, etc.); therefore, there are continued opportunities for moral development. Given the increased opportunity for both challenges to, and development of, moral reasoning and maturity at the collegiate level, it is not surprising that research shows, with resounding concurrence, that college students cheat (Bowers, 1964; Cole & McCabe, 1996; McCabe, 1992; McCabe & Drinan, 1999; Passow, Mayhew, Finelli, Harding, & Carpenter, 2006; Zernicke, 2002).

Since the proposed study focuses on the attitudes and behaviors of students related to academic dishonesty, it is important to review what has been written about which students cheat,

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why they cheat, how they cheat, and ways to reduce cheating behavior. Institutions of higher education have implemented honor codes, training programs, plagiarism detection software, and myriad other tools to help decrease the incidence of cheating on their respective campuses. However, over the nearly 50 years since research on academic dishonesty first began to emerge, no singular guide has been established to prevent or decrease the incidence of cheating.

Prevalence of Academically Dishonest Behaviors

The prior review of the literature highlights the conflicting messages that surround academic integrity. Instability at the institutional level caused by the lack of a focused definition of academic integrity, as well as the more fluid concept of what students consider unethical behavior, has continued to contribute to the pervasiveness of academically dishonest behaviors in students (Arhin & Jones, 2009; Bates et al., 2005; Bowers, 1964; Chiesl, 2007; Drake, 1941; Gulli, 2007; Gulli, Kohler, and Patriquin, 2007; Hinman, 2002; Malesic, 2006; McCabe & Treviño, 1993; Troop, 2007; Vojak, 2006). In fact, a 1990s multi-institutional study expanded the research started by Bowers and concluded that the rates of academic dishonesty among undergraduate students was equal to, or higher than, those reported in the 1960s (McCabe, 1992, 1993; McCabe and Treviño, 1993).

Like an epidemic, researchers have described academic dishonesty as "excessively prevalent" and "contagious" (Gino, Ayal, & Ariely, 2009). Stephens (2019), argued that a third descriptor, "corrosive" was also appropriate given that academic dishonesty not only threatens students' learning, but also their moral development and character (p. 9). With the continued rate of occurrence of academically dishonest behaviors, Callahan (2004) recently suggested a growing concern over the "cheating culture" in higher education. In fact, recent studies suggest that academically dishonest behaviors have become normative with students, faculty, and

administrators in colleges and universities around the world (Callahan, 2004; Decoo, 2002; McCabe, 1992; Sims, 1993). The normalization of this behavior can be dangerous to colleges' and universities' ability to implement academic integrity programs, as was argued by Broeckelman-Post (2008), who suggested that "students' engagement in academic dishonesty is most influenced by whether they believe their peers are engaging in academic dishonesty" (p. 206).

In fact, McCabe and Treviño (1993) suggested that student perceptions were a key component in determining the likelihood that a student will engage in academically dishonest behaviors. Specifically, they identified student perceptions surrounding (1) the actions of peers, (2) the ability for faculty to comprehend and accept academic integrity policies, (3) the general effectiveness of these policies, and (4) the severity of the consequences for those who violated the policies. Further research expanded on the concept of student perceptions and found that when students not only believe their peers are engaging in academically dishonest behaviors, but also feel that institutional faculty and administrators are disregarding or tolerating the behaviors, they are more likely to engage in academically dishonest behaviors (Culiberg & Mihelič, 2019; Dalton, 1985; Daniel, Adams, & Smith, 1994; Haines et al., 1986; McCabe et al., 2001; McCabe, Treviño, & Butterfield, 2002; McCrink, 2010). Viewed within the scope of moral development, the concept that moral equity, defined as "inherent justice, goodness, and rightness" (Reidenbach & Robin, 1990, pp. 645-646) served to influence students' ethical decision making and behavior, as exhibited by the results of Manly, Leonard, and Riemenschneider's (2015) study.

Given the pervasiveness of academic dishonesty across decades of research, academics have sought to understand the factors that contribute to a student's decision to engage in such behaviors. Within the research, these motivational characteristics have been pared down in to

individual factors and contextual factors, with the majority of the focus having been placed on the individual. Across nearly 30 years of research which focused on the impact of individual factors on a student's behavior regarding academic dishonesty, results indicated that a range of determinants, including "gender, grade point average (GPA), work ethic, Type A behavior, competitive achievement striving, and self-esteem" can have a significant impact on the prevalence of cheating (Baird, 1980; Eisenberger & Shank, 1985; Perry, Kane, Bernesser, & Spicker, 1990; Ward, 1986; Ward & Beck, 1990).

Early research conducted by Drake (1941) found that competition for grades was a major driving force in cheating. However, research overwhelmingly indicated that pressure to earn good grades, both from oneself and one's parents, was the most common reason students cited for deciding to cheat (Baird, 1980; Barnett & Dalton, 1981; Bowers, 1964; Davis & Ludvigson, 1995; Gehring & Pavela, 1994; Levine, 1995; Lord & Chiodo, 1995; Nuss, 1984; Singhal, 1982). Additional research pointed to situational ethics as a motivating factor, indicating that students are more likely to cheat if they feel the situation warrants it (Alschuler & Blimling, 1995; LaBeff et al., 1990; Lawson, 2004; McCabe & Treviño, 1993).

For students in business, engineering, and science related disciplines, the research suggests that pressure associated with increased competition for highly desirable positions in post-graduate academia (ex. Business, Law, and Health professions schools), as well as the workforce, has led students to participate in academically dishonest behaviors (Bowers, 1964; Brown, Isbel, Logan, & Etherington, 2019; Keener, Peralta, Smith, Swager, Ingles, Wen, & Barbier, 2019; McCabe, Treviño, & Butterfield, 1999). Bates et al. (2005) reiterated this concept with their findings that students pursuing a Pharmacy degree were more likely to engage in academically dishonest behaviors than those majoring in Education. In these "highly

competitive" academic majors, the implication that success sometimes comes at the cost of making ethical decisions "reflects a higher priority on 'getting ahead' than on 'doing the right thing' and is likely to strongly influence cheating behaviors in college" (Cronan, McHaney, Douglas, & Mullins, 2017, p. 89).

Hulsart and McCarthy (2011) argued that even the current trend of strengthening social networks, which helps to improve student retention, may create additional opportunities for students to cheat. Peer influence and the perception that those around them will support cheating behavior caused McCabe and Treviño (1993) to indicate the following:

> The strong influence of peers' behavior may suggest that academic dishonesty not only is learned from observing the behaviors of peers, but that peers' behavior provides a kind of normative support for cheating. The fact that others are cheating may also suggest that, in such a climate, the non-cheater feels left at a disadvantage. Thus cheating may come to be viewed as an acceptable way of getting and staying ahead. (p. 533)

On the other hand, a more limited number of studies focused on the contextual factors that may influence behavior. Results of these studies suggested that factors such as faculty response, fear of negative consequence, social learning, and honor codes had an impact on student behavior (Canning, 1956; Jendrek, 1989, Michaels & Miethe, 1989; Tittle & Rowe, 1973). Students have also commonly referenced a perceived lack of motivation by faculty members as reasons for cheating in the academic setting. Academic dishonesty was found to be more prevalent when the students felt the faculty member was not motivated, was lazy, or simply did not care about the course being taught (Aaron & Georgia, 1994; Greene & Saxe, 1992). Genereux and McLeod's (1995) findings supported the argument that students were less likely to cheat if they felt that the faculty member placed sufficient time and effort in to the course.

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The growth of online courses has also played a major role in students' attitudes and behaviors toward academic integrity (Peterson, 2019). According to Seaman, Allen, and Seaman (2018), as of Fall 2016, students enrolled in at least one online course accounted for 31.6% of all enrollment. This increase in online education lends itself to enhanced concern over academic integrity. Researchers Watson and Sottile (2010) added validity to this concern when they found that, for online courses, students were four times more likely to participate in academically dishonest behaviors. Often times, these students believed it was not only easier to cheat in an online course, but also that resources for cheating were more readily available (Burnett, Smith, & Wessel, 2016; Harmon, Lambrinos, & Kennedy, 2008; King, Guyette, & Piotrowski, 2009). Peled, Eshet, Barczyk, and Grinautsaki (2019), on the other hand, found that students enrolled exclusively in web-based courses were less likely to engage in academically dishonest behaviors than those in traditional courses.

While both individual and contextual factors contribute to student behavior, a 1997 multi-institutional study by McCabe and Treviño found that "contextual factors (peer cheating behavior, peer disapproval of cheating behavior, and perceived severity of penalties for cheating) were significantly more influential than the individual factors (age, gender, GPA, and participation in extracurricular activities)" (McCabe et al., 2001, pp. 222-223). Despite these assertions by McCabe and Treviño, the proposed study will seek to better understand how individual characteristics, such as gender, class level, and cumulative GPA impact students' self-reported cheating behaviors.

Gender. Between the 1960s and 1990s, much of the research conducted on academic integrity at the college level focused on the effect of individual characteristics, including gender, on cheating behaviors. Across the literature, most studies have found that gender does not play a

significant role in student behavior toward academic dishonesty (Baird, 1980; Bokosmaty, Ehrich, Eady, & Bell, 2017; DePalma, Madey, & Bornschein, 1995; Graham, Monday, O'Brien, & Steffen, 1994; Haines et al., 1986; Kerkvliet, 1994; Soroya, Hashmi, & Soroya, 2016). In fact, in a meta-analysis of gender differences in cheating attitudes and cheating behaviors, Whitley et al., (1999) found little significant difference between male and female participants.

Despite the Whitley et al. findings not being statistically significant, other results commonly suggest that men are more likely to engage in cheating behaviors than women (Aiken, 1991; Davis, Grover, Becker, & McGregor, 1992; McCabe & Treviño, 1997; Roth & McCabe, 1995; Ward, 1986). Some researchers suggested that the observed differences in the behavior of male and female students may be a result of differences in moral orientation, where men often view themselves independently and women view themselves as part of a social network (Chodorow, 1989; Gilligan, 1982; Lapsley, 1996). Others suggested that male students and female students are socialized to hold themselves to different moral standards, with females being held to higher expectations than their male counterparts (Franke, Crown, & Spanke, 1997; Kristiansen & Hotte, 1996). Still others have suggested that male students lack the developmental maturity and moral reasoning that their female counterparts have (Davis & Ludvigson, 1995; Diekhoff et al., 1996; Kerkvliet, 1994).

Despite the prevailing literature suggesting that male students are more likely to engage in academically dishonest behaviors than female students, Etgar, Blau, and Eshet-Alkalai (2019) found that female students were more likely to receive harsher penalties than their male peers. Additionally, whereas the literature more commonly suggests that men are more likely to engage in academically dishonest behaviors, McCabe and Treviño (1997), in their replication of Bower's work, did notice that women had an increased likelihood of participating in unpermitted

collaboration. Additionally, despite the differences in the prevalence of academically dishonest behaviors of men and women across all of higher education, the data also suggest that within the same degree programs, these differences are not as marked. For example, men and women in an Engineering major are likely to have rates that are more comparable to one another (McCabe & Treviño, 1997).

Class level. The body of research on the relationship between student classification (Freshman, Sophomore, Junior, and Senior) and cheating behaviors is rather limited (McCabe et al., 2001); whereas a significant amount of research is available on the relationship between age and these same behaviors. Results from McCabe and Treviño's (1997) study stated that a strong correlative relationship exists between a student's age and the likelihood he/she will participate in academically dishonest behaviors. Specifically, the research suggested that it is more common for younger students to engage in academically dishonest behaviors than older students. These results tend to be consistent with the larger body of research (Klein, Levenburg, McKendall, & Mothersell, 2007).

In contrast to the results of their peers, Soroya, Hashmi, and Soroya (2016), in their assessment of students at Pakistani institutions, found that younger students were less likely than their older peers to engage in academically dishonest behaviors. In fact, students in the 16-20 age group were more likely to exhibit behaviors consistent with academic integrity while those students in the 21-25 and >26 age groups were more likely to engage in academically dishonest behaviors. Chirikov, Shmeleva, and Loyalka (2019) echoed these results in their study of academic integrity in Russia, where junior and senior level students were more likely to engage in academically dishonest behaviors than their younger peers, possibly due to class sizes remaining consistent throughout their college careers.

Unfortunately, however, researchers have been unable to determine how much the relationship is based on age versus academic standing (Anton & Michael, 1983; Diekoff et al., 1996; Haines et al., 1986; Soroya et al., 2016). Some argue that students in their first and second years of college may find it easier to excuse cheating behaviors because they are often enrolled in larger lecture courses and the content does not appeal to their areas of interest (Lord & Chiodo, 1995; McCabe et al., 2001). On the other hand, students in their third and fourth years are often more integrated in to their academic programs and, therefore, are likely to show a greater level of interest in their courses and for the faculty with whom they've built relationships (McCabe et al., 2001). It is also possible that students in lower class level are less developmentally mature than their upperclassmen peers; therefore, they are more likely to engage in cheating behaviors. Others, however, suggest that as students age, they become more involved in external, non-academic activities, which can result in decreased focus on academics (Anderman & Won, 2017; Soroya et al., 2016).

Despite those who have hypothesized about the impact of class standing on academically dishonest behaviors, some studies have suggested that class level has a significant relationship to cheating behaviors (Park, Park, & Jang, 2013; Soroya et al., 2016). While Graham et al. (1994) found that there was a difference in the attitudes toward academic dishonesty in lower level students, these differences did not significantly impact their behaviors when compared to students in higher class levels. Brown (1995) supported these findings, indicating, "the actual incidences of cheating behavior between the two groups [lower- and upper-classmen] were no different" (as cited in Zimmerman, 1998).

Cumulative GPA. The impact of academic GPA on cheating behaviors has been well documented throughout the literature and suggests that students with lower GPAs are more likely

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to engage in academically dishonest behaviors than those with higher GPAs (McCabe &

Treviño, 1997, Klein et al., 2007; Teodorescu & Andrei, 2009). Often times, it is suggested that

students with lower GPAs will engage in cheating behaviors in order to avoid being kicked out

of school or losing a scholarship (Baird, 1980; Diekhoff et al., 1996; Lipson & McGavern, 1993;

Scheers & Dayton, 1987). As with the other individual characteristics, a few studies reported

finding no relationship between GPA and cheating behaviors (Kerkvliet, 1994; Singhal, 1982).

When accounting for skill level, Whitley (1998) argued that no relationship exists

between GPA and academically dishonest behaviors. These results suggest that students are

more likely to engage in academic dishonesty in order to avoid earning a poor grade rather than

because they do not have the academic knowledge base. This echoes the early work by Drake

(1941), which suggested that competition for grades was a large factor in a student's decision to

engage in academically dishonest behaviors. Krou, Acee, Pino, and Hoff (2019), focused on the

perceived value of the course. They found that students were more likely to engage in

academically dishonest behaviors for high value courses, whereas in lower value courses, the

risk did not outweigh the potential benefit.

How do Students Cheat?

In addition to understanding why students engage in cheating behaviors, the literature

provides insight in to the various methods students use to cheat. For example, Bowers' (1964)

early research on cheating found that students engaged in plagiarism, copying from others on

tests or exams, and unauthorized collaboration. While there is a wealth of literature on academic

integrity issues, the majority of data have focused on text-based behaviors. However, the ways

in which students are engaging in academically dishonest behaviors has shifted as technology

has become more advanced (Simon et al., 2014). In fact, Strom and Strom (2007) argued that

new advances in technology and technological devices (i.e. wireless messaging devices, cell phones, MP3 players, the Internet) have resulted in more advanced means by which students can engage in academically dishonest behaviors.

While technology has impacted the ways in which students engage in cheating behaviors over the years, Faucher and Caves (2009) argued that academic dishonesty can be separated in three categories:

- Taking, giving, or receiving information from others;

- Use of forbidden materials or information; and

- Circumventing the process of assessment.

As previously mentioned, in conjunction with the normalization of engaging in academically dishonest behaviors across higher education and the "cheating culture" suggested by Callahan (2004), the literature points to students having the ability to understand extreme examples of academically dishonest behaviors (i.e. plagiarism), but experiencing difficulty when scenarios are less clearly defined (Curtis & Popal, 2011; Gullifer & Tyson, 2010; Gynnild & Gotschalk, 2008; McCabe, 2005; Simon et al., 2014). This concept was echoed by Arhin and Jones (2009), who found that, while students struggled to identify academically dishonest behaviors in situations that related to classroom and/or laboratory assignments, they did have a clearer definition of what constituted academic dishonesty in an examination setting. However, Molnar, Kletke, and Changwatpol (2008) found that, in instances where academically dishonest behaviors were exhibited, students were more likely to find the behaviors acceptable when more advanced technologies were used.

Furthermore, in reviewing the literature, it is surprising to see what students consider acceptable behavior. For example, across a number of surveys, most respondents did not

consider it plagiarism to resubmit work previously submitted (Curtis & Popal, 2011; Owunwanne, Rustagi, & Dada, 2010), and many students believed collusion to be an appropriate behavior (Baker et al., 2008; Owunwanne, et al., 2010).

Additionally, although the number of students who participated in self-reported cheating behaviors remained consistent over the years, McCabe's 1993 survey suggested that the way in which students cheated changed significantly. For instance, the occurrence of unpermitted collaboration increased by more than 4 times the rate found in Bowers' original study (Cole & McCabe, 1996), and it was argued that the increase in unpermitted collaboration may likely be caused by a number of factors including:

- Workplace environments that expect and reward teamwork;
- Students' arguments surrounding the pedagogic value associated with collaborative learning; and
- Reinforcement by national organizations, conferences, and publications of the value to the student and faculty collaborative learning experience.

How students engage in academically dishonest behaviors, as well as the perception of what constitutes academic dishonesty, is exhibited in students' self-reported cheating behaviors. Lipson and McGavern (1993), in their study of 891 undergraduate students at the Massachusetts Institute of Technology (MIT), reported alarming results based on students' self-reported cheating behaviors. Their undergraduate academic dishonesty survey revealed that 83% of students indicated cheating on homework and 71% self-reported having plagiarized or misrepresented work.

As previously mentioned, the continued emergence of new technology adds new dimensions to the concept of academic integrity in higher education. In fact, Stephens et al.

(2007) argued that web-based acts of academic dishonesty have exceeded the rate of conventional approaches. This argument was echoed in the 2011 study by Higbee, Sanford, and Schultz, which included the use of electronic devices and materials purchased or found online to the list of academically dishonest behaviors. The results of their study suggested that students only considered "cutting and pasting" cheating if the work was not cited.

With emerging technology, students will continue to find new methods of cheating in the academic setting and faculty will struggle to stay up to date with the myriad ways in which students engage in these behaviors. However, because academic dishonesty is so hard to define, it will be critical that administrators and faculty members continuously monitor students' behaviors.

Ways to Reduce Cheating Behavior

The first steps in combating the "cheating culture" in higher education are to clearly define academically dishonest behaviors and determine which students are more likely to engage in them. However, it is equally important to define tools within higher education that can be used by administrators, faculty, and peers to curb these behaviors. McCabe, Butterfield, and Treviño (2012) posited that part of the solution is to create an environment that encourages academic honesty. "The ethical culture can be best understood as a complex interplay among various formal and informal cultural systems that can promote either ethical or unethical behavior" (p. 168). As such, a review of the literature on academic integrity offers suggestions for addressing academic dishonesty, from the use of honor codes to clearly defined faculty expectations. While these strategies may not be sufficient on their own, students are less likely to engage in academically dishonest behaviors when we model the ways in which we want them to act (Calluzo & Cante, 2004; Champoux, 2006).

Honor Codes. One of the ways institutions of higher education have sought to curb these

behaviors is through honor codes. Honor codes are not necessarily new to higher education. In

fact, the University of Virginia, for example, has an honor code dating back to 1840, in which

students promised not to cheat, lie, or steal (Carter, 2008).

While honor codes are not a cure-all, they have been widely used to establish and foster

an environment where academically dishonest behaviors are socially unacceptable and are an

effective and important part of building a community-wide culture of ethical behavior (Damaste,

2008; McCabe et al., 2012; Rawe, 2007; Treviño, Butterfield, & McCabe, 1998, Williams,

2012). While these codes cannot prevent a student from engaging in cheating behaviors, the

existence of an honor code on a college or university campus does help to communicate the

institution's expectations (Fass, 1986; May & Loyd, 1993). Lanier (2006) argued that honor

codes are more effective when positive behaviors and values are emphasized rather than focusing

on what should not be done. In fact, educational environments in which students are supported

can result in increased instances of honesty, problem solving, professionalism, morality, and

ethical decision making (Baxter & Boblin, 2007; Davis et al., 1992; McCabe et al., 2002;

Solomon & DeNatale, 2000, 2005).

In those institutions of higher education that have ascribed to the concept of honor codes,

the literature suggests are generally two types of honor codes that may be implemented:

traditional and modified. Traditional honor codes are most commonly found on small to mid-

size institutions that are predominantly residential in nature (McCabe et al., 2002). Melendez

(1985) suggested that traditional honor codes should include at least one of four basic

components, (a) unproctored exams; (b) a written commitment or pledge whereby a student

affirms the (s)he has not cheated on an exam or assignment; (c) a judicial or hearing process in

which students play a major role; and (d) the expectation that students will report violations of the code that they observe.

Unlike traditional honor codes, however, McCabe et al. (2002) argued that modified honor codes are generally found at larger universities and have the following characteristics: (a) focus on academic dishonesty; (b) communicate to students that academic integrity is a major priority; and (c) give students a major role in educating other students about the code and in serving on a judicial or hearing body.

In looking at the differences in characteristics between the traditional and modified honor code, as defined by McCabe et al. (2002), one could argue that the traditional honor code is more punitive in nature and places more of a focus on reporting and punishing students who engage in academically dishonest behaviors. On the other hand, the modified honor code places a greater emphasis on education and self-ownership. These differences can impact the success of Academic Integrity programs across higher education. Accordingly, the Center for Academic Integrity survey found that, students who attend institutions with traditional honor codes were less likely to report incidents of serious cheating than their peers at institutions with a modified or no honor code (McCabe & Pavela, 2004). Modified honor codes, on the other hand, have been found to be the most effective in that, rather than compelling a student to report the academically dishonest behaviors they observe, they encourage students to become involved in the promotion of, and adherence to, academic integrity policies (McCabe & Pavela, 2004).

The Role of the Faculty and the Institution. For students, faculty members play an important role in their understanding of academic integrity (Aasheim, Rutner, Li, & Williams, 2012; Robinson & Glanzer, 2017; Tabsh, El Kadi, & Abdelfatah, 2019). As discussed previously, this proves to be an important issue when tackling student attitudes and behavior

given the literature indicating that one of the factors that contributes to the likelihood of a student engaging in academically dishonest behaviors is the perception that institutional administrators and faculty are turning a blind eye to these acts. To address this behavior and aid in the creation of a culture of academic integrity, Lang (2013) suggested faculty be taught to do the following: "(1) foster intrinsic motivation in their students; (2) create environments that prize mastery of learning over performance learning; (3) focus on low-stakes assessments which offer students ample opportunity to practice their knowledge of the classroom concepts; and (4) instill a confident, yet realistic self-efficacy within their students." (as cited in Robinson & Glazner, 2017).

Unfortunately, the ambiguity associated with academic dishonesty continues to be one of the primary reasons students engage in these behaviors (Owunwanne et al., 2010). It is, however, also one of the areas in which the institution and faculty can make specific and detailed changes. To do so, McClung and Schneider (2014) identified a list of 18 categories of academic behavior. They asserted that by defining these behaviors, discussion could take place and faculty members would be able to "clearly articulate personal or course expectations to students therefore reducing ambiguity which will reduce the incidence of dishonest behaviors" (p. 2).

The research also suggests a number of practices at the institutional level which may impact academic integrity in higher education. Some of these suggestions include a shift toward a positive academic integrity culture; the creation and implementation of academic integrity education programs, to begin as early as orientation; and the clear communication of expectations, standards, and policies, to including a clear definition of the consequences of engaging in academically dishonest behaviors, classroom discussions, newsletters, and the use of situational examples (Aasheim et al., 2012; Elias, 2009; Kisamore, Stone, & Jawahar, 2007;

Klein et al., 2007; Molnar et al., 2008; Simkin & McLeod, 2010; Wilson, 2008). To address the relative consistency of violations of academic integrity that have continued to take place throughout the years, many institutions are taking advantage of technological advances. For instance, Cronan et al. (2017) studied the effects of a technology-based intervention aimed at promoting a culture of integrity. Their results suggested that, regardless of year, discipline, and institution, a web-based intervention "significantly improved student knowledge regarding [academic integrity], as well as improved attitudes toward AI" (p. 102).

Summary

As the literature presented in Chapter Two demonstrates, moral development and maturity have an important influence on students' cheating behaviors. In addition to the ethical perspective, a student's attitude and demographic characteristics, including gender, class level, and cumulative GPA, can influence these behaviors. Therefore, this study serves to examine students' attitudes toward academic dishonesty and their unique demographic characteristics in order to understand how these variables may impact cheating behaviors.

Chapter Three discusses the study's research design, population, and sample as well as the data source that was utilized. Additionally, Chapter Three describes the study's instrument, The Academic Integrity Student Survey (AISS), and the data analysis techniques that were employed.

CHAPTER THREE

Methods

Introduction

The review of the literature outlined the pervasiveness of academic dishonesty across higher education. Moreover, it appears that researchers have analyzed both institutional and individual student characteristics and have found a connection between students' perceptions and the likelihood of engagement in academically dishonest behaviors. However, most of the research has focused on broad-based, multi-institutional studies that address academic dishonesty in the context of higher education as a whole. The current study, on the other hand, attempts to contribute to the body of research through examining students' attitudes toward academic dishonesty and their possible correlation to self-reported cheating behaviors at one large, public institution in the Southeast, the University of South Florida. Chapter Three provides an overview of the study's research design, population, and sample as well as the data source that was utilized. Additionally, Chapter Three describes the study's instrument, The Academic Integrity Student Survey (AISS), its administration, and finally, provides a timeline of study completion.

As previously outlined, this study was guided by the following five research questions:

1. What is the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors?

2. What is the relationship between gender and students' attitudes toward academic dishonesty?

3. What is the relationship between gender and students' self-reported cheating behaviors?

4. What is the relationship between self-reported academic variables (class level and cumulative GPA) and students' attitudes toward academic dishonesty?

5. What is the relationship between self-reported academic variables (class level and cumulative GPA) and students' self-reported cheating behaviors?

Research Design

For the purpose of this research study, a quantitative analysis of secondary data from the Spring 2014 administration of the Academic Integrity Student Survey (AISS) was used in order to examine the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors. Both parametric and non-parametric statistical analyses, including descriptive statistics, the Pearson Product-Moment Correlation Coefficient, Independent T-test, Mann-Whitney U-test, One-way Analysis of Variance (ANOVA), and Kruskal-Wallis H-test were employed to determine whether gender and academic variables, including class level and cumulative GPA, relate to the magnitude of the relationship between a students' attitudes and their cheating behaviors.

Population and Sample

Data collected from the AISS, as well as institutional information gathered from the University of South Florida (USF), were employed for the current study. These data were used to evaluate the relationship between undergraduate students' attitudes toward academic dishonesty and their self-reported cheating behaviors. The population for this study is from the USF Tampa Campus.

In an effort to contextualize the population and sample for the current study, it is important to understand how academic integrity practices have developed at the University of South Florida (USF). Current efforts to create and maintain an ethical community at USF are overseen by the Ethics & Integrity Council (EIC). Established in Spring 2011 by the USF President, the EIC brings together members of the student body, faculty and staff to advise institutional leadership on "policies, procedures and practices affecting students' academic integrity, ethical development, and respect for the global community at the University of South Florida" (EIC 2012-2013 Annual Report, 2013, p. 1). According to the 2012-2013 Annual Report, the Council was charged with expanding initiatives across 13 areas, including the promotion of USF's Commitment to Honor, the review of university policies and procedures related to ethical behavior and academic integrity, the study of best practices, engagement in research, and collaboration with resources across campus, among others (pp. 2-8).

Over the years, USF has strived to meet these original charges through expanding, developing, and implementing of a number of resources that revolve around the institution's Commitment to Honor. Currently, the EIC's Academic Integrity webpage is used as the centralized home for resources related to Academic Integrity and Ethics on the USF campus. Here, members of the USF community can find information regarding not only the Commitment to Honor, but also how to prevent dishonesty, Research Ethics, and Academic Policies (EIC, 2018).

In addition to the resources readily available to the university community, USF has acted to ensure that Academic Integrity and Ethics are an integral part of the experience for incoming students from the beginning of their time at USF. All new students to USF, whether first-year or transfer, are exposed to the university's Commitment to Honor during their mandatory

Orientation session. During this time, students watch a Commitment to Honor video, which provides an overview of the importance of behaving in an ethical manner. Students are also required to complete the Academic Integrity tutorial during their first semester at USF. The tutorial is intended to review the Academic Integrity Policies and provide students with a basic understanding of why integrity and ethical behavior are critical to their success as an undergraduate student.

At the time of survey administration, USF's main campus was, and continues to be, classified by the Carnegie Foundation for the Advancement of Teaching in the Highest Research Activity category. The institution is a large four-year, primarily nonresidential, public, high undergraduate, medium full-time, selective, higher transfer-in institution located in West-Central Florida (Carnegie Classification, 2017). During the 2013-2014 academic year, the USF Tampa campus sat on 1,562 acres and had 263 buildings (USF Office of Decision Support, 2015). Additionally, there were approximately 4,000 Administrative and Professional and Support Staff personnel, and more than 2,000 full-time faculty employed by the institution (USF Office of Decision Support, 2014).

USF Tampa is one of three separately accredited institutions that makes up the University of South Florida System, including USF Tampa, USF St. Petersburg, and USF Sarasota-Manatee. Combined, in the 2013-2014 academic year, these three institutions served a population of 47,943 students, of which 36,059 (75%) were studying at the undergraduate level (USF Office of Decision Support, 2014). Additionally, the USF system maintained an annual operating budget of approximately $1.59 billion and was ranked 50th in the nation for research expenditures among all universities, public or private (USF Office of Decision Support, 2014).

In Fall 2013, data indicated enrollment of 30,425 (74%) undergraduate students at the USF Tampa campus. Approximately 77% percent of those students, or 23,483, were enrolled in at least 12 credit hours (full-time) course loads (USF Office of Decision Support, 2014). For USF Tampa, the reported student: faculty ratio in Fall 2016 was 24:1 (USF Office of Decision Support, 2014). Figure 1 depicts trend information, based on final headcount numbers, for enrollment in the Fall term at the USF Tampa campus over the past five years.
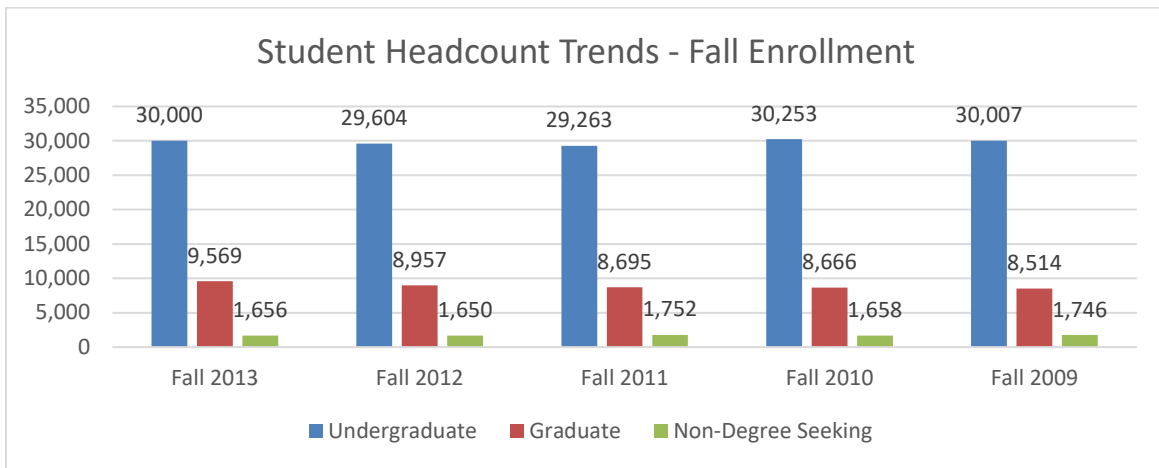

Figure 1: Final Student Headcount Trends – Fall Enrollment (USF ODS, 2018)

Figure 2 shows similar student trend headcount information; however, the information is based on enrollment in the Spring term.
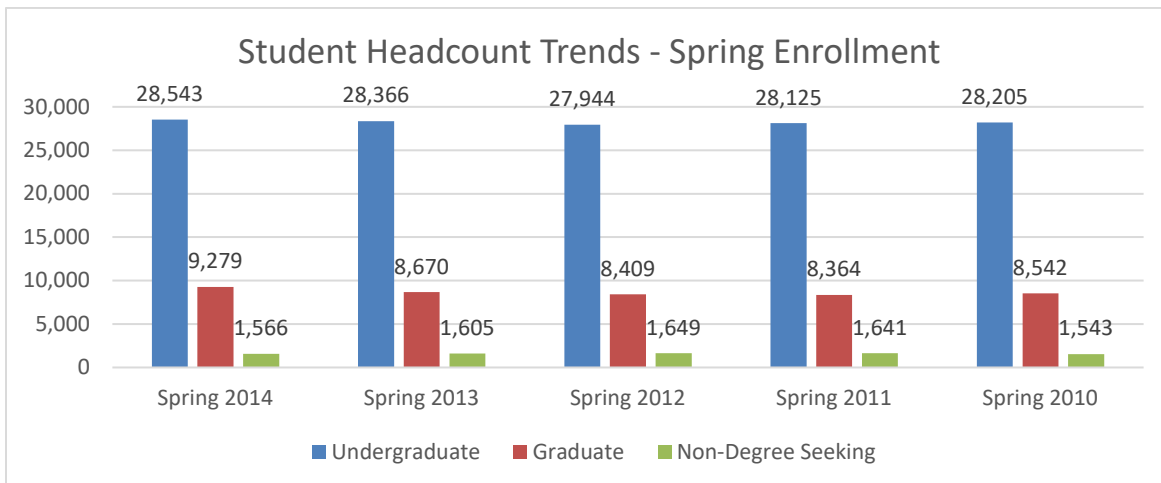

Figure 2: Final Student Headcount Trends – Spring Enrollment (USF ODS, 2018)

In an effort to better understand the sample used in the proposed study, additional information about the undergraduate student population at USF Tampa Campus for the 2013-2014 academic year is provided. Of the 30,425 undergraduate students enrolled as of the end of the Drop/Add week in Fall 2013, 45 percent of the population identified as male while 55 percent identified as female. First-time in College (FTIC) student enrollment was at 3,995 with an average high school GPA of 4.00, average SAT score of 1200, and average ACT score of 27. In addition to the FTIC freshmen enrolled in Fall 2013, USF Tampa Campus also admitted 3,868 transfer students; the majority of whom transitioned from a Florida College System institution (USF Office of Decision Support, 2014).

Study Participants

The original data set included 845 student responses from submitted AI Surveys administered during the Spring 2014 semester. The survey was administered to students at all levels (undergraduate and graduate), and all demographic information obtained was self-reported. Responses were not tied to university identification numbers; therefore, additional institutional data were not available. For the purposes of this study, the data were delimited to include undergraduate level students (as defined by institutional data) enrolled at the USF Tampa Campus. Additionally, the sample included only those students who submitted responses for the variables gender, class level, and cumulative GPA.   Finally, the sample included those students who responded to at least one question in the quantitative portion of the survey.

In an initial review of the data set, missing records and the records of graduate-level students, who were not a focus of this study, were removed. This resulted in a reduction of 252 students from the original data set. Students who did not provide at least one response to the questions in the "Specific Behaviors" section of the AISS were also removed from the data set.

Finally, students who were missing demographic information, such as gender, class level, and cumulative GPA were removed from the data set. The final data set included 574 students who met all criteria for inclusion based on their completed AISS responses.

In comparison to the total population, the study's sample was not generally representative in terms of the demographic breakdown of respondents. For example, in the Spring 2014 semester, institutional data reflects a USF Tampa undergraduate population comprised of approximately 55.3% female and 44.6% male students. The sample, on the other hand, reported participation of approximately 65.3% female and 34.7% male students. Responses were also not generally representative of the class level and cumulative GPA breakdowns across the institution's population. These variances suggest that, although responses to the AISS were not able to be tied to individual students, only certain types of students may have been likely to participate (i.e. specific majors, higher GPA, more collegiate experience). Additionally, because the sample was not representative of the total population, it may be difficult to generalize the results both at the institutional level and across similar institutions of higher education.

Instrument

The AI Student Survey was first developed by Dr. Donald McCabe in 1990. McCabe identified a variety of cheating behaviors and asked students to disclose whether they had engaged in these behaviors. Additionally, he was interested in both the students' perceptions of the seriousness of these behaviors, as well as their perceived likelihood of getting caught. This survey, which utilized many of the questions that were first developed for Bowers' 1964 study and reached more than 5,000 students at 99 different schools, was first administered to more than 6,000 students across 31 academic institutions (McCabe et al., 2001).

Since its development in 1990, McCabe's AI Student Survey has been widely used at institutions across the nation. Multi-institution studies (McCabe, 1993; McCabe and Bowers, 1994) have assessed both student and institutional characteristics that impact academic dishonesty, including the use of honor codes (Cole & McCabe, 1996). The survey has been updated within the last ten years to include changes in the academic landscape, including an increase in questions related to web-based courses and online reference tools.

The instrument, distributed to University of South Florida students in Spring 2014, consisted of four distinct sections. The first section, titled Academic Environment, asked students to provide information about the academic environment at the University of South Florida. The second section, Specific Behaviors, asked students to respond to questions about specific behaviors that may be considered cheating. In this section, students are reminded that the survey is anonymous and connections to individual answers or responses are not able to be made. The third section is titled Demographics. In this section, respondents were asked to provide information about their gender, class standing, academic major, cumulative GPA, and participation in pre-defined activities. The final section, entitled Free Responses, gave respondents the opportunity to provide additional open-ended feedback regarding academic integrity and/or the topic of cheating.

For the purposes of this study, data obtained from responses to questions in the "Specific Behaviors" and "Demographics" sections of the instrument were analyzed. Other data from the "Academic Environment" and "Free Responses" sections of the instrument were excluded. In the "Specific Behaviors" section of the survey, responses to 26 items were used to identify students' attitudes and behaviors toward academic dishonesty. This section of the survey asked students to indicate how often within the past year they had engaged in a set of behaviors using a

scale of "Never," "Once," "More Than Once," and "Not Relevant." Respondents were then

asked to identify how serious they believed each of the behaviors to be using a scale of "Not

Cheating," "Trivial Cheating," "Moderate Cheating," and "Serious Cheating." A few example

items include:

- "Helping someone cheat on a quiz, test, or examination";

- "Turning in a paper from a "paper mill" (a paper written and previously submitted

  by another student) and claiming it as your own work"; and

- "Using a false or forged excuse to obtain an extension on a due date or delay

  taking an exam."

Responses to the attitudes and behaviors items were scored individually per respondent in

order to appropriately analyze the data. To measure attitudes, responses were coded with a value

of one (1) for "Not Cheating," two (2) for "Trivial Cheating," three (3) for "Moderate Cheating,"

and four (4) for "Serious Cheating." Questions in which no response was provided were coded

as missing. An average score was reported for each respondent with a value ranging from 1 to 4,

with a lower average score suggesting the respondent does not perceive the indicated behavior to

be as cheating and a higher average score suggesting the respondent perceives the indicated

behaviors as serious cheating. For behaviors, responses were coded with a one (1) for "Never,"

two (2) for "Once," and three (3) for "More Than Once." Questions in which "Not Relevant" or

no response were provided were coded as missing. Once coded, an average behavior score was

reported for each respondent with a value ranging from 1 to 3, with a lower average score

suggesting the student either has engaged in academically dishonest behaviors less frequently

than other respondents and/or did not respond to a significant number of questions relating to

behavior, and a higher average score indicating the student has engaged in academically dishonest behaviors more frequently than other respondents.

Instrument Administration. The AISS was administered university-wide during the Spring 2014 semester to the USF Tampa campus via the Office of the Vice President of Student Affairs. The web-based survey was sponsored by the USF Ethics and Integrity Council and was conducted through the International Center for Academic Integrity (ICAI) research at Rutgers University. At the time of administration, students received an introductory email which contained information about the survey, its purpose, and a link to the online tool. Students were asked to complete the online survey within a three to four-week time frame. The survey itself resided at Rutgers University and all results were sent directly to that server to be compiled and stored for future analysis, including for the purposes of this study.

Reliability and Validity of Instrument. McCabe's Academic Integrity Student Survey has been widely used, both in his own research and in working with colleagues. Beginning in early 1990s, McCabe conducted a number of multi-institutional studies using the AISS. In his 1990 and 1995 studies, he surveyed 31 highly selective institutions that were predominantly private and medium to small in size. Of the 31 participating universities, 14 of the schools used honor codes. McCabe's 1993 survey, on the other hand, was conducted at nine medium to large public institutions. For this study, none of the nine institutions used an honor code. Across these three studies, in which 12 cheating behaviors were measured, McCabe reported a Chronbach's alpha reliability coefficient of .799 in 1990, .842 in 1993, and .818 in 1995 (as cited in Zimmerman, 1998). In 2004, additional cheating behaviors were added to the AISS to address the changing landscape of higher education. A 2007 calculation of the Chronbach's alpha based on these 26 behavioral items was calculated as .94 (as cited in Christensen, 2011).

Unfortunately, due to the retirement and subsequent passing of the instrument author, specific information regarding the reliability of later studies was not available. However, the International Center for Academic Integrity reported that, based on surveys conducted by McCabe and the ICAI between 2002 and Spring 2015, more than 71,300 undergraduate and 17,000 graduate students had participated in providing responses (ICAI Statistics, 2018).

Prior to being administered in the Spring 2014 semester, the AISS was reviewed by the Vice President of Student Affairs and the USF Ethics and Integrity Council (EIC) to establish content and face validity (USF EIC Report, 2014). Additionally, McCabe continued to conduct major surveys using the AISS up until his retirement in 2010, and the extensive use of the survey over this extended period of time across his own research, as well as in dissertations and research articles focused on academic integrity, serves to help establish the content validity of the survey.

Variables and Data Analysis Procedures

For the purpose of this study, statistical analysis of the data was completed using the Statistical Package for the Social Sciences (SPSS) software. Descriptive statistics provided a basis of analysis for the independent variables of gender, class level, and cumulative GPA. Appropriate statistical analyses of the data were conducted, and the results of the analyses were considered statistically significant if $p < .05$. In addition to the descriptive statistics, the below statistical analyses of the study's research questions were conducted.

Additionally, a number of variables, as outlined below, were examined in the current study.

1. **Student attitude toward academic dishonesty (SA):** Refers to a student's perception of the severity of each type of behavior.

2. **Cheating behavior (CB):** Refers to specific, self-reported behaviors that some may consider cheating.

3. **Gender:** This categorical variable distinguished between students who identify as male or female.

4. **Class Level:** Refers to a student's academic class standing based on credit hours. This categorical measure that will be differentiated based on a student's class standing as a Freshman, Sophomore, Junior, or Senior.

5. **Cumulative Grade Point Average (GPA):** This is a measure of all undergraduate level grades received throughout a student's academic history at both USF and any previous institution of higher education. While GPA tends to be a continuous measure, for the purposes of the proposed study, the variable is measured categorically in that students must select from one of the following options, which will be coded as indicated:

These variables will be defined as independent or dependent based on the research questions.

Question One: Descriptive statistics are provided for both the independent and dependent variables, students' attitudes towards academic dishonesty and self-reported cheating behaviors. Additionally, a Pearson product-moment correlation coefficient was used to measure the strength of the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors.

For the first research question, student attitudes towards academic dishonesty serves as the independent variable. This is a continuous measure of the independent variable resulting in classification of student attitudes along a Likert-type scale. These independent variables were

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coded with a value of one (1) for "Not Cheating," two (2) for "Trivial Cheating," three (3) for "Moderate Cheating," and four (4) for "Serious Cheating." Questions in which no response was provided were coded as missing. Once coded, an average attitude value was calculated for each participant based on their individual responses.

The dependent variable for this question is self-reported cheating behaviors, as measured by the "Specific Behaviors" section of the Academic Integrity Student Survey. The questions in this section of the survey related to behaviors measure the frequency of engagement on a Likert style scale. These continuous dependent variables were coded with a value of one (1) for "Never," two (2) for "Once," and three (3) for "More Than Once." Questions in which "Not Relevant" or no response were provided were coded as missing. Once coded, an average behavior value was calculated for each participant based on their individual responses.

Questions Two and Three: Descriptive statistics are provided for the independent variable Gender. For Question Two, an Independent-samples T-test was used to compare means by gender based on the dependent variable Attitudes. For Question Three, a Mann-Whitney U-test was used to compare means by gender for the dependent variable Behaviors.

For Research Questions Two and Three, the independent variable is Gender, which is categorical in nature. Respondents who identified as female were coded with a value of one (1). Respondents who identified as male were coded with a value of two (2).

The dependent variable for Question Two is students' attitudes toward academic dishonesty, which is measured by the "Specific Behaviors" section of the Academic Integrity Student Survey. The questions in this section of the survey relate to student attitudes and measure the perceived seriousness of the behavior on a Likert-style scale. These continuous dependent variables were coded with a value of one (1) for "Not Cheating," two (2) for "Trivial

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Cheating," three (3) for "Moderate Cheating," and four (4) for "Serious Cheating." Questions in which no response was provided were coded as missing.

For the third research question, the dependent variable is self-reported cheating behaviors, as measured by the "Specific Behaviors" section of the Academic Integrity Student Survey. The questions in this section of the survey relate to behaviors and measure the frequency of engagement on a Likert style scale. These continuous dependent variables were coded with a value of one (1) for "Never," two (2) for "Once," and three (3) for "More Than Once." Questions in which "Not Relevant" or no response were provided were coded as missing.

Questions Four and Five: Descriptive statistics are provided for the academic variables of Class Level and Cumulative GPA. For Question Four, a One-way Analysis of Variance (ANOVA) was used to determine if there are statistically significant differences between the means for the categories associated with Class Level and the dependent variable Attitudes. Tukey's post-hoc test, which is run if the ANOVA returns a statistically significant difference in group means, helps determine where the differences occurred between groups. For the academic variable Cumulative GPA, a Pearson product-moment correlation coefficient was used to measure the strength of the relationship between Cumulative GPA and the dependent Attitudes.

For Question Five, a one-way ANOVA and Kruskal-Wallis H-test were used to examine the differences in means for the independent variable Class Level and the dependent variable Behaviors. Specifically, the one-way ANOVA and Kruskal-Wallis H-tests were conducted to compare the effect of Class Level on students' self-reported cheating behaviors in Freshmen, Sophomore, Junior, and Senior level students. The Kruskal-Wallis H-test, which is considered the non-parametric alternative to the Independent one-way ANOVA, was selected based on the

non-normal distribution of the data for the dependent variable Behavior. The ANOVA was also conducted for the independent variable class level because the HOV assumption was not violated. Additionally, a Pearson product-moment correlation coefficient was used to measure the strength of the relationship between the academic variable Cumulative GPA and the dependent variable Behaviors.

For Research Questions Four and Five, the independent variable is academic variables, which includes class level and cumulative GPA. The two variables that comprise this independent variable are defined and coded as follows:

Class Level is a categorical measure of a student's academic class standing. This variable was coded as follows: first year undergraduate (Freshman) was coded with a value of one (1), second year undergraduate (Sophomore) was coded with a value of two (2), third year undergraduate (Junior) was coded with a value of three (3), and fourth year undergraduate (Senior) was coded with a value of four (4).

For the purposes of the proposed study, cumulative GPA was measured and coded as a continuous variable, as follows: the three bottom GPA categories, 0.00 – 0.49 GPA, 0.50 – 1.49 GPA, and 1.50 – 2.49 GPA were combined and coded with a value of one (1), 2.50 – 3.49 GPA was be coded with a value of two (2), and 3.50 – 4.00 GPA was be coded with a value of three (3).

The dependent variable for Question Four is student attitudes toward academic dishonesty, which is also measured by the "Specific Behaviors" section of the Academic Integrity Student Survey. The questions in this section of the survey relate to student attitudes and measure the perceived seriousness of the behavior on a Likert-style scale. These continuous dependent variables were coded with a value of one (1) for "Not Cheating," two (2) for "Trivial

Cheating," three (3) for "Moderate Cheating," and four (4) for "Serious Cheating." Questions in

which no response was provided were coded as missing.

The dependent variable for Question Five was self-reported cheating behaviors, as

measured by the "Specific Behaviors" section of the Academic Integrity Student Survey. The

questions in this section of the survey related to behaviors and measure the frequency of

engagement on a Likert style scale. These continuous dependent variables were coded with a

value of one (1) for "Never," two (2) for "Once," and three (3) for "More Than Once."

Questions in which "Not Relevant" or no response were provided were coded as missing.

Table 2

Summary of Research Questions, Variables, and Statistical Application

Research Question	Variables	Statistical Application
Question One	IV: Students' Attitudes DV: Self-reported Cheating Behaviors	Descriptive statistics; Pearson Product-Moment Correlation Coefficient
Question Two	IV: Gender DV: Students' Attitudes	Descriptive statistics for Gender; Independent-Samples T-test
Question Three	IV: Gender DV: Self-reported Cheating Behaviors	Descriptive statistics for Gender; Mann-Whitney U-test
Question Four	IV: Academic variables (Class Level, Cumulative GPA) DV: Students' Attitudes	Descriptive statistics for Academic variables; One-way ANOVA for Class Level; Pearson Product-Moment Correlation Coefficient for Cumulative GPA
Question Five	IV: Academic variables (Class Level, Cumulative GPA) DV: Self-reported Cheating Behaviors	Descriptive statistics for Academic variables; Kruskal-Wallis H-test and One-way ANOVA for Class Level; Pearson Product-Moment Correlation Coefficient for Cumulative GPA

Summary and Timeline

   The research methods for this study included a quantitative analysis of post hoc de-identified data. Utilizing secondary data, the study includes analysis of students' attitudes toward academic dishonesty at the University of South Florida with the hopes that the information may prove useful to the institution in exposing educational and/or behavioral gaps that exist in the integrity culture at USF. A data file from the survey administrator was obtained in April 2019. All statistical analyses of the data were completed using SPSS software.

CHAPTER FOUR

Analysis of Data

The purpose of this study was to investigate the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors. Additionally, the study examined whether students' attitudes toward academic dishonesty and their self-reported cheating behaviors varied based on gender or academic variables, including cumulative grade point average and class level.

Students completed the Academic Integrity Student Survey (AISS) during the Spring 2014 semester and provided responses to questions related to "Academic Environment", "Specific Behaviors", "Demographics", and "Free Responses". For the purposes of this study, only the responses provided to the "Specific Behaviors" and "Demographics" sections of the AISS were evaluated.

Sample Population and Demographic Profile

After removing incomplete and graduate level surveys, as indicated in Chapter Three, the final data set included 574 students who met all criteria for inclusion based on their completed AISS responses. Demographic data were collected including gender, class level, and cumulative GPA. The demographic analysis for the 574 respondents based on the self-reported data from the AISS are shown in Tables 3, 4, and 5 and included 375 (65.3%) female students and 199 (34.7%) male students. Freshmen level students made up 13.1% of the sample ($n = 75$), Sophomore level students made up 12.0% of the sample ($n = 69$), Junior level students made up 28.6% of the sample ($n = 164$), and Senior level students made up 46.3% of the sample ($n =$

266). Finally, of the sample, 17 students (3.0%) reported having less than a 2.50 cumulative

GPA, 279 students (48.6%) reported having between a 2.5 and 3.49 cumulative GPA, and 278

students (48.4%) reported having a cumulative GPA of 3.5 or higher.

Table 3
Frequency Distribution by Gender

Variable	Frequency	Percent	Valid Percent	Cumulative Percent
Female	375	65.3	65.3	65.3
Male	199	34.7	34.7	100
Total	574	100	100	

Table 4
Frequency Distribution by Class Level

Variable	Frequency	Percent	Valid Percent	Cumulative Percent
Freshman	75	13.1	13.1	13.1
Sophomore	69	12.0	12.0	25.1
Junior	164	28.6	28.6	53.7
Senior	266	46.3	46.3	100.0
Total	574	100.0	100.0	

Table 5
Frequency Distribution by Cumulative GPA

Variable	Frequency	Percent	Valid Percent	Cumulative Percent
0.00 – 2.49 GPA	17	3.0	3.0	3.0
2.50 – 3.49 GPA	279	48.6	48.6	51.6
3.50 – 4.00 GPA	278	48.4	48.4	100.0
Total	574	100.0	100.0	

Analysis of Research Questions

The following section will provide a detailed analysis of each of the five research

questions developed for this study. For the purposes of each statistical test, a significance level

of $\alpha=.05$ was used. Varying methods were used to analyze each of the research questions,

including the Pearson Product Correlation Coefficient, Independent T-Test, Mann-Whitney U-test, one-way Analysis of Variance (ANOVA), and the Kruskal-Wallis H-test.

Prior to using the Independent T-test and ANOVA, the assumptions of normality and homoscedasticity need to be tested. The data were examined for normality and homogeneity of variance (HOV) using the Levene's Test, which is less sensitive to departures of normality. For the dependent variable attitude, the data was normally distributed, with skewness of -1.93 ($SE =$ 0.11) and kurtosis of 4.27 ($SE = 0.21$). Additionally, the results of the Levene's test showed no statistically significant difference in variance when testing for either the independent variable gender, $F(1,539) = 0.31$, $p = 0.58$ or the independent variable class level, $F(3,537) = 2.56$, $p = 0.05$. Based on these analyses, the assumptions of normality and homoscedasticity for the variable Attitude were not violated by either gender or class level.

However, for the dependent variable behavior, the data was non-normally distributed, with skewness of 2.81 ($SE = 0.10$) and kurtosis of 10.68 ($SE = 0.21$). Additionally, the results of the analyses showed a statistically significant difference in variance for the independent variables of gender, $F(1,566) = 14.51$, $p = 0.0002$. For the independent variable class level, the results of the Levene's test showed no statistically significant difference in variance $F(3,554) = 1.32$, $p = 0.27$. Based on these analyses, the assumption of normality was violated for the variable behavior. The homoscedasticity for the dependent variable behavior was violated by the variable gender, but was not violated by the variable class level were violated.

Analysis of Research Question One

Question One: What is the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors?

To answer this question, a Pearson product-moment correlation coefficient was used to examine the relationship, between student's responses to the attitudes toward academic integrity and self-reported cheating behaviors questions in the "Specific Behaviors" section of the AISS.

Table 6 provides descriptive statistics (mean, standard deviation, and number of participants) for students' attitudes toward academic dishonesty and their self-reported cheating behaviors.

Table 6
Descriptive Statistics for Attitude and Behavior

	N	Minimum	Maximum	Mean	Std. Deviation
Attitude	541	1.00	4.00	3.2988	.6246
Behavior	558	1.00	3.00	1.1586	.2581
Valid N (listwise)	525				

The Pearson product-moment correlation analysis, as shown in Table 7, indicated a weak negative correlation between students' attitudes and their behavior. Specifically, the analysis suggested that as a student's attitude toward academic integrity (i.e. the perceived severity of specific behaviors) increases, their self-reported cheating behaviors decreases. These results are statistically significant ($r = -0.29$, $n = 525$, $p = 0.000$).

Table 7
Correlation of Attitude and Behavior

		Attitude	Behavior
Attitude	Pearson Correlation	1	-.28515[**]
	Sig. (2-tailed)		.00000
	N	541	525
Behavior	Pearson Correlation	-.28515[**]	1
	Sig. (2-tailed)	.00000	
	N	525	558

**. Correlation is significant at the 0.01 level (2-tailed).

Analysis of Research Question Two

Question Two: What is the relationship between gender and students' attitudes toward academic dishonesty?

To answer this question, an independent samples t-test was conducted to compare students' attitudes toward academic dishonesty in male and female students based on responses to questions in the "Specific Behaviors" and "Demographics" areas of the AISS. For the independent variable gender, respondents who identified as female were coded with a value of one (1). Respondents who identified as male were coded with a value of two (2). For the dependent variable attitude, responses were coded with a value of one (1) for "Not Cheating," two (2) for "Trivial Cheating," three (3) for "Moderate Cheating," and four (4) for "Serious Cheating." Questions in which no response was provided were coded as missing. An average score was reported for each respondent with a value ranging from 1 to 4.

In Table 8, descriptive statistics for the variable attitude according gender are presented.

Table 8
Descriptive Statistics for Attitude According to Gender

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Attitude	Female	354	3.33106	.63361	.03368
	Male	187	3.23796	.60428	.04419

The results of the independent samples t-test, represented in Table 9, indicated there was not a significant difference in the means for female students' ($M = 3.33$, $SD = 0.63$) and male students' ($M = 3.24$, $SD = 0.60$) attitudes toward academic dishonesty; $t(539) = 1.65$, $p = 0.099$.

Analysis of Research Question Three

Question Three: What is the relationship between gender and students' self-reported cheating behaviors?

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To answer this question, a Mann-Whitney U-test, which is the non-parametric equivalent

of the independent samples t-test, was conducted to compare students' self-reported cheating

Table 9

Independent Samples Test for Attitude by Gender

		t-test for Equality of Means						
							95% Confidence Interval of the Difference	
		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Attitude	Equal variances assumed	1.651	539	.09927	.09310	.05638	-.01765	.20385
	Equal variances not assumed	1.676	394.646	.09460	.09310	.05556	-.01613	.20233

behaviors by gender based on responses to questions in the "Specific Behaviors" and

"Demographics" areas of the AISS. For the independent variable gender, respondents who

identified as female were coded with a value of one (1). Respondents who identified as male

were coded with a value of two (2). For the dependent variable behaviors, responses were coded

with a one (1) for "Never," two (2) for "Once," and three (3) for "More Than Once." Questions

in which "Not Relevant" or no response were provided were coded as missing. An average score

was reported for each respondent with a value ranging from 1 to 3.

Table 10 provides the descriptive analysis for the variable behavior according to gender.

Although these descriptive statistics are presented, the information obtained is not particularly

useful because it does not provide information for the individual groups, in this case female and

male. Rather, values for the groups are combined and it is assumed that the combined groups are

also non-normally distributed.

The results of the Mann-Whitney u-test, presented in Table 11, indicated that there was no statistically significant difference in the behavior in male students ($M = 293.57$) and female students ($M = 272.23$), $U = 32286$, $p = 0.13$.

Table 10

Descriptive Statistics for Behavior by Gender

	N	Mean	Std. Deviation	Min.	Max.	Percentiles 25th	50th (Median)	75th
Behavior	558	1.15863	.25816	1.00	3.00	1.00000	1.04167	1.20000
Gender	574	1.34669	.47633	1.00	2.00	1.00000	1.00000	2.00000

Table 11

Mann-Whitney U-test for Behavior by Gender

		Ranks		
	Gender	N	Mean Rank	Sum of Ranks
Behavior	Female	368	272.23370	100182.0
	Male	190	293.57368	55779.0
	Total	558		

Test Statistics[a]	
	Behavior
Mann-Whitney U	32286.000
Wilcoxon W	100182.000
Z	-1.535
Asymp. Sig. (2-tailed)	.125

a. Grouping Variable: Gender

Analysis of Research Question Four

Question Four: What is the relationship between self-reported academic variables (class level and cumulative GPA) and students' attitudes toward academic dishonesty?

To answer this question, an Independent one-way Analysis of Variance (ANOVA) and Pearson product-moment correlation coefficient were conducted to compare responses to questions in the "Specific Behaviors" and "Demographics" areas of the AISS. Specifically, a one-way between subjects ANOVA was conducted to compare the effect of Class Level on students' attitudes toward academic dishonesty in Freshmen, Sophomore, Junior, and Senior level students. Additionally, a Pearson product-moment correlation coefficient was used to explore the relationship between student's responses to the attitudes toward academic integrity and cumulative GPA.

For the independent variable Class Level, respondents who identified as first year undergraduate (Freshman) were coded with a value of one (1), second year undergraduate (Sophomore) were coded with a value of two (2), third year undergraduate (Junior) were coded with a value of three (3), and fourth year undergraduate (Senior) were coded with a value of four (4). The independent variable cumulative GPA was measured and coded as follows: the three bottom GPA categories, 0.00 – 0.49 GPA, 0.50 – 1.49 GPA, and 1.50 – 2.49 GPA were combined and coded with a value of one (1), 2.50 – 3.49 GPA was be coded with a value of two (2), and 3.50 – 4.00 GPA was be coded with a value of three (3).

For the dependent variable attitude, responses were coded with a value of one (1) for "Not Cheating," two (2) for "Trivial Cheating," three (3) for "Moderate Cheating," and four (4) for "Serious Cheating." Questions in which no response was provided were coded as missing. An average score was reported for each respondent with a value ranging from 1 to 4.

Tables 12 and 13 provide descriptive statistics for the variable attitude according to the academic variable Class Level, both in total and by group.

Table 12

Descriptive Statistics for Attitude by Class Level

	N	Min.	Max.	Sum	Mean	Std. Deviation
Class_Level	574	1.00000	4.00000	1769.00000	3.0818815	1.04951711
Attitude	541	1.00000	4.00000	1784.69384	3.2988796	.62464550
Valid N (listwise)	541					

Table 13

Descriptive Statistics for Attitude by Class Level (by Group)

Attitude

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean Lower Bound	95% Confidence Interval for Mean Upper Bound	Min.	Max.
1.00000	69	3.1983694	.69911927	.08416407	3.0304226	3.3663162	1.00000	4.00000
2.00000	68	3.3772284	.38180391	.04630053	3.2848121	3.4696446	2.08000	4.00000
3.00000	153	3.2588145	.64958590	.05251591	3.1550592	3.3625699	1.00000	4.00000
4.00000	251	3.3297060	.63861852	.04030924	3.2503170	3.4090950	1.00000	4.00000
Total	541	3.2988796	.62464550	.02685561	3.2461253	3.3516338	1.00000	4.00000

Additionally, Table 14 provides the descriptive statistics for the variable attitude and the academic variable cumulative GPA.

Table 14

Descriptive Statistics for Attitude by Cumulative GPA

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Attitude	541	1.00000	4.00000	1784.69384	3.2988796	.62464550
Cum_GPA	574	1.00	3.00	1409.00	2.4547	.55472
Valid N (listwise)	541					

The results of the ANOVA, presented in Table 15, indicated there was not a significant effect of Class Level on students' attitudes toward academic dishonesty for the four conditions [$F(3, 537) = 1.37$, $p = 0.25$]. Because the results were not significant, a post hoc test was not required.

The Pearson product-moment correlation analysis, as shown in Table 16, indicated a weak positive correlation between students' attitudes and cumulative GPA.

Table 15
ANOVA for Attitudes by Class Level

Attitude					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.59859	3	.53286	1.36848	.25153
Within Groups	209.09968	537	.38938		
Total	210.69828	540			

Specifically, the analysis suggested that as a student's cumulative GPA increases, their attitude toward academic integrity (i.e. the perceived severity of specific behaviors) also increases. These results were not statistically significant ($r = 0.07$, n = 541, $p = 0.10$).

Table 16
Correlation of Attitude and Cumulative GPA

		Cum_GPA	Attitude
Cum_GPA	Pearson Correlation	1.00000	.06993
	Sig. (2-tailed)		.10422
	N	574	541
Attitude	Pearson Correlation	.06993	1.00000
	Sig. (2-tailed)	.10422	
	N	541	541

Analysis of Research Question Five

Question Five: What is the relationship between self-reported academic variables (class level and cumulative GPA) and students' self-reported cheating behaviors?

To answer this question, a one-way ANOVA, Kruskal-Wallis H-test, and Pearson product-moment correlation coefficient were conducted to compare responses to questions in the "Specific Behaviors" and "Demographics" areas of the AISS. Specifically, the one-way ANOVA and Kruskal-Wallis H-tests were conducted to compare the effect of Class Level on students' self-reported cheating behaviors in Freshmen, Sophomore, Junior, and Senior level students. The Kruskal-Wallis H-test, which is considered the non-parametric alternative to the Independent one-way ANOVA, was selected based on the non-normal distribution of the data for the dependent variable Behavior. The ANOVA was also conducted for the independent variable class level because the HOV assumption was not violated. Additionally, a Pearson product-moment correlation coefficient was used to explore the relationship between student's self-reported cheating behaviors and cumulative GPA.

For the independent variable Class Level, respondents who identified as first year undergraduate (Freshman) were coded with a value of one (1), second year undergraduate (Sophomore) were coded with a value of two (2), third year undergraduate (Junior) were coded with a value of three (3), and fourth year undergraduate (Senior) were coded with a value of four (4). The independent variable cumulative GPA was measured and coded as follows: the three bottom GPA categories, 0.00 – 0.49 GPA, 0.50 – 1.49 GPA, and 1.50 – 2.49 GPA were combined and coded with a value of one (1), 2.50 – 3.49 GPA was be coded with a value of two (2), and 3.50 – 4.00 GPA was be coded with a value of three (3).

For the dependent variable behaviors, responses were coded with a one (1) for "Never," two (2) for "Once," and three (3) for "More Than Once." Questions in which "Not Relevant" or no response were provided were coded as missing. An average score was reported for each respondent with a value ranging from 1 to 3.

In Tables 17 and 18, descriptive statistics for the variable behavior according to the academic variables Class Level and cumulative GPA, presented.

According to the results in Table 19, the Kruskal-Wallis H-test showed that there was no statistically significant difference between student's self-reported cheating behaviors by class level, $X^2(3) = 3.03$, $p = 0.39$, level students, 277.40 for Junior level students, and 274.17 for Senior level students.

Table 17
Descriptive Statistics for Behavior by Class Level

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Behavior	558	1.00000	3.00000	646.51600	1.15863	.25816
Class_Level	574	1.00000	4.00000	1769.00000	3.08188	1.04952
Valid N (listwise)	558					

Table 18
Descriptive Statistics for Behavior by Cumulative GPA

	N	Min.	Max.	Sum	Mean	Std. Deviation
Behavior	558	1.00000	3.00000	646.51600	1.15863	.25816
Cum_GPA	574	1.00000	3.00000	1409.00000	2.45470	.55472
Valid N (listwise)	558					

Table 19

Kruskal-Wallis H-Test Ranks for Behavior by Class Level

	Class_Level	N	Mean Rank
Behavior	Freshman	74	274.47297
	Sophomore	68	310.08088
	Junior	158	277.39557
	Senior	258	274.17054
	Total	558	

Test Statistics[a,b]	
	Behavior
Kruskal-Wallis H	3.03293
df	3
Asymp. Sig.	.38658

a. Kruskal Wallis Test

b. Grouping Variable: Class_Level

The results of the ANOVA, presented in Table 20, indicated there was not a significant effect of Class Level on student's self-reported cheating behaviors for the four conditions [$F(3, 557) = 0.47$, $p = 0.70$]. Because the results were not significant, a post hoc test was not required.

Table 20

ANOVA for Behavior by Class Level

Attitude					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.09454	3	.03151	.47150	.70226
Within Groups	37.02845	554	0.06684		
Total	37.12299	557			

The Pearson product-moment correlation analysis, as shown in Table 21, indicated a weak negative correlation between self-reported cheating behaviors and cumulative GPA. Specifically, the analysis suggested that as a student's cumulative GPA increases, their self-

reported cheating behaviors (i.e. engagement in cheating behaviors) decreases. These results were not statistically significant ($r = -0.05$, $n = 558$, $p = 0.21$).

Table 21

Correlation of Behavior and Cumulative GPA

		Cum_GPA	Behavior
Cum_GPA	Pearson Correlation	1	-.05287
	Sig. (2-tailed)		.21241
	N	558	558
Behavior	Pearson Correlation	-.05287	1
	Sig. (2-tailed)	.21241	
	N	558	574

Summary

Chapter Four provided an analysis of the results for each of the five research questions using the appropriate statistical methods. Using self-reported data collected from the Academic Integrity Student Survey (AISS), these statistical analyses concluded four main findings. First, the study found that there was a statistically significant correlation between students' attitudes toward academic dishonesty and their self-reported cheating behaviors. Specifically, as attitude increased, behavior decreased. Additionally, the study found that there were no significant differences in students' attitudes or their self-reported cheating behaviors based on gender. Third, the study found that there were no significant differences in students' attitudes or cheating behaviors based on the academic variable Class Level. Finally, the study found no significant correlation between the academic variable cumulative GPA and either attitudes or behaviors. Chapter Five provides a review of the findings and discusses the study's limitations and implications for practice, as well as makes recommendations for future research.

CHAPTER FIVE

Conclusions and Recommendations

Summary of Findings

Kohlberg's Theory of Moral Reasoning uses a behavioral lens to examine the way a person's moral development changes as their thinking transforms. Past research has supported Kohlberg's theory by seeking to better understand the effectiveness of deterrents to cheating on student's behavior and moral development (Diekoff et al., 1996, Haines et al., 1986). For the purposes of this research, there were three primary goals. For each goal, Kohlberg's theory was used as a guidepost in connecting moral reasoning and ethical decision making with students' perceptions of, attitudes toward, and likelihood of engaging in academically dishonest behaviors.

The first goal of the study was to determine the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors. Research by McCabe and Treviño (1993) suggests that student perceptions (attitudes) play a vital role in determining the likelihood of engagement in academically dishonest behaviors. These attitudes, as well as the normalization of cheating behaviors in institutions around the world (Callahan, 2004; Decoo, 2002; McCabe, 1992; Sims, 1993), have the ability to affect student's willingness to engage in acts of academic dishonesty.

The second goal of the study was to determine if there was a difference in either students' attitudes toward academic dishonesty or their self-reported cheating behaviors based on gender. While past research has criticized Kohlberg's Theory of Moral Reasoning for its bias toward males, it has nonetheless been widely generalized across genders and referenced in studies of

academic dishonesty at the collegiate level (Diekhoff, LaBeff, Clark, Williams, Francis, & Haines, 1996; Fraedrich, Thorne, & Ferrell, 1994; Haines, Diekhoff, LaBeff, & Clark, 1986). Much of the research on gender differences found little significant difference between male and female students (Whitey et al., 1999). However, some literature suggested that female students were less likely to engage in cheating behaviors than male students, with the possible differences being a result of moral orientation or moral standards and expectations (Franke, Crown, & Spanke, 1997; Kristiansen & Hotte, 1996).

The third goal of the study was to determine if there was a difference in either students' attitudes toward academic dishonesty or their self-reported cheating behaviors based on the academic variables of class level and cumulative grade point average. The existing research on the relationship between student classification (class level) and cheating behaviors is rather limited (McCabe et al., 2001), whereas there is a significant body of literature on the relationship between age and these same behaviors. Some researchers suggested that students in the first and second years of college may be more likely to excuse cheating behaviors due to enrollment in larger lecture courses and a lack of interest in the course content (Lord & Chiodo, 1995; McCabe et al., 2001). Students in their third and fourth years, on the other hand, are often less likely to engage in these behaviors, as they are often more emmeshed in their academic programs and are likely to show a greater level of interest in their courses (McCabe et al., 2001). With regards to GPA, most of the literature suggests that students with lower GPAs are more likely to engage in academically dishonest behaviors (McCabe & Treviño, 1997, Klein et al., 2007; Teodorescu & Andrei, 2009). Most often, the decision to engage these dishonest behaviors is centered around the fear of being dismissed from school or losing a scholarship (Baird, 1980; Diekhoff et al.,

1996; Lipson & McGavern, 1993; Scheers & Dayton, 1987) as opposed to not having the appropriate knowledge base (Whitley, 1998).

The study presented five research questions aimed at addressing these goals. The data were collected from the Academic Integrity Student Survey, which was administered to undergraduate students at the University of South Florida in the Spring 2014 term. This chapter will review the findings of the five research questions, as well as discuss the limitations of the study, implications for practice, and recommendations for future research.

Findings Regarding Students' Attitudes and Behaviors

The first research question sought to explore the relationship between students' attitudes toward academic dishonesty and their self-reported cheating behaviors.

To answer this question, a Pearson product-moment correlation coefficient was conducted to evaluate the nature and strength of the relationship between students' attitudes and their self-reported cheating behaviors using responses to the "Specific Behaviors" section of the AISS. These questions asked students to indicate how often within the past year they'd engaged in specific academically dishonest behaviors (behavior) and to rate how serious they believed each behavior to be (attitude). The results of this analysis suggest that, as a student's attitude toward academic integrity (i.e. the perceived severity) increases, their self-reported cheating behaviors decreases. Albeit weak, the results were statistically significant at the $p < .05$ level ($r = -0.29$, $n = 525$, $p = 0.000$).

A review of the literature on the prevalence of academic dishonesty suggests the emergence of a "cheating culture" in higher education (Callahan, 2004). In this environment, the normalization of academically dishonest behaviors extends not only to students, but also faculty and administrators and can affect institutions' ability to implement academic integrity programs

(Broeckelman-Post, 2008). Past research also suggests that social networks and the perception of support by peers serves to normalize cheating behaviors among peer groups (Hulsart & McCarthy, 2011; McCabe and Treviño, 1993). However, some researchers noted that contextual factors, including faculty response, fear of negative consequence, social learning, and honor codes were shown to have an impact on student behavior (Canning, 1956; Culiberg & Mihelič, 2019; Jendrek, 1989; Michaels & Miethe, 1989; Tabsh et al., 2019; Tittle & Rowe, 1973). While these contextual factors were not specifically examined for this study, the results are consistent with the existing body of research which focuses on the importance of both individual and contextual factors on a student's decision to engage in academically dishonest behaviors.

Findings Regarding Students' Attitudes and Gender, Class Level, and GPA

The second and fourth research questions focused on determining the relationship between students' attitudes toward academic dishonesty and the individual characteristics of gender, class level, and GPA.

To answer question two, an independent samples t-test was conducted to compare students' attitudes toward academic dishonesty in male and female students. In order to answer the fourth question, an Independent one-way Analysis of Variance (ANOVA) was conducted to compare the effect of Class Level on students' attitudes toward academic dishonesty. Additionally, a Pearson product-moment correlation coefficient was used to explore the relationship between students' attitudes toward academic integrity and cumulative GPA. Both questions two and four utilized responses from the "Specific Behaviors" and "Demographics" areas of the AISS.

The results of the independent samples t-test analysis, conducted for question two, concluded that there was no significant difference in the means for female and male student's

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attitudes toward academic dishonesty. While female students had a marginally higher average attitude score ($\mu = 3.33$) than their male peers ($\mu = 3.24$), it cannot be determined to what the difference in means is attributed.

Previous research has focused heavily on the impact of gender on cheating behaviors; whereas the literature is less prevalent in regards to cheating attitudes. In their 1999 meta-analysis of gender differences in cheating attitudes and cheating behaviors, Whitley et al. noted little significant difference between male and female students. However, while the results of this study are not statistically significant, they do appear to align with the literature surrounding the socialization of female students, which suggests that female students are often held to higher expectations and standards than male students (Franke, Crown, & Spanke, 1997; Kristiansen & Hotte, 1996). These higher standards and expectations, in turn, may impact the way a student perceives acts of academic dishonesty and the severity of these behaviors.

For Research Question Four, the findings of the ANOVA indicated that there was no statistically significant difference in attitudes towards academic dishonesty between Freshmen, Sophomore, Junior, and Senior level students. Additionally, despite not being statistically significant, the results of the Pearson product-moment correlation coefficient indicated a weak, positive correlation between attitudes and cumulative GPA. These finding suggest that individual or contextual factors that impact a student's GPA may have some impact on a student's perception of the severity of academically dishonest behaviors.

In reviewing the literature, there was a consistent lack of research regarding the effect of individual factors, such as class level and cumulative GPA, on students' attitudes toward academic dishonesty. While Graham et al. (1994) found that there was a difference in the attitudes toward academic dishonesty in lower level students, the differences were not

statistically significant. Additionally, Soroya et al. (2016) suggested that, as they advance in age, students are likely to have a decreased focus on academics, which could impact their perceptions of, and likelihood to engage in acts of academic dishonesty. With researchers (Brown et al., 2019; Klein et al. 2007; McCabe and Treviño, 1997) in agreement that a strong relationship exists between a student's age and the likelihood they will participate in academically dishonest behaviors, continued research surrounding the what impacts the perceptions and attitudes of students as they advance in class standing are warranted. Past research also argued the importance of contextual factors related to GPA when determining students' attitudes toward academic dishonesty. For example, in some of the seminal work in the field of academic integrity, Drake (1941) suggested that when students are competing for grades, they're more likely to view academically dishonest behaviors as necessary and justified.

Although this study did not find any statistical significance in students' attitudes toward academic dishonesty based on the individual characteristics of gender, class level, or cumulative GPA, further exploration into student's perceptions and attitudes would help institutions in discovering how best to prevent and address incidences of academic dishonesty. Additionally, given the increasing retention and persistence rates at USF, it would be beneficial to have a more thorough understanding of the impact of contextual factors on a student's attitude toward academic integrity.

Findings Regarding Cheating Behaviors and Gender, Class Level, and GPA

The third and fifth research questions focused on determining the relationship between students' self-reported cheating behaviors and gender, class level, and GPA.

To answer question three, a Mann-Whitney U-test was conducted to compare self-reported cheating behavior in male and female students. In order to answer the fifth question,

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multiple analyses were used. First, an ANOVA and Kruskal-Wallis H-test were conducted to compare the effect of Class Level on self-reported cheating behaviors. Additionally, a Pearson product-moment correlation coefficient was used to explore the relationship between self-reported cheating behavior and cumulative GPA. Both questions three and five utilized responses from the "Specific Behaviors" and "Demographics" areas of the AISS.

The results of the Mann-Whitney u-test concluded that there was no statistically significant difference in the cheating behavior of male and female students. While, male student did have a slightly higher average behavior score (μ = 293.57) than their female peers (μ = 272.23), it is not possible to determine what attributed to the difference in means.

Prevailing research in the area of academic integrity has focused extensively on the relationship between gender and cheating behaviors. Throughout the literature, most researchers have found that gender does not have a significant impact on a student's decision to engage in acts of academic dishonesty (Baird, 1980; Haines et al., 1986; Soroya et al., 2016). Other researchers, however, have suggested that male students are more likely to participate in academically dishonest behavior than female students (Aiken, 1991; McCabe & Treviño, 1997; Ward, 1986) and have attributed these differences to differences in moral orientation (Chodorow, 1989; Gilligan, 1982; Lapsley, 1996). While the results of this study are not significant, they do align with the current body of literature and provide opportunities for further research in to how morality and ethical decision-making impact student's behavior.

For question number five, the results of the Kruskal-Wallis h-test, which was used as one means of analysis based on the non-normal distribution of the data, found that there was no statistical difference in the self-reported cheating behaviors based on class level [$X^2(3)$ = 3.03, p = 0.39]. Similarly, the ANOVA, which was the second means of analysis based on the

homogeneity of variance assumption not being violated, also found that class level did not significantly impact students' self-reported cheating behaviors [$F(3, 557) = 0.47$, $p = 0.70$]. Finally, while not statistically significant, the Pearson product-moment correlation coefficient found a very weak negative correlation between self-reported cheating behavior and cumulative GPA. This result suggests that as a student's cumulative GPA increases, their self-reported cheating behavior decreased.

Unlike the literature surrounding students' attitudes, the body of research on cheating behaviors, as they relate to the individual factors of class level and cumulative GPA, is more robust. Early research in to the impact of class level on cheating behaviors suggested that there was no difference in behavior between lower level and upper level students (Brown, 1995; Graham et al., 1994). However, more recent research has suggested that lower level students may find it easier to excuse academically dishonest behaviors (McCabe et al., 2001; Park, Park, & Jang, 2013; Soroya et al., 2016). With regards to the impact of cumulative GPA on cheating behaviors, Teodorescu & Andrei (2009) argued that students' cheating behaviors were likely to be negatively influenced by GPA. This is particularly true in situations where a lower GPA can trigger consequences such as the loss of financial aid or dismissal from the institution.

Despite the lack of statistically significant differences in self-reported cheating behaviors based on gender, class level, or cumulative GPA, further exploration in to what factors lead to a student's decision to engage in these behaviors would be beneficial in helping to curb academic dishonesty. Additionally, given the continued prevalence of academic dishonesty in higher education, the increase in non-traditional teaching methods (i.e. online and hybrid courses), as well as continued competitiveness in the job market, further exploration in to the contextual factors that impact students' behavior is needed.

Although this study did not find any statistical significance in students' attitudes toward academic dishonesty or their self-reported cheating behaviors based on the individual characteristics of gender, class level, or cumulative GPA, it is important to keep in mind how limitations associated with this study may have impacted these results. For instance, compared to the total population who received the survey, the response rate was quite low and resulted in a smaller sample size (*n*). Additionally, the demographic breakdown of the sample was not representative of the total population. It is possible that the impact of gender, class level, and cumulative GPA may have been more pronounced with a larger *n*. Additionally, it is possible the demographic breakdown of the self-reported gender, class level, and cumulative GPA variables may have impacted the results as they relate to students' attitudes and behaviors if they more closely represented the demographic breakdown of the institution.

Limitations

In Chapter One, three limitations were initially identified. As the study progressed, however, unanticipated limitations were revealed and are discussed below.

1. The AISS was administered in the Spring of 2014 and the data were nearly six years old at the time of study completion. As such, the age of the data may be considered as a limitation for the study, as institutional practices, trends, and the student population may have changed in the years since the data were collected.

2. The AISS comprises self-reported data from the students who participated in the study. Although identifying information is not disclosed, and responses cannot be tied to individual participants, students may have been apprehensive about providing candid responses to each question. This could lead to a misrepresentation of the number of students who engage in cheating behaviors.

3. This study utilized secondary data, which can be seen as a limitation. The data collection process was managed by a third party; therefore, the researcher did not have control over the data.

4. The study sample included any undergraduate student who provided a response to at least one prompt in the "Specific Behaviors" section of the AISS. This could result in he findings being difficult to generalize, as there is no way to distinguish whether similar average attitudes and behaviors scores were based on responses to one prompt or all 26 in the section.

5. The Likert-style scale used in the AISS does not allow you to distinguish the "severity" of cheating behavior. Specifically, students who indicate "More than Once" are coded similarly, regardless of whether they engaged in the behavior twice or much more frequently.

Implications for Practice

The findings from this study suggest that students' attitudes regarding academic dishonesty do correlate with their participation in academically dishonest behaviors. Specifically, the more serious students perceive an act of academic dishonesty to be, the less likely they are to engage in that behavior. However, the study also found that neither students' attitudes toward academic dishonesty nor their self-reported cheating behaviors are impacted by individual characteristics such as gender, class level, and cumulative GPA. If neither attitudes nor behaviors are impacted by the individual factors presented in this study, what factors do contribute to the relationship between the two?

Kohlberg's Theory of Moral Reasoning, which was used as the theoretical framework for this study, may provide some explanation for the correlation between attitudes and behaviors. In

developing his theory, Kohlberg posited that a person's moral development shifts as their cognitive development transforms. Therefore, students' experiences with moral conflict or diverse ways of thinking can result in movement from one stage to another and changes in moral reasoning. It is critical that approaches to academic integrity take in to consideration ways in which moral development impacts students' attitudes and behaviors, particularly since the results of this study found no statistically significant differences when accounting for the individual characteristics of gender, class level, and cumulative GPA. In the higher education setting, this may be done by creating opportunities for students to be challenged, both in and out of the classroom, to move toward more complex ways of knowing, specifically through the creation of a culture of integrity.

In discussing their longitudinal research surrounding academic integrity, McCabe and Trevino concluded that the most important determinant of the level of academic integrity on a given campus is the campus climate or culture. With that in mind, how can institutions build a strong campus culture toward academic integrity? One way is with the use of an Honor Code. Whether traditional or modified, research has shown that students at honor code institutions are less likely to engage in academically dishonest behaviors than those at institutions with no honor code (McCabe & Pavela, 2000).

At the University of South Florida, students are first exposed to the Commitment to Honor at Orientation. At this time, students are shown a Commitment to Honor video, which is meant to provide an overview of the importance of behaving ethically, and are introduced to the Commitment to Honor principles. While the USF Commitment to Honor lays the groundwork for defining the campus culture and communicating the institution's expectations, it relies on students to be actively involved in promoting, and adhering to, academic integrity policies.

Despite existing programming, much of the work that is done outside of the classroom to create a culture of integrity appears to be geared toward new and incoming students. Given the value associated with honor codes, practitioners would benefit from incorporating the honor code more frequently and throughout all levels of the student experience. Potential ways this could be implemented include: requiring that, each semester, students reaffirm their understanding of the Commitment to Honor when submitting their course registration; requiring students take an ethics course as a part of the general education requirement; or having faculty members incorporate the honor code in to a first-day or attendance requirement.

In conjunction with the use of an honor code, faculty members play an integral role in impacting students' attitudes and behaviors by challenging their ways of thinking and encouraging moral development and ethical decision-making. When students perceive that faculty are turning a blind eye to acts of academic dishonesty, they are more likely to engage in these behaviors. Therefore, faculty members can contribute to the culture of integrity by reiterating the institutions' commitment to honor, displaying heightened awareness, clearly communicating and openly discussing expectations, and enforcing academic standards. These actions by faculty members create opportunities for students to work through periods of dissonance and further develop their ethical decision-making skills and sense of moral equity (Manly et al., 2015). Additionally, the impact of faculty member engagement has the potential to be felt well beyond the classroom, as lessons learned in the academic setting often extend to students' personal and professional lives.

While it is important that institutions implement academic policies and practices that encourage a culture of integrity, the role of Student Affairs professionals and programming cannot be overlooked when addressing academic integrity. LaBeff et al. (1990) suggested that

students will excuse cheating behavior if they feel the situation warrants it. Unlike Academic Affairs, Student Affairs practitioners often have greater opportunities to interact with students outside of the classroom. In this respect, they may be better positioned to address the situational factors which impact a student's moral judgement and development. With this in mind, it is important that members of the Academic and Student Affairs communities work together to offer diverse programming related not only to the topic of academic integrity, but also addressing moral development and ethical decision-making across all areas of student life. One possible example of these efforts could include offering programming in the Residence Halls where "faculty in residence" discuss common issues associated with academic integrity, personal ethics, and ethical decision-making.

Recommendations for Future Research

The results of this study serve to enhance the existing literature on academic integrity and how students' attitudes toward academic dishonesty and their self-reported cheating behaviors are impacted by individual characteristics such as gender, class level, and cumulative GPA. While the study found the relationship between attitudes and behaviors to be statistically significant, the lack of significant results as they relate to the individual factors listed above offers opportunities for additional research. Based on the findings of this study, there are a number of recommendations that would help future researchers continue to address academic integrity, as well as moral reasoning and ethical decision-making as they relate to attitudes and behaviors.

1. This study focused on the "Specific Behaviors" section of the AISS, but did not take in to consideration the data collected from the "Academic Environment" section of the survey. Given the results of this study, which found that the individual factors of gender, class

level, and GPA do not significantly impact the differences exhibited in attitudes and behaviors, it is recommended that future researchers examine the data gathered from the "Academic Environment" section of the AISS with a focus on the potential impact of institutional culture on students' attitudes and cheating behaviors.

2. The AISS uses both quantitative and qualitative methods to assess students' attitudes and behaviors as they relate to academic integrity. For this study, only the quantitative data was used to assess these variables. While students provide Likert-style scale responses regarding their attitudes and behaviors, these responses do not allow students to clarify or explain their selections. For questions specifically related to the severity of a behavior, this additional information could be a key component in better understanding how students define acts of academic dishonesty. Future research in which students' attitudes are analyzed at a qualitative level may offer additional insights in to how institutions can strengthen or modify campus culture to impact academic integrity.

3. More frequently, institutions of higher education are using online platforms to expand their reach. The increase in web-based courses has caused institutions to redefine their definitions of, and expectations for, academic integrity. While the AISS has been updated to include questions regarding web-based courses and online reference tools, the survey still places emphasis on traditional-style education. It would be interesting to further evaluate students' attitudes and behaviors as they relate to web-based courses versus traditional courses to determine if differences exist based on the method in which a course is taught.

4. This study analyzed students' attitudes and cheating behaviors based on the demographic areas of gender, class level, and GPA. However, it would be interesting to analyze the

attitudes and behaviors of students who are involved in extracurricular activities, including Greek Life, Athletics, Student Government, etc., to determine if students not engaged in extracurriculars have different attitudes and behaviors toward academic integrity than those who are.

5. USF is made up of three separately accredited institutions (although consolidation efforts are currently underway). This study focused on the responses of students at the USF Tampa campus; however, future researchers could benefit from comparing students' attitudes and cheating behaviors across all three institutions, USF Tampa, USF St. Petersburg, and USF Sarasota-Manatee. This information may be helpful in determining how campus culture impacts attitudes and behaviors across a university system, and how system campuses can work together to create a common culture.

6. The State of Florida University System (SUS) comprises 11 public institutions, all of which have differing student and academic profiles. While this study focused on the USF Tampa campus, it would be interesting to focus future research on a comparison of the 11 SUS institutions. Given the diversity in the SUS, it would be interesting to see if there are commonalities in students' attitudes and behaviors across institution. This same comparison could then be made with a focus across other institutions, including Florida's private institutions and community/state colleges or AAU institutions, to determine if there are distinct factors that may impact students at one type of institution over another.

7. Prevailing research suggests that students in highly competitive majors are more likely to engage in academically dishonest behaviors than those in less competitive degree programs. While the AISS collects data regarding the college in which a student is declared, the information would not be useful for colleges in which there are a varying

spectrum of majors (i.e. College of Arts and Sciences). Therefore, it is recommended

that future research focus on major specific differences, both between and within

colleges, to determine which areas are more likely to engage in academically dishonest

behaviors. This information can help institutions create targeted programming aimed at

addressing major specific culture and the attitudes and behaviors of students in these

programs.

8. Although academic integrity has been a subject of endless research for over 50 years,

there is little information regarding potential differences in the attitudes and behaviors of

first-time in college (FTIC) and transfer students. With the rising costs of education,

many students are not starting their education at a four-year institution, but are instead

transferring after the completion of a two-year degree. Therefore, it would be interesting

to analyze the attitudes and behaviors of native and transfer students to determine

potential differences between the two populations.

Concluding Remarks

This quantitative study explored the relationship between students' attitudes toward

academic integrity and their self-reported cheating behaviors. Additionally, the study sought to

determine if differences in both students' attitudes and cheating behaviors based on gender and

the academic variables class level and cumulative GPA. Previous research has focused on these

individual characteristics when examining the prevalence of academic dishonesty in higher

education; however, the prevailing literature on how they impact students' attitudes toward

academic integrity is rather limited. The results of this study indicated there was a weak

negative correlation between students' attitudes and their self-reported cheating behaviors.

Further, the study found there were no significant differences in either students' attitudes toward

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academic dishonesty or their self-reported cheating behaviors when considering gender, class level, and cumulative GPA.

Kohlberg's Theory of Moral Development was used as the theoretical framework for this study. Using this theory, this study sought to connect moral reasoning and ethical decision making with students' perceptions of, attitudes toward, and likelihood of engaging in academically dishonest behaviors. Although the study did not directly connect students' attitudes and behaviors to moral development, the lack of significant results relating to the individual factors of gender, class level, and cumulative GPA, allowed Kohlberg's theory to be used as a guide in discussing how students' experiences with moral conflict or diverse ways of thinking can impact their attitudes toward academic dishonesty and self-reported cheating behaviors.

This study also adds to the body of literature on academic integrity in higher education. While researchers have studied academic integrity for years, the ever-changing student population and academic environment, along with the ambiguity of defining acts of academic dishonesty, continue the need for constant research in to what impacts attitudes and behaviors related to academic integrity. Additionally, by continuing to better understand academic integrity, institutions are able to develop policies and interventions that help maintain the integrity of the institutional curriculum and degrees.

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APPENDICES

Appendix A: Academic Integrity Student Survey Administration Email

Dear USF Student:

A university-wide survey of Tampa students is being conducted to learn about student awareness and perceptions of academic integrity on the Tampa campus. We need your views on academic integrity in general and observed behaviors of honesty/dishonesty as seen in academic work, scholarship and research at USF.

This survey is sponsored by the USF Ethics and Integrity Council and is conducted through the International Center for Academic Integrity (ICAI) research at Rutgers University. It is part of a broader national study on issues of integrity in U.S. schools and universities. Responses from USF students will be compared to those of the national norms. Results from this survey will be used in publications about our climate for academic integrity.

All students are encouraged to participate in this web-based survey. The survey instrument resides at Rutgers University and all results will go directly to that server for data collection. All responses are confidential. Individual results will not be reported; only group results will be reported.

Please click https://honesty.rutgers.edu/usf2014.asp to begin your survey.

Go bulls!

Thomas E. Miller, Ed.D.
Vice President for Student Affairs
University of South Florida

This message has been approved under the USF Mass E-Mail Policy

Appendix B: Academic Integrity Student Survey (AISS)

Academic Integrity

University of South Florida

Student Survey

PLEASE READ AND COMPLETE THIS SECTION BEFORE STARTING THE SURVEY

For the protection of every student completing this survey, we would like to confirm that you have read the e-mail you were sent describing the purpose of this Academic Integrity survey, that you wish to voluntarily participate, and that you are 18 years of age or older. Please affirm these points by checking the following "I Agree" box and then you may proceed to complete the survey.

I Agree ☐

If you have any concerns or questions about the survey, you may contact Professor Don McCabe at Rutgers University, author of the survey, at 973-353-1409 or dmccabe@andromeda.rutgers.edu . If you prefer, you may contact the IRB Administrator at Rutgers University at: Rutgers University, the State University of New Jersey, Institutional Review Board for the Protection of Human Subjects, Office of Research and Sponsored Programs, 3 Rutgers Plaza, New Brunswick, NJ 08901-8559, by telephone at 732-932-0150, or by email at humansubjects@orsp.rutgers.edu.

Academic Environment

Please tell us about the academic environment at USF.

1. How would you rate:	Very Low	Low	Medium	High	Very High
The severity of penalties for cheating at USF?	O	O	O	O	O
The average student's understanding of campus policies concerning student cheating?	O	O	O	O	O
The faculty's understanding of these policies?	O	O	O	O	O
Student support of these policies?	O	O	O	O	O
Faculty support of these policies?	O	O	O	O	O
The effectiveness of these policies?	O	O	O	O	O

2. Have you been informed about the academic integrity or cheating policies at USF?	Yes	No
	O	O

If yes, where and how much have you learned about these policies? (Check all that apply.)	Learned Little or Nothing	Learned Some	Learned A Lot
First-year orientation program.	O	O	O
Campus website.	O	O	O
Student Handbook.	O	O	O

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Appendix B: Academic Integrity Student Survey (AISS) - Continued

Program Counselor, Residential Advisor, or Faculty Advisor.	O	O	O
Other students.	O	O	O
Faculty (e.g., discussed in class, course syllabi, or course outlines).	O	O	O
Teaching Assistant.	O	O	O
Dean or other administrator.	O	O	O
Other (please specify):	O	O	O

3. In the past year, how often, on average, did your instructors discuss policies concerning:	Never	Very Seldom	Seldom/ Sometimes	Often	Very Often
Plagiarism	O	O	O	O	O
Guidelines on group work or collaboration	O	O	O	O	O
Proper citation/referencing of written sources	O	O	O	O	O
Proper citation/referencing of Internet sources	O	O	O	O	O
Falsifying/fabricating course lab data	O	O	O	O	O
Falsifying/fabricating research data	O	O	O	O	O

4. How frequently do you think the following occur at USF?	Never	Very Seldom	Seldom/ Sometimes	Often	Very Often
Plagiarism on written assignments.	O	O	O	O	O
Inappropriately sharing work in group assignments.	O	O	O	O	O
Cheating during tests or examinations.	O	O	O	O	O

5. How often, if ever, have you seen another student cheat during a test or examination at USF?

Never	O
Once	O
A few times	O
Several times	O
Many times	O

6. Have you ever reported another student for cheating?	Yes	No
	O	O

Specific Behaviors

This section asks you some questions about specific behaviors that some people might consider cheating. Please remember that this survey is completely anonymous and there is no way that anyone can connect you with any of your answers.

In the RED column please mark how often, if ever, in the past year you have engaged in any of the following behaviors. If a question does not apply to any of the courses you took in the last year, please check the 'Not Relevant' column. For example, if

Appendix B: Academic Integrity Student Survey (AISS) - Continued

you had no tests/exams in the last year, you would check 'Not Relevant' for questions related to tests/exams. In the BLUE column please mark how serious you think each type of behavior is.

	Never	Once	More Than Once	Not Relevant	Not Cheating	Trivial Cheating	Moderate Cheating	Serious Cheating
Fabricating or falsifying a bibliography.	O	O	O	O	O	O	O	O
Working on an assignment with others (in person) when the instructor asked for individual work.	O	O	O	O	O	O	O	O
Working on an assignment with others (via email or Instant Messaging) when the instructor asked for individual work.	O	O	O	O	O	O	O	O
Getting questions or answers from someone who has already taken a quiz, test, or examination.	O	O		O	O	O	O	O
In a course requiring computer work, copying another student's program rather than writing your own.	O	O	O	O	O	O	O	O
Helping someone else cheat on a quiz, test, or examination..	O	O	O	O	O	O	O	O
Fabricating or falsifying lab data.	O	O	O	O	O	O	O	O
Fabricating or falsifying project data.	O	O	O	O	O	O	O	O
Copying from another student during a quiz, test, or examination with his or her knowledge.	O	O	O	O	O	O	O	O
Copying from another student during a quiz, test, or examination without his or her knowledge	O	O	O	O	O	O	O	O
Using digital technology (such as text messaging) to get unpermitted help from someone during a quiz, test, or examination.	O	O	O	O	O	O	O	O
Receiving unpermitted help on an assignment.	O	O	O	O	O	O	O	O
Copying (by hand or in person) another student's homework.	O	O	O	O	O	O	O	O
Copying (using digital means such as Instant Messaging or email) another student's homework.	O	O	O	O	O	O	O	O
	Never	Once	More Than Once	Not Relevant	Not Cheating	Trivial Cheating	Moderate Cheating	Serious Cheating
Paraphrasing or copying a few sentences from a book, magazine, or journal (not electronic or Web-based) without citing them in a paper you submitted.	O	O	O	O	O	O	O	O
Turning in a paper from a "paper mill" (a paper written and previously submitted by another student) and claiming it as your own work.	O	O	O	O	O	O	O	O
Paraphrasing or copying a few sentences of material from an electronic source - e.g., the Internet - without citing them in a paper you submitted.	O	O	O	O	O	O	O	O
Submitting a paper you purchased or obtained from a Web site and claimed it as your own work.	O	O	O	O	O	O	O	O
Using unpermitted handwritten crib notes (or cheat sheets) during a quiz, test, or examinaiton.	O	O	O	O	O	O	O	O
	O	O	O	O	O	O	O	O

Appendix B: Academic Integrity Student Survey (AISS) - Continued

	Never	Once	More Than Once	Not Relevant	Not Cheating	Trivial Cheating	Moderate Cheating	Serious Cheating
Using electronic crib notes (stored in PDA, phone, or calculator) to cheat on a quiz, test, or examination.								
Using an electronic/digital device as an unauthorized aid during an exam.	O	O	O	O	O	O	O	O
Copying material, almost word for word, from any written source and turning it in as your own work.	O	O	O	O	O	O	O	O
Turning in a paper copied, at least in part, from another student's paper, whether or not the student is currently taking the same course.	O	O	O	O	O	O	O	O
Using a false or forged excuse to obtain an extension on a due date or delay taking an exam.	O	O	O	O	O	O	O	O
Turning in work done by someone else.	O	O	O	O	O	O	O	O
Cheating on a quiz, test, or examination in any other way.	O	O	O	O	O	O	O	O

2. If you indicated above that you have paraphrased or copied material from a written or electronic source without citing it, please tell us how you **accessed** this material:

Internet or other electronic means only	O
Have only used hard (paper) copies of sources	O
Have primarily used Internet or other electronic means	O
Have primarily used hard (paper) copies of sources	O
Have used both methods pretty equally	O

	Yes	No
3. Have you ever taken an online quiz, test, or examination at USF?	O	O

3a. If you have taken an online quiz, test, or examination at USF, have you ever: (Check all that apply.)

Collaborated with others during an online quiz, test or examination when not permitted?	☐
Used notes or books on a closed book online quiz, test, or examination?	☐
Received unauthorized help from someone on an online quiz, test, or examination?	☐
Looked up information on the Internet when not permitted?	☐

4. How likely is it that:	Very Unlikely	Unlikely	Likely	Very Likely
You would report an incident of cheating that you observed?	O	O	O	O
The typical student at USF would report such violations?	O	O	O	O
A student would report a close friend?	O	O	O	O

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Appendix B: Academic Integrity Student Survey (AISS) - Continued

5. How strongly do you agree or disagree with the following statements?	Disagree Strongly	Disagree	Not Sure	Agree	Agree Strongly
Cheating is a serious problem at USF.	O	O	O	O	O
The investigation of suspected incidents of cheating is fair and impartial at USF.	O	O	O	O	O
Students should be held responsible for monitoring the academic integrity of other students.	O	O	O	O	O
Faculty members are vigilant in discovering and reporting suspected cases of academic dishonesty.	O	O	O	O	O
Faculty members change exams and assignments on a regular basis.	O	O	O	O	O
The amount of course work I'm expected to complete is reasonable for my year level and program.	O	O	O	O	O
The degree of difficulty in my exams and assignments is appropriate for my year level and program.	O	O	O	O	O
The types of assessment used in my courses are effective at evaluating my level of understanding of course concepts.	O	O	O	O	O
The types of assessment used in my courses are effective at helping me learn course concepts.	O	O	O	O	O

6. If you had cheated in a course and the following individuals knew about it, how strongly would they disapprove?	Very strongly	Fairly strongly	Not very strongly	Not at all
A close friend	O	O	O	O
One of the students you hang out with	O	O	O	O
Your parents	O	O	O	O

Demographics

1. What is your academic class standing?

1st year undergraduate (Freshman)	O
2nd year undergraduate (Sophomore)	O
3rd year undergraduate (Junior)	O
4th year undergraduate (Senior)	O
Graduate student	O

2. Sex:

Female	O
Male	O

4. In which college does your primary major reside?

Arts & Sciences
Business Administration
Behavioral & Community Sciences
Education
Engineering

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Appendix B: Academic Integrity Student Survey (AISS) - Continued

5. What is your approximate cumulative grade point average?

(A)	3.50 - 4.00	O
(B)	2.50 - 3.49	O
(C)	1.50 - 2.49	O
(D)	0.50 - 1.49	O
(F)	0.00 - 0.49	O

6. If you actively participate in any of the following, please tell us about how much time you spend on each activity in an average week.

	Do Not Participate	1-9 Hours	10-19 Hours	More Than 19 Hours
Paid employment	O	O	O	O
Caring for a dependent	O	O	O	O
Social fraternity/sorority/club	O	O	O	O

Free Response

1. What specific changes would you like to see your school take in support of academic integrity? What role should students play in this process?

2. Please use this space for any comments you care to make, or if there is anything else you would like to tell us about the topic of cheating.

Thank you for participating in this survey!

Submit Form

Appendix C: IRB Letter

USF
UNIVERSITY OF
SOUTH FLORIDA

RESEARCH INTEGRITY AND COMPLIANCE
Institutional Review Boards, FWA No. 00001669
12901 Bruce B. Downs Blvd., MDC035 • Tampa, FL 33612-4799
(813) 974-5638 • FAX (813) 974-7091

4/11/2019

Kelly Pearson
L-CACHE - Leadership, Counseling, Adult, Career & Higher Education
10832 Kensington Park Ave
Riverview, FL 33578

RE: **Not Human Subjects Research Determination**
IRB#:   Pro00039057
Title: Student Attitudes and Behaviors Regarding Academic Dishonesty

Dear Ms. Pearson:

The Institutional Review Board (IRB) has reviewed your application. The activities presented in the application involve methods of program evaluation, quality improvement, needs analysis, and/or research that does not involve human subjects. As such, USF IRB approval and oversight are not required.

While not requiring USF IRB approval and oversight, your study activities should be conducted in a manner that is consistent with the ethical principles of your profession. If the scope of your project changes in the future, please contact the IRB for further guidance.

If you will be obtaining consent to conduct a program evaluation, quality improvement project, or needs assessment, please remove any references to "research" and do not include the assigned Protocol Number or USF IRB contact information.

If your study activities involve collection or use of health information, please note that there may be requirements under the HIPAA Privacy Rule that apply. For further information, please contact a HIPAA Program administrator at (813) 974-5638.

Sincerely,

Kristen Salomon, Ph.D., Chairperson
USF Institutional Review Board