# ACADEMIC INTEGRITY: A CORRELATIONAL STUDY OF PRIVATE CHRISTIAN COLLEGE STUDENTS' RELIGIOSITY AND THE PROPENSITY TO CHEAT

by

Linda Sue Williams

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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## ABSTRACT

Creating a campus culture of academic integrity is a target aimed for by colleges across the nation. A religiosity level and academic dishonesty survey was administered for a predictive correlational study investigating religiosity levels and the propensity to cheat as they relate to students on the campuses of large, medium, and small private Christian college campuses in the southeastern United States. These factors were further tested to determine if they align with the determinants of behavior identified with the theory of planned behavior and self-efficacy. A volunteer response sample was utilized from the answers received by way of the online survey, and a bivariate linear regression analysis was conducted to predict the relationship between the level of religiosity and the propensity to cheat on Christian college campuses. The use of correlation and bivariate linear regression required that assumption testing for normality, reliability, linearity, and homoscedasticity be met. This predictive correlational study produced rigorous statistical information providing educational institutions insight as they work toward creating campus cultures of integrity.

*Keywords*: academic dishonesty, campus culture, cheating, contract cheating, plagiarism, religiosity, self-efficacy, theory of planned behavior

## Dedication

Most of all I thank the Lord for His promises, especially Philippians 1:6 & 4:13, which were my promises and strength throughout this entire process. Special thanks to my parents, Jerry & Dotty, for their unconditional love, belief in me, and never ending prayer. I am truly thankful for their support and keeping me grounded with the continual, "Don't let it go to your head" after each victory and stage that was completed. Thank you to my sister Patty, brother-in-law Allen, nephews Mark and Craig, and niece Kristin for their continued prayer and encouragement throughout this academic journey. Thank you also to the many friends and colleagues who faithfully prayed and encouraged me to never give up.

**Acknowledgments**

First and foremost, I acknowledge my Lord and Savior who throughout this journey was my strength, health (both mental and physical), and source of wisdom in completing this work. Special thanks to Dr. Donna Marion for her continual positive inspiration to keep at it and never give up. Her wisdom and encouragement as I made this journey gave me the confidence and determination needed to finish the task. It was God's providence that placed me under the guiding hand of Dr. Meredith Park. She was handed a group of us from another research consultant, which I am sure seemed a burden at the time, and to myself a very scary place to be, but God knew all along that she would be the extra factor I needed to push me the last leg of the journey. I would also like to thank Dr. Meredith Park, Dr. Abreena Inscore, and Dr. Donna Marion for their combined wisdom and guidance on this last leg of the doctoral journey as my committee members. Hard work, sweat, and many tears have been lessoned because of the assistance offered by these women. I thank you for never giving up on me and encouraging me along the way. I am truly blessed by the support system of friends and family across this nation that daily brought my name before the thrown of God, and by their prayers and faith in me, the Lord gave me the ability to complete this journey and finish this milestone in my life. I am truly blessed!

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## List of Abbreviations

Duke University Religion Index (DUREL)

International Center for Academic Integrity (ICAI)

Intrinsic Religiosity (IR)

Nonorganizational Religious Activity (NORA)

Organizational Religious Activity (ORA)

Self-Efficacy (SE)

Statistical Package for the Social Sciences (SPSS)

Theory of Planned Behavior (TPB)

# CHAPTER ONE: INTRODUCTION

## Overview

Academic dishonesty is an issue that plagues educational institutions, especially higher levels of learning, as reported through research and surveys by Donald McCabe and the International Center for Academic Integrity over the past 12 years reporting that 68% of undergraduates and 43% of graduates have cheated on written assignments and tests (Farkas, 2017). Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills (Voogt & Knezek, 2013) provides surreptitious technological temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. This chapter explores background information and research presented by other researchers along with their findings, the problem that will be discussed, the purpose for the research, why the research is significant, the research question utilized by the researcher, and a list of definitions to assist the reader in complete understanding of the topic presented.

## Background

The propensity to be dishonest began when Adam and Eve chose to disobey God. Since that time man has chosen to either do right or wrong. Born in sin, man automatically has the struggle to make wise choices. The Bible says in Jeremiah 17:9, "The heart is deceitful above all things, and desperately wicked: who can know it?" which explains much regarding academic dishonesty. Given the opportunity to demonstrate ethical or unethical behavior, students are

born with a nature to choose the latter. The question arises as to whether a higher level of religiosity deters the propensity to cheat or there is no effect at all. As presented in the next paragraphs, college campuses across the nation continue to see students involved in academic dishonesty. The burgeoning technology of the 21st century aids these digital natives in their dishonest academic endeavors (Lipson & Karthikeyan, 2016). The private Christian college is not immune to this unethical behavior.

**Historical Context**

With the invention of technology, students have discovered a myriad of innovative ways to cheat and have a propensity to join those already entrenched in the unethical behavior, but as history reveals, students in the past were just as clever in their tactics as those in today's classrooms. Over 1,000 years ago an undergarment called the "cribbing garment" (Plaks, 2004) was used by Chinese young men during their civil service examination. This garment was covered completely with minuscule notations that seemed to be decorative markings but were in fact used to assist the person taking the exam, as well as those sitting around the person wearing the garment (Plaks, 2004). Much like individuals today who use various methods to cheat, the garment premise is still the same. Instead of the outer garment, information is scribbled on crib notes, written on the body, hidden in clothing, obtained through cell phones or tapping codes on the desk, programming calculators with answers, and looking on others' papers during tests to take the answer by copying (Bernardi, Baca, Landers, & Witek, 2008; Lipson & Karthikeyan, 2016; McCabe 2009). Students then and now look for ways to obtain higher academic scores through avenues of deceit.

In the 1940s about 20% of college students admitted to cheating during high school; today there are between 75% and 98% of students who through surveys say they cheated in high

school and/or college (Farkas, 2017; NewsOne, 2011; Stanford University, 2016; StatCrunch, 2013; Study.com, 2011). Yet it is no wonder that the dishonesty continues to rise when students are bombarded on a regular basis with news of national, government, and local leaders involved in deceit. Business students' ethical attitudes were challenged by the Enron scandal (Hanna, Crittenden, & Crittenden, 2013) and Arthur Anderson scandal in 2001and the ImClone and Martha Stewart scandal in 2004 (Conroy & Emerson, 2006). Education students' ethical position was also challenged in 2011 when the news reported across the nation that some schools in Atlanta were entangled in a cheating scandal. In 2015, 82 of the 178 teachers and principals involved in this scandal confessed to cheating of some kind (Saultz, Murphy, & Aronson, 2016). Another education scandal at the college level occurred in 2017 involving Ohio State University. This scandal rocked the university reporting that 83 students cheated using a GroupMe app while working on classwork that was a graded assignment. According to news agencies the students knew the rules set forth by the university regarding using the GroupMe app for nongraded assignments but chose to use the app for the graded assignment despite the written rules forbidding this activity (Ciaccia, 2017). These unethical acts by business leaders and educators have left unfavorable role models for young entrepreneurs and emerging educators. It has been noted that in this 21st century education framework, students are being told repeatedly that they must compete educationally with the global society; yet students feel that they are unable to achieve that level of knowledge without utilizing various cheating techniques (Harkins & Kubik, 2010). Over the years, this issue of academic dishonesty has been studied in the public sector quite extensively (Dix, Emery, & Le, 2014; Gullifer & Tyson, 2014; Hsiao, 2015; Kuntz & Butler, 2014; Minarcik & Bridges, 2015; Patall & Leach, 2015); however, the private Christian sector of education has had very little recorded as to the academic dishonesty that occurs in these

institutions of higher learning (Hilton & Aramaki, 2014). Understanding levels of religiosity and how they relate to the level of academic dishonesty will offer the administration and faculty concrete evidence from which to draw feedback for the development of character curriculum and campus atmospheres that create campus cultures which cultivate academic integrity (McCabe & Makowski, 2001; Palmer, Bultas, Davis, Schmuke, & Fender, 2016).

**Social Context**

In 1996 Donald L. McCabe and Linda Klebe Trevino presented the concept that the climate or culture of academic integrity was the most important rationale of the level of on-campus cheating by students. Other researchers noted that this trend in cheating was not only affecting the test scores and academic culture of the campus but the community was impacted by the lack of integrity as well. Students joined the workforce only to carry over their lack of integrity to their current jobs (Chiu, Hong, & Chiu, 2016; VanMeter, Grisaffe, Chonko, & Roberts, 2013). This unethical behavior in the workforce created an impact on the community forcing employers to require more training of their supervisors to better observe and deal with the misconduct. This extra training caused an economic burden to the community to cover the new costs (Plinio, Young, & Lavery, 2010).

Research reveals there are other contextual factors that impact academic dishonesty including the difference in faculty and student perceptions of cheating, student perceptions of peer behavior, faculty and student perceptions of the academic integrity policies or honor codes put in place by the administration, the student's fear of being caught, the student's fear of penalties, and the fear of catching a peer in the act of academic dishonesty and the pressure to report the act (Hsiao, 2015). Inconsistency among staff and administration as to what constitutes cheating, specifically plagiarism, is noted, as is a lack of clarity in explanation to students as to

what plagiarism is and how to avoid committing this unethical act. Students from other cultures have different views of plagiarism which, when added to the already divided consensus as to what constitutes this unethical behavior provides a gateway for students to decide what they deem as acceptable academic behavior (Camara, Eng-Ziskin, Wimberley, Dabbour, & Lee, 2017). First semester engineering students were questioned about their previous knowledge regarding plagiarism. The results presented that 90% of the students said they had received prior training, but when asked to apply that knowledge, about 51% failed to understand how to paraphrase, use quotation marks, or set up a proper citation (Henslee et al., 2017). Whether plagiarizing through the borrowing of others' work or utilizing technology, students and faculty must have a mutual understanding as to what constitutes unethical behavior/academic cheating (Camara, et al., 2017; Henslee et al., 2017). Addressing the unethical behavior and using these instances as teaching moments will equip students with the knowledge of correct academic integrity and ethical behavior which will carry over into the future employment opportunities the students face (Exposito, Ross, & Matteson, 2015; VanMeter et al., 2013). These contextual factors have a direct impact on the student, who in turn has an impact on the workforce and the community including the church, the shopping malls, the grocery store, and other places of business (Hsiao, 2015; Minarcik & Bridges, 2015).

**Theoretical Framework**

To try to better understand the fears of students and create a better climate or culture of academic integrity, some scholars have applied the theory of planned behavior and the lack of self-efficacy to explain the propensity to cheat. The theory of planned behavior (TPB) is a derivative of the theory of reasoned action by Fishbein and Ajzen. Ajzen added one more predictor to the two found in the theory of reasoned action and developed TPB. The TPB

suggests that planned behavior utilizes three variables: attitudes regarding the academic behavior, subjective standards of the academic behavior, and perceived conduct (Voegel & Pearson, 2016). The idea that students intentionally plan the unethical behavior is the crux of this theory. The intention is measured through attitude, perceived behavioral control, and subjective norms, which are legitimate predictor variables. Attitude is the prevalent factor (Coren, 2012). In many of the studies, TPB was linked to self-efficacy which comes from Bandura's Social Learning Theory.

Self-efficacy, or lack thereof, is linked to the first variable in TPB. Students lacking self-efficacy often justify their actions, thus meeting the criteria regarding attitudes (Alt, 2015). Self-efficacy and TPB encompass man's thinking and reasoning, yet God the Creator knows every individual and his or her thoughts (Psalm 139:2). Religiosity has shown to impact the academic integrity on campuses. Religious educators seek to teach students the Word and help the students to apply the scripture to their own lives and utilize verses to fend off the propensity to commit acts of academic dishonesty (Hilton & Aramaki, 2014). Although many studies report that religiosity and religion effect academic integrity in a positive manner, Parboteeah, Hoegel, and Cullen (2008) contend that religion and religiosity are not synonymous. They report that religion is not internalizing the ethical behavior brought about through beliefs but is merely religious affiliation and church attendance, but religiosity is internalizing one's beliefs and living those beliefs in an ethical way.

Religious affiliation and church attendance impact the lives of individuals, but religiosity, which comes from internalizing the scripture and applying it to everyday life, leads a student on a path that chooses academic integrity over dishonesty (Parboteeah et al., 2008). As seen throughout time, man has a propensity to choose to do wrong. It is innate in all individuals to

have that sin nature that gravitates to the easy way, which is often sinful. Students who understand scripture and apply Psalm 119:11, "Thy word have I hid in mine heart, that I might not sin against thee," to their lives have a deep internal relationship with their Savior. Teachers and administrators building a campus culture that breeds honesty and integrity impact the lives of their students and community by helping their students live a life of integrity at school, in the community, and in the workplace. Guiding these digital natives (Christensen, Horn, & Johnson, 2016) in this 21st century world of technology to have better self-control as it pertains to choices made whether to cheat or not to cheat is a responsibility all educators should aspire and set as a goal to achieve with their students.

## Problem Statement

Cheating persists on college campuses across the nation. Research indicates that though technology and man's ability to use it continues to develop, academic dishonesty continues to be a significant issue and educational institutions are working to cultivate campus cultures of integrity (Ip, Nguyen, Shah, Doroudgar, & Bidwal, 2016). College campuses across this nation endeavor to achieve campus cultures of academic integrity (Burnett, Smith, & Wessel, 2016), but because man is a sinful being and the means with which to cheat continue to multiply, administrators and faculty search for solutions to conquer this troubling problem. Whether public or private Christian campuses, honor codes have not made an impact in deterring cheating (Hsaio, 2015). Students have carried these practices of academic dishonesty into the workforce as well (Chiu et al., 2016; Molnar & Kletke, 2012; Schindler & Hope, 2016; Voegel & Pearson, 2016).

Another aspect in the academic arena is that students are so accustomed to collaborative activities and material at their fingertips for free viewing on the Internet that they disassociate

plagiarism and other unethical academic behavior as wrong. They look at this activity as fair use since it is online and readily accessible (Alt, 2015; Dyer, 2010; Harkins & Kubik, 2010). Though much research presents statistical information to aid public institutions of higher learning, there is still a lack in the needed statistical information to assist private Christian college administration and faculty in creating campus cultures that promote academic integrity (Ip et al., 2016; Wilks, Cruz, & Sousa, 2016).

Providing insight as to the relationship between level of religiosity and the propensity to cheat to educators in the private Christian college setting is necessary to promote campus cultures that advocate academic integrity and in turn send honest, hard-working students into society and the workforce (Chiu et al., 2016; Molnar & Kletke, 2012; Schindler & Hope, 2016; Voegel & Pearson, 2016). The problem is cheating persists in American colleges and future research is needed to investigate whether there is a significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges.

## Purpose Statement

The purpose of this predictive correlational study is to provide rigorous statistical research to aid the administration in private Christian colleges as they build campus cultures of academic integrity by investigating the theory of planned behavior and self-efficacy as it relates to the level of religiosity and the propensity to cheat. The predictor variable, level of religiosity, will be generally defined as the level of church attendance, denomination loyalty, frequency of prayer, Bible authority, and Bible reading are just five dimensions of religiosity (Roth & Kroll, 2007). The criterion variable, the propensity to cheat, although measured in over 20 or more behaviors, will be generally defined as and grouped into three categories: cheating on tests,

falsifying excuses, and plagiarizing (Hensley, Kirkpatrick, & Burgoon, 2013). The population for this study will consist of 830 students from 1 large, 2 medium, and 4 small private Christian colleges from the southeastern United States during the spring semester of 2018.

## Significance of the Study

This study presents rigorous statistical research to aid administration and staff as they endeavor to build a campus culture of academic integrity. Addressing academic dishonesty and the need for integrity in the campus culture is needed in this 21st century environment (Griebeler, 2017; Hilton & Aramaki, 2014; Molnar, 2015; Wei, Chesnut, Barnard-Brak, & Schmidt, 2014). There has been some research presented that students at secular college campuses who hold to religious beliefs have less propensity to cheat because of the tenets they adhere to through their religious beliefs (Pauli, Arthur, & Price, 2012). Although other studies agree with the continually growing problem of cheating and that religion influences those tempted to cheat, Parboteeah, Hoegl, and Cullen (2008) assert that religiosity is not the same as religion. One can be a part of religion without having a growing level of religiosity. Religion may comprise sporadic church attendance and religious affiliation, but the student may not internalize the ethical behavior brought through the biblical beliefs presented by the church and religion. Religiosity, on the other hand, is internalizing one's beliefs and living those beliefs ethically (Parboteeah et al., 2008). Understanding the belief system of the student body provides more information as the administration and faculty determine what path to take to help the student body move toward a campus of academic integrity. Other studies present connections, both positive and negative, regarding honor codes used by colleges and universities (Hsiao, 2015; Wei et al., 2014), and there is also data collection as to the implications academic dishonesty places on the workplace and other societal involvement (Auger, 2013; Chiu et al.,

2016; VanMeter et al., 2013).

Christian college students are not immune to these activities associated with academic dishonesty. Students attending a Christian institution should be familiar with James 4:17 which states, "Therefore to him that knoweth to do good, and doeth it not, to him it is sin"; but regardless of their knowledge of this verse and the many others mentioned in God's Word pertaining to cheating, Christian students are not sheltered from the temptations to cheat academically. Hsiao (2015) discusses the implementation of moral education to provide direct school intervention to combat academic dishonesty. Teachers need to intentionally educate students in proper use of technology (Deranek & Parnther, 2015). The Internet and easy access to technology bombard continually those who know what is right with temptations to do what they know to be wrong (Lipson & Karthikeyan, 2016). Although much of the Christian college students' character is formed prior to arrival on campus, religious academics and the instructors help with continuous growth and development create a campus culture of integrity (Hilton & Aramaki, 2014; McCabe & Trevino, 1996). Statistical research regarding the level of religiosity and predicting the propensity to cheat yields a useful tool for administration and faculty as they design their curriculum and model proper behavior for their students. For the Christian educator, understanding the level of religiosity and propensity to cheat provides a framework from which to build spiritual growth via programs aimed at spiritual direction, utilizing special speakers discussing topics about integrity and providing opportunities to internalize sound ethical beliefs on a deeper level. This framework developed by the administration and faculty helps students on the Christian campus thwart academic dishonesty and build a deep spiritual conscious, thus building a campus culture of integrity which reaches the community and workplace as students enter the workforce with a stronger sense of integrity and propensity to be honest on the job.

## Research Question

The aim of this correlational study was to discern whether there is a predictive relationship between the level of religiosity and the propensity to cheat on Christian college campuses to aid the administration and faculty in developing a campus culture of academic integrity. The following question will guided this study:

**RQ1:** How accurately can a significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges be identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire?

**$H_0$1:** No significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges can be accurately identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire.

## Definitions

1. *Academic dishonesty* - Academic dishonesty includes acts of plagiarism, using work from other students, using cheat sheets or crib notes on tests, buying essays, and even asking someone to sit in for you on a test or exam (Underwood & Szabo, 2003).
2. *Academic integrity* - An involved commitment to fundamental values referring to honesty and trust in all academic endeavors (Busch & Bilgin, 2014).
3. *Academic years* - Years a student has attended a university, usually measured by the labels *freshman, sophomore, junior, senior* (Underwood & Szabo, 2003).
4. *Campus culture* - This is the academic integrity climate of a college campus (McCabe & Trevino, 1996).

5. *Cheating* - A term used interchangeably with academic dishonesty (Molnar, 2015).
6. *Commission* - Actively violating a social norm (Pittarello, Rubaltelli, & Motro, 2016).
7. *Contract cheating* - Purchasing outsourced classwork, usually via the Internet, and submitting it as the buyers own personal work (Walker & Townley, 2012).
8. *Cyber-pseudepigraphy* - Purchasing assignments via the Internet through an essay or paper mill (Walker & Townley, 2012).
9. *Digital natives* - Those born after 1977 known as Millennials, Gen M, Y, Z and *i*Gen (Keengwe, Schnellert, & Jonas, 2014)
10. *Extrinsic religiosity* - A term that encompasses how one's religion serves oneself (Chen & Tang, 2013)
11. *Helicopter parents* - These are parents of millennials who hover over their children by continually emailing and calling their child's teachers and deans requiring extra attention and care for their child (Much, Wagener, Breitkreutz, & Hellenbrand, 2014).
12. *Honor codes* - A universities academic integrity policies (Molnar, 2015).
13. *Intrinsic religiosity* - A term that encompasses the absence of Machiavellianism and is the bright side of religiosity as a deterrence to unethical behavior by internalizing beliefs living out their convictions (Chen & Tang, 2013).
14. *Omission* - An act in which a student withholds the truth (Pittarello et al., 2016).
15. *Plagiarism* - A form of cheating by misrepresenting that the material is the writer's when in fact it has been copied from another (Gullifer & Tyson, 2014).
16. *Propensity to cheat* - Although academic dishonesty can be measured in over 20 or more behaviors, it can be grouped into three categories: cheating on tests, falsifying excuses, and plagiarizing (Hensley et al., 2013).

17. *Religiosity* - The level of church attendance, denomination loyalty, frequency of prayer, Bible authority, and Bible reading are just five dimensions of religiosity (Roth & Kroll, 2007).
18. *Self-efficacy* - Branching from the Social Learning Theory by Albert Bandura, self-efficacy denotes an individual's ability to execute certain behaviors (Ahmed & Ward, 2016; Chen, Lin, Yeh, & Lou, 2013).
19. *Social Learning Theory* - A theory by Albert Bandura that is based on the idea that environmental and personal factors along with behavior are mutually interrelated (Chen et al., 2013).
20. *Subjective norms* - Impressionable expectations of others who are important to the performer regarding the behavior (Stone, Jawahar, & Kisamore, 2010).
21. *Theory of Planned Behavior (TPB)* - Originating from the theory of reasoned action by Martin Fishbein and Icek Ajzen, the premise of TPB by Ajzen is that behavior can be intentional and planned (Alas, Anshari, Sabtu, & Yunus, 2016).

## Summary

Chapter One has examined an overview of academic dishonesty and the background information detailing the first known reported occurrences of cheating and the different types of academic integrity detailed through research over the years. The historical context surrounding this unethical behavior and the impact upon current education has been noted and presented to encourage administration and faculty to use the past to prevent the same repeated behavior in the present and future classrooms. The chapter continued with a section devoted to the theoretical framework purposed for the study, which included the Theory of Planned Behavior and Albert Bandura's self-efficacy. The theoretical framework provided the needed connection to present

the problem statement concerning cheating on Christian college campuses, the purpose of this study, and the significance of the data from this research which may provide rigorous statistical data to aid administration and faculty as they endeavor to create college campuses teeming with academic integrity. The final section of this first chapter included several definitions to aid the reader in better understanding key words found throughout this research. This chapter laid the foundation to provide a bridge for the reader to move into Chapter Two in which a synthesis of the literature pertaining to academic dishonesty is presented.

Chapter Two presents in-depth information regarding the Theory of Planned Behavior and self-efficacy, including their connection with research regarding academic dishonesty. A section of this chapter is devoted to data collected from other researchers to help the reader better understand the need for developing a proper campus culture and better understanding how religiosity and the student's personal level of religiosity plays a role in the act of or deterrence of cheating. Chapter Two also gives insight into the different perceptions of cheating held by faculty and students.

Over the years, perceptions have changed because of the methods used to cheat have evolved over time. This second chapter provides a view into cheating methodology recorded over the years, as well as the current techniques brought about because of 21st century technology. A portion of the chapter is devoted to understanding why students prefer cheating to studying, and whether intention has a role in the act. Of course, with the invention of technology, the last decade has brought about a new era of students; thus, the millennial generation will be discussed to provide insight for future administration and faculty dealing with this tech savvy generation. This second chapter closes with a detailed discussion as to deterrents of academic dishonesty, such as utilizing honor codes, student reporting, electronic checking

software usage, and presenting ethics curriculum for moral growth training. Chapter Two presents the reader with a synthesis of the literature from which the information was gathered, introduces a plethora of detail for better understanding of the current dilemma college educators find on their campuses, and proposes deterrents that can be used to create a campus of students who chose to embrace academic integrity.

# CHAPTER TWO: LITERATURE REVIEW

## Overview

Although written research regarding the propensity to cheat only dates as far back as the 1940s, with one mention of a cribbing garment used over a thousand years ago (Plaks, 2004), the burgeoning technology of the 21st century has presented more of a challenge for educators as they work toward a campus culture of academic integrity. Even though not specifically academic, throughout scripture there are several accounts of dishonesty, including Abraham telling the Pharaoh of Egypt that Sarai was his sister and not his wife (Genesis 12:10-20), Jacob lying to his father Isaac to get the birthright (Genesis 27:1-38), David lying to secure Uriah's death during battle to cover his sin with Bathsheba (2 Samuel 11), Ananias and Sapphira lying to Peter (Acts 5:1-11), and Peter lying to those around the fire to protect him from being persecuted like Jesus (Matthew 26:69-75; Mark 14:66-72; Luke 22:54-62; John 18:25-27). There are many other accounts of unethical behavior in scripture that point the reader to the understanding that man is a sinful creation who must learn from the past to guide future generations. God presents clearly that ethical behavior needs to be handed down and modeled for generations to emulate.

Despite the plethora of studies concerning cheating and the need for academic integrity (Dix et al., 2014; Gullifer & Tyson, 2014; Hsiao, 2015; Kuntz & Butler, 2014; Minarcik & Bridges, 2015; Patall & Leach, 2015), there remains a gap in the literature as it pertains to Christian college campuses. Colleges and universities desire to build campuses that produce a strong sense of academic integrity in their student body, which has been markedly documented in the public secular realm (Coren, 2012; Curtis & Clare, 2017; Henslee et al., 2017; McCabe & Makowski, 2001; Palmer et al., 2016); thus, this correlational study attempted to narrow the gap by examining the following question: How accurately can a significant predictive relationship

between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges be identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire?

The following pages discuss the theoretical framework comprising the theory of planned behavior and self-efficacy, and a discussion of related literature encompassing cheating data, campus culture, the faculty and students' perceptions of cheating, intentions, techniques of cheating which include historical and 21st century methods, and deterrence's to cheating such as honor codes, student reporting, millennials, electronic checking software, and ethics curriculum. Chapter Two concludes with a summary of the literature utilized in this research, positing that researchers have found that the theory of planned behavior and self-efficacy identify with academic integrity issues that plague schools across the nation, which formulate the theoretical framework for this study.

## Theoretical Framework

### Theory of Planned Behavior

The theory of planned behavior (TPB) developed by Izek Ajzen succeeded the theory of reasoned action with one added dimension, that of intension (Ajzen, 1991). Emerging as the most influential conceptual framework for human action studies, the theory of planned behavior is the theory most utilized by researchers (Ajzen, 2001). In short, the theory of reasoned action purported that human behavior is guided by three thoughts including behavioral beliefs (beliefs concerning consequences for actions), normative beliefs (expectations of others), and control beliefs (beliefs about hindrances to performance of the behavior) (Ajzen, 2002). Adding the extra dimension of intention brought to light the idea that students understand their actions and

the implications of their actions (Ajzen, 1991; Ajzen, 2002; Alas et al., 2016; Hsiao, 2015). A persons' behavioral control is determined by intentions which are formulated by the subject norm, the perceived behavioral control, and the attitude toward the behavior (Ajzen, 1991; Stone et al., 2010). The idea is to what extent does the individual feel he or she is able to control the outcome of the situation (Alas et al., 2016), and the immediate determinant of the behavior is whether the individual has intention to commit the act or not (Hsiao, 2015). In 2012 Harding, Carpenter, and Finelli modified Ajzen's theory of planned behavior to incorporate moral obligation, which proved valuable in that it focused on the moral obligation which led to intention. This resulted in revealing that the more students were involved in Pan-Hellenic or fraternity and sorority membership, the more likely they were to cheat than non-members (Burrus, McGoldrick, & Schuhmann, 2007; Chapman, Davis, Toy, & Wright, 2004; Harding et al., 2012; Hsiao, 2015; McCabe & Bowers, 2009; McCabe & Trevino, 1997; McKibban & Burdsal, 2013). Harding, Carpenter, and Finelli (2012) revealed in their study that fraternity and sorority membership did not directly affect students' intentions to cheat in the future but rather it reduced their sense of moral obligation to avoid cheating and altered their intention behavior. This fraternity and sorority behavior or peer behavior is strongly supported by Bandura's Social Learning Theory from which comes self-efficacy (McCabe & Trevino, 1997). The intention factor derived from the theory of planned behavior and the peer behavior supported by self-efficacy and the Social Learning Theory further attest to the framework of this current research.

A correlation also exists regarding citizenry. According to Harding, Carpenter, and Finelli (2012), United States citizenship drew a stronger deterrence to cheating than noncitizenship, which is a factor on most college campuses. Payan, Reardon, and McCorkle (2010) had similar results with their comparison study of the United States and several foreign

countries revealing that the international students had a stronger propensity to cheat than their United States counterparts. Colleges across the United States welcome students from various countries into the academic setting; thus, it is important for the administration and faculty to understand the differences in cultural acceptance to cheating. The intentions are different depending on the cultural upbringing. Understanding how the theory of planned behavior and intentions impact a student's ethical decision-making assist administration and faculty as they work to create campus cultures of academic integrity. The theory of planned behavior and self-efficacy are interconnected asserting that efforts to boost a student's performance must be manifested by the individual's self-efficacy (Alas et al., 2016).

**Self-Efficacy**

Measuring an individual's belief regarding the person's competence to reach goals and complete tasks embodies Albert Bandura's self-efficacy (Cheng & Chu, 2014), which simply stated is the measure of one's self confidence. Self-efficacy is a main component of the Social Learning Theory by Albert Bandura (Harrison, Rainer, Hochwarter, & Thompson, 1997). As stated by Bandura (1991) the stronger the perceived self-efficacy a person has, the higher the goals set by him or her and the stronger his or her commitment to finish the task. Self-efficacy is known by other names including self-regulation (Pelton, 2014) and self-influence. Self-influence regulates social cognitive theory and extensively motivates human behavior (Bandura, 1991).

Self-efficacy has also been called perceived behavioral control, which fundamentally states that a student's perceived ability of college success will determine the choice to pursue the desired degree or dropout of college (Foltz, Foltz, & Kirschmann, 2015). A student characterized by good self-regulation skills is said to have better metacognitive control; thus, the

student has a better ability to plan, organize, set goals, question ideas, and fine-tune cognitive pursuits (Pelton, 2014). Studies by Bandura (1989), Bandura (1993), and Pelton (2014) present that students exhibiting higher levels of self-efficacy perform better in their coursework than other students. Students who believe in their abilities to master the information and complete the task at hand have strong self-efficacy which has a significant correlation with self-regulatory skills (Pelton, 2014). Individuals with high self-efficacy visualize scenarios of success that positively guide their performance and enhance their persistence to complete the task (Bandura, 1989; Bandura, 1993).

Bandura (1991) further explained the importance of self-efficacy stating that belief in one's efficacy influences choices made, aspirations considered, mobilized efforts of tasks at hand, length of perseverance when facing difficulties, stress levels in coping with demands, and susceptibility to depression. Studies regarding elevated levels of self-efficacy and the positive effect it has on the individual's performance have taken place in the realm of education (Alt, 2015; Burnett et al., 2016; Cheng & Chu, 2014; Foltz, Foltz, & Kirschmann, 2015; Minarcik & Bridges, 2015) as well as the workplace (Elias, 2015; Harkins & Kubik, 2010; Harrison et al., 1997; Hsiao, 2015; Weaver, Reynolds, & Brown, 2014). Not necessarily a predictor, but an influence on academic integrity, research has also ascertained that the disciplinary practices during the college students' childhood have bearing on the moral values internalized by that child (Qualls, 2014). Qualls (2014) and other researchers reported that students who received harsh corporal punishment, not a normal spanking, had more of a propensity to cheat than those students who were spoken to by a parent or received a normal spanking, and these students who received harsh corporal punishment had decreased internalized moral values (Grusec & Goodnow, 1994; Hart, Atkins, & Ford, 1999; Rothbaum & Weisz, 1994; Smetana, 1999). The

decreased internalization of moral values also relates to the depth of efficacy in the child's life (Murray, Irving, Farrington, Colman, & Bloxsom, 2010). Understanding how self-efficacy and the theory of planned behavior work together in the lives of individuals provides researchers with statistical information to better comprehend how these theories relate to students in the realm of academic dishonesty and higher learning campus cultures.

## Related Literature

### Cheating Data

Many different researchers have provided data over the years as to the diverse types of cheating, the players involved in cheating, the various reasons for cheating, and the confusion surrounding the definition of cheating. Although God's Word records in 1 Peter 3:11, "Let him eschew evil, and do good; let him seek peace, and ensue it," man still has the propensity to choose to do that which is wrong. In 2006, Iyer and Eastman reported that there was no significant difference between freshmen, sophomores, juniors, and seniors as it pertains to cheating; but Harding, Carpenter, and Finelli in their 2012 study reported that 35.1% of freshmen cheated slightly more than the 28.5% of seniors. This increase may be related to the millennial generation which regards information as communal property (Much, Wagener, Breitkreutz, & Hellenbrand, 2014; van Zyl & Thomas, 2015). Millennials are often viewed as sheltered, team-oriented, technologically savvy, driven by "helicopter parents" (parents who hover over their child's education by contacting the college when they are unhappy with how their child is doing academically or feel their child should receive special treatment), and have a feeling of entitlement (Much et al., 2014; Warmerdam, Lewis, & Banks, 2015). Millennials will be discussed further later in the paper, but needed to have a mention here as well.

Other research has recorded that fraternity and sorority membership as well as Pan-Hellenic activities showed the largest effect on those participating in cheating (Burrus et al., 2007; Chapman et al., 2004; Harding et al., 2012; Hsiao, 2015; McCabe & Bowers, 2009; McCabe & Trevino, 1997; McKibban & Burdsal, 2013; Yang, Huang, & Chen, 2013), and those involved in athletics were more involved with cheating than nonathletes (Burrus et al., 2007; McCabe & Trevino, 1997; McCabe, Trevino, & Butterfield, 2001; McKibban & Burdsal, 2013; Mohr, Ingram, Fell, & Mabey, 2011; Park, 2014; Simkin & McLeod, 2010). While athletes and fraternities/sorority members show a higher level of cheating, engineering and business majors are also high on the list of those who participate in the cheating practice (Jenkel & Haen, 2012; Yang et al., 2013). McCabe and Trevino (1995) noted that 87% of the business students they questioned admitted to cheating (McCabe, 1997; McCabe & Trevino, 1996). In 1997 91% of business students and 82% of engineering students self-reported to cheating, which researchers concluded was a result of more team-based assignments (Harding, Passow, Carpenter, & Finelli, 2004). Many business and engineering students form lasting habits and attitudes of cheating that are hard to change and often become their normal lifestyle (Carpenter, Harding, Finelli, Montgomery, & Passow, 2006). McCabe and Bowers (2009) reported that many engineering and business students were self-reporting cheating because the influx of women in the business field of study created a more competitive atmosphere to succeed in that major; thus, more cheating has occurred. Yang, Huang, and Chen (2013) reported that business and engineering students were motivated to cheat due to attitudes pertaining to the benefits they perceived they would receive from cheating, scholarship opportunities procured, and job placement with no regard for the punishment, which was reported as limited because the benefits outweighed the drawbacks. Although much research reports business and engineering students leading the way

in the practice of cheating, there is conflicting evidence found in a 2006 report by Iyer and Eastman that stated that more nonbusiness students cheated more than business students (Sutton & Taylor, 2011). Whether business or nonbusiness students are involved in cheating, the seriousness of the problem still needs addressing and procedures put in play by the administration and faculty to help deter cheating and create a campus culture of academic integrity.

**Campus Culture**

With larger campuses and fewer students living on site, aggressively competitive schools, and inconsistencies among faculty in reporting and punishing cheating infractions, administrators face a daunting task to create campus cultures of academic integrity (McCabe & Trevino, 1996). In 1993 McCabe and Trevino reported that campus cultures of integrity must be more than "window dressings." Other researchers proffer that campus culture, or the climate of the campus, relates to the attitudes, behaviors, and standards practiced by the institutions' employees and student body (Rankin & Reason, 2008). Ryder and Mitchell (2013) concur with attitudes, behaviors, and standards as part of the campus climate, but believe that the terms culture, climate, and environment all differ and are not interchangeable. Much documentation concerning campus cultures exists in the public higher education setting (Coren, 2012; Curtis & Clare, 2017; Henslee et al., 2017; McCabe & Makowski, 2001; Palmer et al., 2016); yet very little research outside of a few dissertations documenting campus culture in the Christian realm is available (Bradley, 2015; Longjohn, 2013; Robertson, 2008).

Much is documented regarding honor codes and the effect they can and sometimes do create on college campuses (McCabe & Trevino, 1996; McCabe, Trevino, & Butterfield, 1996, 1999). Honor codes are presented in detail later in this work; thus, the mention here is minuscule

but important. Although honor codes help create campus cultures of integrity, McCabe and Trevino (1993a) suggest that support for the institution's academic integrity policies is more important. With the combined efforts of the faculty and students, a stronger campus culture can be created to uphold the policies set in place by the institution, thus creating a greater view of importance and generating a culture of loyalty and integrity.

Campus culture is created by the opportunities provided and experienced by the student body through community service opportunities providing an opportunity to test the students' values and beliefs while also experiencing cultural diversity (Kuh & Umbach, 2004). The key factor for all institutions is to make students aware of the community service opportunities offered whether through announcements or a messaging system. Character development is important and cannot be developed through one course, one activity, or even throughout the course of one year. Character development occurs over time (Billings & Terkla, 2014; Graham, & Diez, 2015; Kuh & Umbach, 2004). George Kuh (2000) suggested that institutions of higher learning understand the importance of character development on campuses and emphasize that character development in the institutions' mission statement. The institution must provide an out-of-classroom character development, recruit and train new faculty, staff, and students, create institutional character building policies and practices consistent with the institutions commitment to character development, assess the impact being made through the experiences, and consistently enforce the policies and procedures set in place (Kuh, 2000).

Campus culture can also be achieved through curriculum utilized by the faculty in the classroom to promote values and the use of those values in decision making (Graham & Diez, 2015). Moral and character education taught over the course of a students' college years through curriculum or campus experience shapes one's moral, emotional, intellectual, and social

character/identity (Hersh, 2015). It is important for administration to understand the gaps between the institution and the stakeholders regarding where the culture or climate of the campus should be heading (Ryder & Mitchell, 2013). Administration and faculty must also keep in mind that "character cannot be 'taught' in a single course, or developed as part of an orientation program or capstone experience. Rather the multiple dimensions of character are cultivated through a variety of experiences that take place over an extended period of time in the company of others who are undergoing similar experiences" (Kuh & Umbach, 2004, p. 51).

College students, considered emerging adults, deal with many life changes as they enter higher education, such as living in a confined space with others, academic challenges, family issues, and relationship struggles. A student's maturity in their faith directly correlates with his or her purpose in life (Piedmont, 2001; Reymann, Fialkowski, & Stewart-Sicking, 2015); thus, the strength of the emerging adults' faith has direct bearing on their moral temperature as they begin their college career. Studies concluded that women were slightly stronger in their faith and were more likely to join spiritual activities, whether personal/private or public (Lipka, 2010; Livingston & Cummings, 2009; Reymann et al., 2015; Smith & Snell, 2009). Molasso (2006) presented that the stronger the meaning and purpose in life within a college student, the more likely the student would develop strong values and healthy mental attitudes which would contribute to academic integrity. Over time, men showed more faith maturity than women (Reymann et al., 2015), and although college students experience elevated levels of life change, poor spirituality can be improved (Muller & Dennis, 2007; Reymann et al., 2015). During this emerging adulthood, it is reported that the expression of religion becomes more internal rather than an outward external behavior such as church attendance (Koenig, 2015; Smith & Snell,

2009). Educators must tap into this mindset that has developed in current emergent adults to help these individuals cultivate a moral and spiritual mindset that values academic integrity.

This research proposes to assess whether there is a relationship between religiosity and the propensity to cheat, thus providing rigorous statistical data to aid administrators and faculty as they attempt to create campus cultures of academic integrity. Understanding the mindset of this generation and having rigorous statistical data to work with, administrators and faculty can collaborate to create curriculum, activities, and policies that will promote integrity on their college campuses. Without a campus culture of academic integrity, the student body resembles the children of Israel during the time of no kings in which man did that which was right in his own eyes (Judges 17:6; 21:25).

**Religiosity**

Knowing and internalizing God's Word embodies the deepest level of religiosity. The level of church attendance, denomination loyalty, frequency of prayer, Bible authority, and Bible reading are just five dimensions of religiosity (Roth & Kroll, 2007). With this description of religiosity, one would ascertain that Christian campuses should have a higher standard of academic integrity and less propensity to cheat, but is this the overall outcome on every Christian campus? While many studies hold that religious campuses gravitate to campus cultures of integrity, Paragament (2002) and Parboteeah, Hoegl, and Cullen (2008) maintain that spiritual guidance is not religion but the depth of religiosity in a person's life that guides his or her ethical behavior. Religious affiliation is less important than attitude, behavior, and the values one exhibits daily (McAndrew & Voas, 2011). Wurthmann (2013) and Lau (2010) relate religiosity and ethics with morality; thus, according to their research and others, those religiously inclined should follow the principles of the Ten Commandments that stem from Judaism.

In a few instances, research studies record that students at secular universities have stated that while at college their religious beliefs are stifled for fear of being considered a fanatic, or carrying the label of "Christian," while other students reported that religiosity was something associated with their youth and now that they were in college they were distanced from this lifestyle (Taylor, 2016). This is evident in the 2015 Pew Research Center religiosity report. The survey compared 2007 to 2014. Americans who stated they were absolutely certain God exists dropped from 71% to 63%, and those stating that religion was important in their lives dropped from 56% to 53%. This decline has been driven by the rapid growth of religiously unaffiliated populations of Americans which went from 16% to 23% (Lipka, 2015). This change in the religious climate in America would explain why Rockenbach and Mayhew (2014) present that while religiosity and spirituality may encourage a campus of diversity that encourages healthy educational outcomes, it also presents a challenge that may engender conflict and hostility. Although religiosity appears to be on the decline, spirituality is not; yet this term is problematic in that the definition is broad in that it now can accommodate some atheists (Cragun, Henry, Mann, & Krebs, 2014). Religiosity has become a broader canvas in the United States where the landscape of faith-based higher education incorporates higher learning institutions which represent Catholic, Lutheran, Jewish, Mormon, and Muslim denominations and religions (Daniels & Gustafson, 2016). The level of religiosity is determinant of the belief system the student follows in his or her own life; thus, understanding the student body and the diverse backgrounds from which they come assists administration and faculty as they engage and help train students to pursue integrity at all costs. Cragun, Henry, Mann, and Krebs (2014) reported that faith-based students were more likely to attend religious services at home rather than on campus with only 1% of the students at one of the colleges researched and 6% at another. It was

also cited that the religious and spiritual organizations were active but the majority of the student body declined attendance (Cragun et al., 2014). Religious activity does not determine the depth of religiosity, but as the Bible states in Matthew 18:20, "For where two or three are gathered together in my name, there am I in the midst of them"; thus, a student that faithfully spends time with others of like faith may tend to develop a stronger aversion to unethical behavior because of the spiritual growth and accountability to fellow believers.

Finally, ethical and unethical behavior has been associated with intrinsic and extrinsic religiosity. Those sustaining intrinsic religiosity have stronger inhibitors to unethical behavior, whereas the opposite is true of those with extrinsic religiosity, which is turning to God but not away from unethical behavior (Chen & Tang, 2013). Living by Genesis 16:13, "Thou God seest me," the intrinsic religious person will be directed by the idea that God is watching and although faculty, peers, and administration do not see the academic dishonesty, God does. The extrinsic religious individuals would have no regard for this verse or whether authority sees the act because they are not driven by inward ethical demands. Comprehending the level of one's religiosity can be perceived differently by others which is also recognized as a detriment to campus cultures of integrity. A 2015 Pew Research report sheds much light on the religious state of the nation. Among young adults (24-29), an estimated 72% report belief in God, but only 50% view God as personal and involve Him in their daily lives. With this statistic in mind, administration and faculty must work hard to reach the other 50% who have no spiritual compass as they make the academic journey. Faculty and administration will need to work together to be sure that what they perceive and what the students perceive as academic integrity and cheating are in sync with one another.

## Perceptions of Cheating

Another detriment to campus cultures of academic integrity is the perception of cheating by both students and faculty. What students perceive as cheating and what the administration and faculty perceive as cheating are not equivalent in many cases. Perceptions as to the punishment or lack thereof and whether students should report cheating of fellow students differ among faculty and students. Understanding the differences of opinions as to what constitutes cheating and what punishments should be applied to various situations must be consistent schoolwide and should be communicated clearly to the student body.

**Students' perceptions.** The concept of academic dishonesty and whether it has been thoroughly defined and conveyed to students properly is a discussion still unanswered by research (Owunwanne, Rustagi, & Dada, 2010; Pincus & Schmelkin, 2003; Wei et al., 2014). Students do not consider all acts of academic dishonesty as cheating but rather have flexible definitions for their actions (Wei et al., 2014). Students also categorize cheating from the label "serious cheating," such as stealing an exam, to the label "mild cheating," such as a false excuse to delay an exam; but on these categories, there is still no common consensus as to the order or complete list (Schmelkin, Gilbert, Spencer, Pincus, & Silva, 2008). Surprisingly, students considered giving help to a friend to complete an out of class assignment, which was to be independent work, as cheating but did not consider getting help from a friend for the same assignment a form of cheating (Owunwanne et al., 2010). In assessing the perceptions of the college student body, one must understand the mindset of the current generation.

These digital natives (Christensen et al., 2016) or millennials are concerned with abiding by their own conduct code and expressing that others realize they are the exception to the rule (Much et al., 2014). Millennials tend to ignore problems, neglect the responsibility for the

problem, insist on parent involvement, and expect others to solve the problem (Much et al., 2014). Students also feel justification in cheating if they feel the professor unfair in meting out the policies (Owunwanne et al., 2010). The entitlement felt by this generation of students (Stein, 2013) accompanied by their technological expertise with social media (Bolton et al., 2013) support the findings of Molnar and Kletke (2012) which assert that students find online information in cyberspace as public knowledge or "fair use." Understanding the mindset of the student body assists the faculty but does not signify that their definitions of cheating agree.

**Faculty's perceptions.** Understanding student perceptions are important for faculty and administration, but more important, faculty need to have consistent definitions for cheating and be sure all faculty abide by and mete out punishment for the policies defined by the administration. Burrus, Graham, and Walker (2011) found faculty definitions of cheating to be much broader than student definitions, which cause confusion within the faculty and frustration for the students. If the faculty on the same campus are not in agreement as to what constitutes cheating, the student body will be frustrated as they move from teacher to teacher.

Another area of frustration involves faculty and students not in agreement pertaining to previously unpublished work. Faculty do not see eye to eye with the students' perception that they own their unpublished previous work and should be allowed to use it repeatedly for other assignments (Halupa & Bolliger, 2015). Faculty view academic dishonesty on a rated scale of serious and clarity (Pincus & Schmelkin, 2003). In this same report, faculty were not in agreement as to the types of behavior classified as serious, and there was also disagreement as to the level of clarity pertaining to the act of academic dishonesty (Pincus & Schmelkin, 2003). Faculty also disagree with the students' assessment that teachers do not articulate language surrounding the rules and regulations concerning academic dishonesty (McClung & Schneider,

2015). Research by Halupa and Bolliger (2013) noted that faculty understand the responsibility to teach students about plagiarism and self-plagiarism, but they do not follow through with the instruction, thus creating a strained atmosphere in the learning environment. Faculty assume that students understand academic integrity policies, when in fact they do not have a clear understanding; thus, the faculty and students' perceptions are not aligned. Faculty must be clear in their expectations and explanations to perpetuate a classroom culture that creates an understanding of policies and eagerness to abide by them.

## Methods of Cheating

While faculty perceive that students lack understanding as to what constitutes cheating, research reveals that students understand and are cheating because they perceive a low probability of being caught or are unafraid of the consequences (Beasley, 2014; Burnett et al., 2016; Burrus et al., 2011; Carmichael & Krueger, 2014; Hensley, 2013; Yang et al., 2013). Since Adam's sin in the garden man has had a sin nature to cheat and this sin nature exists today as well. With the 21st century wave of technological advances came the high-tech development of cheating and multitudinous ways to cheat.

**Historically recorded cheating techniques.** The violation of cheating has been around for centuries as mentioned earlier with the "cribbing garment" (Plaks, 2004). Other recorded cheating techniques include cheat sheets, crib notes, writing on one's body or clothes, hiding notes in a pencil case, glancing at another's work to steal the answer, taking the test for another person, tapping or coughing answer codes (Auger, 2013; Bernardi et al., 2008; McCabe & Trevino, 1993a, 1993b, 1995; McClung & Schneider, 2015), receiving help from students who have previously taken the test, having falsely given an excuse to delay taking the test, or having outright copied from another person during the test (McCabe, 2009). There are a few unique

modes of cheating such as attacking the instructor by claiming ambiguity in the course handout, writing a letter of threat to cause the teacher to change the grade by using words like humiliated and harassment and using blogs for support from fellow students (Lipson & Karthikeyan, 2016).

**Twenty-first century cheating techniques.** With technology comes more opportunities for students to cheat on tests. Students have been known to program calculators and digital devices including MP3 players, smartphones, laptops, tablets, and iPods (Bachore, 2014). Using the digital device allows the test taker to quickly switch screens before the instructor reaches the area making it harder to detect dishonesty, and some students utilize high-tech receiving devices which use earpieces and a miniature microphone for the cheating student to ask questions and receive answers from someone outside the classroom (Bachore, 2014). Using the cell phone in the classroom, a student can now access information on the Internet to answer test questions or take photos of the test or text questions and send them to friends (Keengwe et al., 2014). With the invention of the smartwatch, teachers must ask students with those devices to remove them before administering tests and quizzes since they have the capability to transmit information to others as well as take photos; but the question arises as to whether the students' civil rights are violated by the removal of the watches (Lipson & Karthikeyan, 2016). An ingenious method involves students removing the wrapper from a water bottle, using a fine point marker to write notes on the back of the paper, resealing the paper to the bottle, and filling the bottle with water. During the test the student appears to be thirsty, when in fact, the water acts as a magnifier displaying the notes to the person holding the bottle (Montoya, McKinney, & Zabel, 2012), otherwise known as a crib sheet in a bottle (Lipson & Karthikeyan, 2016).

Plagiarism is another technique used by students to claim another person's work as their own. Although plagiarism has been around for many years, it has come more to the forefront

with the use of technology and the quickness and ease of copy and paste features (Ma, Wan, & Lu, 2008) used on the computer. Josien and Broderick (2013) reported that students were more apt to cheat outside of the classroom than while in class and that plagiarism was not the top cheating method used by students; yet many studies have recorded the offense and look for ways to help students understand what it means and how to avoid it (Burnett et al., 2016; Camara et al., 2017; Gullifer & Tyson, 2014; Halupa & Bolliger, 2013; Hensley et al., 2013; Jordan, 2013; Kashian, Cruz, Jang, & Silk, 2015; Kuntz & Butler, 2014; Reisig & Bain, 2016; Rodriguez, Greer, & Shipman, 2014; Sampson & Smith, 2015; Traniello & Bakker, 2016).

**Students' Reasons for Cheating**

Students have given excuses for cheating down through the ages and invariably they will continue to do so. Knowing some of the excuses students claim drive their propensity to cheat can help the administration and faculty understand the mindset and present helps for students given to such excuses. Some students report that the competitive nature of their field of study causes their propensity to cheat (McCabe, Dukerich, & Dutton, 1993). Academic procrastination and good intentions are also excuses for cheating used by students, which led students to copy homework from others, cheat on tests, and falsify data (Patrzek, Sattler, van Veen, Grunschel, & Fries, 2014). Academic procrastinators showed more variety in their dishonest behavior and were more often involved in academic dishonesty than those who were not procrastinating (Patrzek et al., 2014). Dishonest behavior is often propagated further if the student is procuring an extension for the procrastination via email instead of face-to-face conferences. Students who struggle with body language and facial discoloration when caught or have the thought of being caught often utilize the email or text systems to avoid eye contact with the instructor (Carmichael & Krueger, 2014).

Another dimension added to the administration and faculty's task regarding academic integrity is understanding that students tend to believe that academic excuse making is not a viable form of deception, thus giving a false excuse for a project's extension does not qualify as academic dishonesty (Carmichael & Krueger, 2014). Factors of this nature help administration as they make policies for the deterrence of academic dishonesty. Often ignorance of the punishment and rules, the neutral stance of the instructor or administration, time pressures, the option of getting a better grade versus a bad grade, strain to achieve success, and peer pressure create situations in which students feel the need to cheat (Beasley, 2014).

**Millennials.** Those born after 1977 known as millennials, Gen M, Y, Z and *i*Gen (Keengwe et al., 2014) bring a new dimension to the college campus. These students have an entrepreneurial mindset, are risk takers, love technology, have a social consciousness, are open to diverse cultures, frequently change jobs (Cardon, 2014; Hackel, 2016; VanMeter et al., 2013), expect instant gratification (Cardon, 2014), and have a feeling of entitlement (Much et al., 2014; Warmerdam et al., 2015). As mentioned earlier in this work, these students enter their college years often bringing along with them their helicoptering parents who are hyper-involved in the lives of their children and demanding of the college personnel (Much et al., 2014). Lum (2006) reports that 70% of United States colleges and universities have added a new employee to their payroll which carries the title of parent coordinator and acts as the buffer with these parents. Millennials are more likely to blame others for their actions, reluctant to accept responsibility, expect to be the exception to the rule for the transgression, and want others to fix their problems for them (Much et al., 2014).

Many educators consider this generation to be apathetic and lazy because of their technology interaction (Cardon, 2014), but placing all millennials in this category would be the

same as saying that every millennial cannot survive without the use of his or her cell phone. Stereotyping this generation is wrong today as it has been in the past. Administration and faculty must understand the mindset of this generation and work together to meet their needs while nurturing and training them along the journey. With this in mind, the administration and faculty should provide training seminars that discuss the school policies and procedures, train digital immigrant faculty so they feel comfortable utilizing technology in their classrooms, and maintain that not all millennials will have all characteristics presented as the qualities exhibited by this generation (Cardon, 2014; Much et al., 2014; VanMeter et al., 2013). The technological revolution of the 21st century has provided the current generation instantaneous information at their fingertips which they utilize multitudinous times throughout their day. This is not an evil, but with the plethora of information at their disposal comes the temptation to use technology for cheating purposes.

**Intention**. Understanding why a student chooses to cheat is part of the puzzle administration and faculty attempt to piece together to create a college campus that exhibits academic integrity. As previously stated, the intention to cheat is driven by factors pressuring the lives of students. The most important reason according to research as to why students cheat is to get ahead of the rest of their classmates (Gallant, Anderson, & Killoran, 2013; Simkin & McLeod, 2010). The most notable form of intentional cheating in the realm of academic dishonesty is plagiarism. Because most research is self-reported, the exact intention of a student is not known, but it is recorded through research that plagiarism is either intentional or by mistake (Camara et al., 2017; Hensley, 2013; Woodbine & Amirthalingam, 2013). Intention may also be shaped by lack of time management strategies, beliefs, and priorities (Hensley,

2013). Hypercompetitive individuals have a desire to win at any cost; thus, the intention here is pride and a possible decrease in their grade point average (Orosz, Farkas, & Roland-Lévy, 2013).

Pittarello, Rubaltelli, and Motro (2016) reported that when given the opportunity, students would rather commit the act of cheating based on omission (omitting truth to cover a transgression) rather than commission (outright lying to cover a transgression). The idea here is that the students are more interested in withholding truth to benefit themselves than professing an outright lie to cover the transgression in question. Active and passive transgressions have been in practice for years and under the right circumstances, students may use either one to further their academic standing. To lesson unethical behavior, administration and faculty must understand how and under which circumstances students would be compelled to violate moral principles and school policies (Pittarello et al., 2016). Other research has revealed that certain individuals felt a sense of guilt relief when their unethical behavior benefited others (Gino, Ayal, & Ariely, 2013; Peer, Acquisti, & Shalvi, 2014). Peer, Acquisti, and Shalvi (2014) reported that during their research concerning confessions, 40% of the admissions were only partial admissions of guilt and those who partially confessed felt more guilt than those who fully confessed and those who did not confess the transgression. From this research, it is evident that full confession is the true guilt relief that will bring peace. Applying biblical principles to one's life will help avoid the temptation to cheat and help deter the desire to commit acts of dishonesty.

**Deterrents of Cheating**

In a perfect world, there would be no cheating and all assignments would be turned in written by the student, but since man has been in a state of sinfulness since the Garden of Eden and Adam's fall, efforts to deter cheating must be implemented by the administration to deter the propensity to cheat. Prevention strategies, suggested in a 2015 study by Minarcik and Bridges,

included educating the student body as to what constitutes academic integrity, enhancing oversight of students, required adherence to existing academic policies, reducing barriers for students to report violations, modeling integrity, and frequently revising the academic integrity policies. As early as 1998 studies have suggested that institutions make policies and honor codes readily available to students, create quiet learning environments for studying, understand the characteristics of those with a propensity to cheat, ensure that classroom environments assign course workloads that are attainable and do not create competition for grades, control for cheating during tests by training faculty to watch for certain behaviors and watch for items that are used for cheating (Whitley, 1998). A workable accountability system, which provides a compliance monitoring mechanism with clearly stated rules and procedures that also specifies consequences for noncompliance is another effective organizational structure that can help deter academic dishonesty (Chapman & Lindner, 2016). These measures along with honor codes can be used as a deterrence to cheating.

**Honor codes.** Although some institutions have had well-established honor codes, cheating still abounds following the cheating norms found on campuses which propose that students who witness or believe others are cheating are inclined to cheat themselves (McCabe & Trevino, 1993b). If honor codes are not embraced by the college community, the veritable existence of the code will not deter academic dishonesty (O'Neill & Pfeiffer, 2012). The honor code setting correlates with the students' realization of the probability and severity of punishment (McCabe & Trevino, 1993a). Upholding the honor code and commitment to these codes requires agreeing to certain guidelines, being faithful to the tenets of the code, and refraining from academic cheating. Committing to these guidelines resembles an interpersonal relationship which requires investing significant resources and energy (Dix et al., 2014).

Strengthening a student body's commitment to the school's honor code may reduce cheating while increasing the students' investment in the college's values (Dix et al., 2014) and significantly improve the work climate on campus (Pauli et al., 2012). Hensley (2013) suggested placing honor code information in several different publicized areas within the campus community, thus informing students and faculty of academic integrity policies and punishments presented in the honor code. Unseen honor codes tend to be less effective than those that are visible to the student body (Boehm, Justice, & Weeks, 2009). Ely, Henderson, and Wachsman (2014) found in their research that students taking tests or other assessments, in an unproctored environment and not signing an Honor Code tend to cheat more than those who sign the Honor Code statement.

**Student reporting.** Peer reporting may be part of the honor code or academic integrity policies created by the administration requiring students to report violations (Beasley, 2014; McCabe & Trevino, 1993a, 1997). Peer reporting is often called whistle blowing, especially in the medical school settings (Jenkel & Haen, 2012; Rennie & Crosby, 2002). Often students refuse to turn in their fellow peers for fear of complete anonymity and peer punishment for their act (Burnett et al., 2016; Huang & Yang, 2015). Even though students attest to seeing their peers cheat during tests, hear of their friends cheating without being caught, or hearing of others working with peers to improve their grades, students are still hesitant to turn in their peers and exercise academic integrity (Minarcik & Bridges, 2015). In their 2002 research, Rennie and Crosby reported that only 13% of students were willing to report their peers. Peer influence is the most influential factor regarding academic dishonesty, thus putting policies in place to support peer reporting promotes a campus culture of academic integrity (McCabe, 2009; McCabe & Trevino, 1993a). Other researchers reported various reasons for not reporting peers

such as fear of retaliation, acceptance of cheating as a norm, the belief that policing cheating was someone else's responsibility, lack of guidelines stated by administration, expansive evidentiary demands, lack of administrative follow-through, social costs, grades being affected, and fear of reprisal (Jenkel & Haen, 2012; Rennie & Crosby, 2002). Many students refuse to report their peers and do not report their personal academic dishonesty due to attitudes of ignorance of what constitutes cheating and blame-placing others including teachers, friends, family, and former educators for their ignorance and actions (Beasley, 2014). All students are susceptible to academic dishonesty, yet Schuhmann, Burrus, Barber, Graham, and Elikai (2013) report that business majors are less likely of all majors to report their own academic dishonesty. Beasley (2014) reports that students are not deterred from becoming involved in academic dishonesty because they do not know others who have been caught and punished for cheating. They have learned how to utilize the technology to their advantage.

**Electronic checking software.** With the expanding technological advances entering the 21st century classrooms, many college administrators have turned to software such as Turnitin.com and others as an extra safeguard in the framework developed to catch those plagiarizing and committing acts of academic dishonesty (Kashian et al., 2015; Reisig & Bain, 2016; Youmans, 2011). Burrus et al. (2011) reported that instructors are more likely to confront cheaters and mete out severe punishments if they feel their colleagues are reporting cheaters as well. If instructors believe their colleagues are not consistent in using the software, then most will not use the software because they are strongly influenced by their peers (Burrus et al., 2011). Adopting and utilizing detection software is a debate in many institutions of higher learning which is usually decided by the opinions as to the causes behind why students are cheating and plagiarizing (Youmans, 2011).

Two areas in which the software is ineffective is for detecting contract cheating and back translation. Walker (1998) defined this contract writing as "ghostwriting." Contract cheating involves students purchasing outsourced classwork, usually via the Internet, and then submitting that work as their own personal assignment (Curtis & Clare, 2017; Lancaster & Clarke, 2006; Walker & Townley, 2012). Introduced in the computer coding area of education, contract cheating has spread to various other education levels and disciplines (Walker & Townley, 2012). The determining factor regarding someone else writing a paper for a student and the student using a "ghost writer" or contract cheating is that there is payment involved (Singh & Remenyi, 2016). Contract cheating may involve student to student interaction, or it may involve an organization known as an essay mill (Walker & Townley, 2012). Cyber-pseudepigraphy, a form of contract cheating, involves buying pre-written work from essay mills via the Internet (Walker & Townley, 2012). Contract cheating and cyber-pseudepigraphy are both considered plagiarism, in which pseudepigraphy is a misattribution rather than the lack of attribution, as seen in plagiarism (Walker & Townley, 2012). Walker and Townley (2012) presented from Lancaster and Clarke's 2006 study that students use vWorker.com, formerly known as RentACoder.com, to contract college and university assignments. Lancaster and Clarke have done an extensive study of contract cheating between 2006 and 2009 noting that contract cheating is not classic plagiarism; thus, this type of cheating is hard to detect and prevent (Walker & Townley, 2012). Singh and Remenyi (2016) cited that in a Google search lasting less than a half of a second, over 4.6 million references to contract cheating services appeared on-screen. Combating this level of plagiarism is a task for universities and colleges around the world. Institutions of higher learning are concerned because this academic misconduct discredits the degrees awarded by the institution, and it is unfair for hardworking students to receive the same credit for students who

are using dishonest measures to complete assignments (Singh & Remenyi, 2016). Walker and Townley (2012) state that the prevalence of contract cheating is not known, whereas Curtis and Claire (2017) purport that little is known regarding the prevalence of contract cheating. The software industry has not been able to produce a program to detect this growing business. A concern held by educators in using the software involves the problem of correctness. The software is not correct all the time; thus, students who do cheat and are not caught are emboldened to continue their academic dishonesty and those who are called out for cheating and have not done so are disheartened, embarrassed, and wary of the system (Youmans, 2011). There is a definite need for more research in this area to better equip administration and faculty to the existence, prevention, and severity of the contract cheating problem.

The second area in which software detection is ineffective is back translation. Some students have also mastered back translation, which is a way to subvert detection software by changing words but keeping the core of the concept (Jones & Sheridan, 2015). To the instructor, back translation may appear as poor writing skills when it is actually cleverly concealed plagiarism. Students translate their plagiarized work into another language and then translate it back into English, which changes the work but leaves the conceptualized thoughts intact (Hsiao, 2015; Jones & Sheridan, 2015).

Both contract cheating and back translation create a problem for teachers when checking work for plagiarism, with or without the use of software programs. The current software detection programs provide help in combating this growing problem yet do not provide complete accuracy in catching all occurrences of plagiarism. Educators need a solid ethical framework when using a software program and should be sure that all faculty are using the product and

reporting to the administration those students whose dishonest work is detected by the program. The use of this software can become part of the curriculum used for teaching ethics.

Another area that continues to grow at the undergraduate and graduate levels in the educational realm is online learning. With this growth also comes the rise in academic dishonesty, which has brought about an effort to provide a testing environment that will deter cheating. With the growing international student influx in American colleges, especially in online courses, companies like Examity are providing online testing that actually has the ability to monitor the test taker live during the process and stop the test taking at any time in which the observer feels cheating is occurring, or if another person enters the room during the test (Examity, 2017). Examity, Gauge, and Proctoru provide secure proctoring for online students that may not occur in certain parts of the world (Examity, 2017; Gauge, 2017; Proctoru, 2016). Not all students are able to find proctors for tests that meet the colleges' requirements; thus, using a reputable company such as Examity, Gauge, or Proctoru provides a secure testing environment. The online classroom opens a new dimension for cheating; thus, educators are relying on character and honesty to guide students that are taking online tests. The internet is a wonderful tool for educating the masses, but without monitoring, it is a temptation for students to do that which is right in their own eyes and forgo honesty and integrity.

**Ethics curriculum.** Incorporating ethics and academic integrity training into the school program is a university-wide approach that has a greater impact than having students read and figure out the school's policies on their own (Gullifer & Tyson, 2014). Business educators currently teach professional values, legal demands, and standards which has invited occasional suggestions that ethics be added to the curriculum (Van Wart, Baker, & Ni, 2014). With the business world's corruption infiltrating the nightly news, adding this dimension to the classroom

curriculum will seek to improve academic integrity in the student body and help business colleges with future ethical challenges. McCabe, Dukerich, and Dutton (1994) offered findings from their business versus law school student study presenting that business students taking an ethics course showed no change in ethical decision making than those who did not take the course. This study suggested that this could also be for the short term and that in the long term the ethical difference would be more evident. Although not considered as part of an ethics curriculum, Patrzek, Sattler, van Veen, Brunschel, and Fries (2014) propose that time-management and goal setting strategies be taught by universities in the classroom as well as in the counseling services. Many students struggle ethically because they have no time-management skills and need help setting goals for themselves.

Administration and faculty must also keep in mind that by the time college students enter their campuses, these students have already passed the formative years of character training. The task now is to continue building upon the existing character level and help the students develop a stronger sense of integrity (Hilton & Aramaki, 2014). Brigham Young University set forth a required course, Religion 121, presenting three objectives: develop a personal scripture study, acquire skills to know how to study scripture, and develop positive decision-making skills. An estimated 90% of the students in the program during the study indicated important positive changes in their lives after taking the course (Hilton & Aramaki, 2014). Rodriguez, Greer, and Shipman (2014) propose a course structured to teach students about copyright laws and the digital age. This course could be taught online or in class with an instructor or the school librarian. Librarians have been historically the copyright specialists (Colleran, 2013); thus, utilizing their abilities to teach students proper citations and copyright policies is a good start for copyright education.

## Summary

Whether understanding copyright laws or glancing at another person's paper to take an answer, James 4:17 still applies, 'therefore to him that knoweth to do good and doeth it not, to him it is sin" (King James Version). Since the fall of Adam and Eve in the Garden of Eden, man has had the propensity to sin. For college administration and faculty creating campus cultures of academic integrity require an understanding of their student body and faithfully abiding by and enforcing the policies set by the school (McCabe & Trevino, 1996). Administration and faculty must understand the minds of the generation they are working with; thus, they must understand that Gen-M and *i*-Gen (millennials born between 1977 and 2000) are digital natives, multi-taskers who are technology device driven (Keengwe et al., 2014). They use these devices as a tool for entertainment, communication, productivity, and information (Kolb, 2008).

Another area that cannot be neglected is understanding the caliber of students seated in the classroom. As reported, students with lower grade points were more apt to commit acts of academic dishonesty than those with higher grade points (Hensley et al., 2013); thus, the teacher must understand the student's ability and watch for signs that would present themselves as opportunities for cheating. The pressure to reach higher academic goals due to peer pressure from fraternities/sororities is another factor leading to increased cheating (Burrus, McGoldrick, & Schuhmann, 2007; Chapman et al., 2004; Harding et al., 2012; Hsiao, 2015; McCabe & Trevino, 1997; McKibban & Burdsal, 2013). A stronger propensity to cheat exists with international students compared to their United States counterparts (Harding et al., 2012; Payan, Reardon, & McCorkle, 2010); thus, administration and faculty must take it upon themselves to know the academic ability of the student body, cultural make-up of the student body, and the peer pressure felt by their students, and create a campus atmosphere that promotes honesty and

integrity. This positive campus culture must create an intrinsic desire of the student body to maintain a high level of academic integrity while faced with temptations to cheat the system and themselves.

For the students, faculty, and administration to have a common understanding of what academic honesty is, the faculty and administration must understand characteristics of the students attending their colleges. The Millennial generation, those born after 1977 known as Gen M, Y, Z and *i*Gen (Keengwe et al., 2014), brings a uniqueness to the college campus that many educators have not seen in the past. While many educators consider this generation lazy and apathetic due to their technology use (Cardon, 2014), there must be an understanding and an attitude to work with these entrepreneurial risk-takers who love technology, have a social consciousness, and are open to diverse cultures (Cardon, 2014; Hackel, 2016; VanMeter et al., 2013). Although they frequently change jobs (Cardon, 2014; Hackel, 2016; VanMeter et al., 2013), expect instant gratification (Cardon, 2014), have a feeling of entitlement (Much et al., 2014; Warmerdam et al., 2015), bear the burden of helicopter parents (Much et al., 2014), are likely to blame others for their actions, are reluctant to accept responsibility, expect to be the exception to the rule for their transgressions, and want others to fix their problems for them (Much et al., 2014), administration and faculty must work together to cultivate an educational atmosphere that trains these students to be academically honest and in turn take this integrity character quality in the workforce upon graduation and upon entrance into the workforce.

The student body, administration, and faculty must also be cohesive regarding student and faculty definitions to what constitutes cheating and the severity of the misconduct (Halupa & Bolliger, 2015). Students hold different views regarding cheating but they agree on one aspect—it happens everywhere and students do not believe it is a big deal; while others say nothing but

believe cheating to be wrong, or they are silent because they need to get a good grade (Burnett et al., 2016). Faculty are unintentionally at fault when they are ambiguous as to allowing students to work collaboratively on tests and projects for one course but not another, including one instructor allowing cheat sheets for tests while the other teachers do not allow the cheat sheet (McClung & Schneider, 2015). Administrators must be sure their faculty buy into the policies and honor code system of their school and present a good example of academic integrity for students to emulate (McCabe & Trevino, 1996). Attitudes of ignorance of what constitutes cheating and blame-placing others including teachers, friends, family, and former educators for their ignorance and actions keep students from turning in their peers for cheating (Beasley, 2014). Other reasons for not reporting peers are presented as fear of retaliation, acceptance of cheating as a norm, the belief that policing cheating was someone else's responsibility, lack of guidelines stated by administration, expansive evidentiary demands, lack of administrative follow-through, social costs, and fear of reprisal (Jenkel & Haen, 2012; Rennie & Crosby, 2002). Despite the fear of peer retaliation, students should have the moral integrity to deter this behavior and choose what is right to do when placed in the position to report a peer. Despite moral bearings, students do not wish to be considered a "squealer" or "whistleblower" (Jenkel & Haen, 2012; Rennie & Crosby, 2002). Students, faculty, and administration must have a common understanding of what academic honesty is and maintain consistent implementation of consequences for those who take part in academic dishonesty practices.

The adoption and implementation of an ethics curriculum or course is a step in the right direction toward a common understanding of what is cheating and how to combat it on campus and at home (Gullifer & Tyson, 2014; Patrzek et al., 2014). Creating a course to teach ethical behavior may help bolster the spiritual growth of the student body (Hilton & Aramaki, 2014).

The moral temperature of the campus is important and can be affected by peer and parental pressure (Beasley, 2014; Burrus et al., 2007; Chapman et al., 2004; Harding et al., 2012; Hsiao, 2015; McCabe & Trevino, 1997); thus, creating courses and opportunities such as workshops or chapel messages in which students are reminded of moral standards such as Genesis 16:13 ("Thou God seest me") and ethical obligations are ways to encourage students and create a campus of integrity. This encouragement and positivity could also bolster students' reporting of cheating and self-reporting as well (Beasley, 2014; McCabe & Trevino, 1993a, 1997).

Colleges across the country have started implementing plagiarism detection software (Kashian et al., 2015; Reisig & Bain, 2016; Youmans, 2011) and honor codes (McCabe & Trevino, 1993a, 1993b; O'Neill & Pfeiffer, 2012) to help deter cheating, but students are not deterred by these preventative measures. Now more than ever before in the 21st century classroom, a vast variety of cheating techniques have arisen. Students are still using crib notes and plagiarizing, but with the technology trend, high-tech cheating utilizing iPhones, smartwatches, and computers present a great problem for the educator (Lipson & Karthikeyan, 2016; Montoya et al., 2012).

Another deterrence to a campus culture of integrity is that many faculty and students have differing opinions as to what constitutes cheating and the definitions for these acts of dishonesty (Owunwanne et al., 2010; Pincus & Schmelkin, 2003; Wei et al., 2014). Their perceptions differ (Burrus, Graham, & Walker, 2011) which leads to disillusionment, frustration, and distrust in the system. Having a cohesive understanding of the honor code system (O'Neill & Pfeiffer, 2012), a working knowledge of common practices of cheating (Auger, 2013; Bernardi et al., 2008; McCabe & Trevino, 1993a, 1993b, 1995; McClung & Schneider, 2015), high-tech techniques (Lipson & Karthikeyan, 2016; Montoya et al., 2012), and gain a stronger understanding of

student and teacher perceptions of cheating (McClung & Schneider, 2015), the campus atmosphere will be much more ethical and cohesive (Coren, 2012; Curtis & Clare, 2017; Henslee et al., 2017; McCabe & Makowski, 2001; Palmer et al., 2016).

Understanding students and their level of religiosity (Rockenbach & Mayhew 2014), help the administration comprehend the spiritual climate on campus. Developing a campus culture that will move students from nonorganizational religiosity to organizational religiosity and finally to intrinsic religiosity (Koenig, Meador, & Parkerson, 1997) should be the goal, especially on Christian campuses. Utilizing the theory of planned behavior (Ajzen, 1991) and Bandura's (1991) self-efficacy to better grasp the intention (Cheng & Chu, 2014) of the student for the act of cheating will aide administration and staff as they set a plan of action in motion to deter cheating on and off campus and create a campus culture of academic integrity (McCabe & Trevino, 1996). Despite the plethora of studies documenting countless hours of research regarding cheating and the reasons behind the actions, at the end of the day man is still faced with the same thought—to cheat or not to cheat, that is the question.

The literature review of Chapter Two presented the reader with detail pertaining to the Theory of Planned Behavior and self-efficacy, as well as their connection with academic integrity. A synthesis of the literature provided a clear look at the data and the cheating dilemma that continues to plague college campuses, which presents a challenge for administrators to create a campus culture of academic integrity. Religiosity was discussed and shown to play a role in the strength of academic honesty developed in an individual's life. Although there are some students guided by religiosity, there are many who are not, which sets the stage for temptation and the possible act of academic dishonesty. As noted in this chapter, perceptions of cheating were found to be different among faculty and students, and with the influx of

technology, students have found more technological ways to cheat than the historically documented methods of the past. This tech savvy, millennial generation at times is impeded by certain deterrents such as honor codes, student reporting, ethics curriculums, and electronic checking software, but the data shows that the percentage of individuals who cheat continues to be on the rise.

As reported in Chapters One and Two, much data exists pertaining to whether the student's level of religiosity deters his/her propensity to cheat on secular college campuses, but there is still a gap in the literature regarding the propensity to cheat and religiosity as it pertains to Christian college campuses. This research hopes to provide rigorous statistical data to aid administrators and faculty at Christian college campuses as they endeavor to create campus cultures of academic integrity. Chapter Three details the design and methodology utilized for this research. The participants and setting are identified, and a description of the instrumentation that was employed is presented in the next chapter. In the last portion of the chapter, there is a discussion pertaining to the procedures that were followed during the research, an examination of the process used for the data analysis, and an in-depth look as to the methodology utilized by the researcher for this study.

# CHAPTER THREE: METHODS

## Overview

This study sought to report the predictive relationship between the level of religiosity and the propensity to cheat. This predictive correlational study was conducted on the campuses of large, medium, and small private Christian colleges in the southeastern United States. A volunteer response sample was utilized with responses to an online survey. Design of the study, the research question and hypothesis, participants and setting, instrumentation, procedures, and data analysis are presented to determine if a statistically significant predictive relationship between the level of religiosity and the propensity to cheat exists and to what extent these variables may be correlated.

## Design

The design of this research was a predictive correlational study since a correlational design involves analyzing the relationship between variables (Gall, Gall, & Borg, 2007; Green & Salkind, 2014; Warner, 2013). The predictive relationship between the level of religiosity and the propensity to cheat was studied. Data collection for the two variables, level of religiosity and propensity to cheat, was gathered through the International Center for Academic Integrity (ICAI) survey, which was created by Donald L. McCabe and known as McCabe's Academic Integrity Survey (see Appendix A), and the Duke University Religion Index (DUREL) (see Appendix B).

## Research Question

The research question for this study was as follows:

**RQ1:** How accurately can a significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private

Christian colleges be identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire?

## Hypothesis

The null hypothesis for this study was:

**$H_0$1:** No significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges can be accurately identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire.

## Participants and Setting

The participants for this study were drawn from a volunteer response sample of college students at a convenience sample of one large (1,000 or more students), two medium (500-999 students), and four small (100-499 students) private Christian colleges in the southeastern United States during the spring semester of 2018. The private Christian colleges were chosen regarding their religious status presented in their school's mission statement and school size determined by Internet statistics (Peterson's, 2017). Specific verbiage, such as "Christian worldview", "Christ-like character", and "Christ-centered," were used to detect a college meeting the requirements for this study, which incorporate the criteria of a large, medium, or small private, Christian college or university in the southeastern United States. All students registered for the 2018 spring semester at the colleges selected were invited to participate, including part-time and full-time students, new students, international, or town students. There were 7,666 anonymous surveys sent to students via email. Out of the 7,666 students, 1,294 of these scholars took the time to answer the survey. Of those students, 736 = large, 60 = medium, and 125 = small college or university participants. From this number, 91 surveys were not utilized because there were

questions not completed on the questionnaire. The sample size, N = 830, well exceeds the minimum required sample size of 66 for a medium effect size at the .05 alpha level with statistical power of 0.7 (Gall et al., 2007). Surveys that were completed were utilized for the research, and incomplete surveys were deleted from the research study ensuring that the student's anonymity remained intact.

## Instrumentation

For this study two surveys, the International Center for Academic Integrity (ICAI) (see Appendix A) and the Duke University Religion Index (DURAL) (see Appendix B), were completed by the participants. The surveys were combined into one survey utilizing SurveyMonkey® (see Appendices A and B).

### International Center for Academic Integrity (ICAI)

Over the course of many years McCabe (1993a, 1993b, 1996, 2002, 2009) studied the subject of cheating and created a survey instrument that has been used by many others (Anzivino, 1996; Christensen, 2011; Edmondson, 2013; Kirkland, 2009; Passow, Mayhew, Finelli, Harding, & Carpenter, 2006; Schindler, 2016; Robinson & Glanzer, 2017; Steutermann, 2014; Williams 2012) throughout the years. In 2016 McCabe passed away turning over the instrument he created to the International Center for Academic Integrity. Reliability and validity of the ICAI instrument is reported at 0.82 based upon three McCabe studies: 0.79 in 1990, 0.84 in 1993a, and 0.81 in 1995 (Sunday, 2000). The ICAI survey comprises 36 questions regarding different types of cheating, age, ethnicity, major classification, and academic year. The ICAI is comprised of a five-point Likert scale with "1" indicating the participant rates agreement with a statement "very low" and "5" indicating very high agreement with the statement. This survey

tool has been used by several researchers to further the cheating study begun by Donald L. McCabe (Ananou, 2014; Bemmel, 2014; Bourassa, 2011; Robertson, 2008).

**Duke University Religion Index (DUREL)**

The Duke University Religion Index (DUREL) of 1997 developed by Harold G. Koenig and Arndt Büssing is a 5-question survey with a Likert scale score ranging from 5 to 27 with three subscales. A high level of religiosity is represented by 27 and a low level of religiosity is represented by a 5. The first question and first subscale concerns organizational religious activity (ORA), which is public religious activities such as attending religious services, prayer groups, and study groups. This first question had six possible answers that range from 1 point for an answer of never and 6 points for an answer of more than once/week. The second question and second subscale concerns nonorganizational religious activity (NORA), which encompasses private activities such as prayer, scripture study, listening to religious music or watching religious television. This second question had six possible answers that range from 1 point for an answer of "Rarely" or "Never" and 6 points for an answer of "More than once a day." The other three questions which provide information for the third subscale encompass Intrinsic religiosity (IR), which assesses the degree of personal religious commitment and motivation. These last questions had 15 possible answers that range from 1 point for an answer of definitely not true and 5 points for an answer of definitely true of me (Koenig & Büssing, 2010). The overall scale has high test-retest reliability (intra-class correlation = 0.91), and the Cronbach's alpha's = 0.78–0.91. The survey has been used in over 100 published studies around the world and is published in 10 languages (Koenig & Büssing, 2010). Both the ICAI and DUREL survey tools meet the Cronbach's alpha of 0.80 to establish reliability and validity (Gall et al., 2007),

and both have been cited in research studies (Griebeler, 2017; Koenig & Büssing, 2010; Reisig & Bain, 2016) and used in other dissertations (Bourassa, 2011; Robertson, 2008).

## Procedures

Upon successfully defending the proposal with the chair and committee members, the researcher developed the following to present to the Institutional Review Board (IRB) for permission to contact schools regarding participants and the questionnaire: created permission statements to use for contacting schools to join the research and allow their students to fill out the questionnaires (see Appendix C); merged the ICAI and DUREL surveys into one survey on SurveyMonkey® (see Appendices A and C); developed an online statement for students participating in the survey which included a statement of anonymity regarding the demographical information retrieved from the survey including academic standing, gender, approximate age, domestic or international status, full or part-time status, marital status, current living situation, declared or intended academic concentration, second major, approximate grade point average, extracurricular participation, and religiosity (see Appendices A and B); developed a cover letter for the student regarding the research and the time length for taking the survey (approximately 15 minutes) (see Appendix C); developed a thank you for participating response for those who participated (see Appendix D); developed a reminder email for those who had not responded within a week or two of the survey time frame (see Appendix E); and developed a thank you letter/email for the school administration and Institutional Review Board of each college (see Appendix F).

After obtaining IRB approval (see Appendix G) to begin collecting data, the researcher contacted the president of each college using the email letter created earlier (see Appendix H) and sought permission from the school's IRB to use their students in the research study. Once a

school had agreed to allow students to participate, the researcher asked the school administrator to have the registrar send the student body the cover letter for the survey via email explaining the research and describing their anonymity (see Appendix C). The email was equipped with a button that allowed the student to take the survey or decline. The survey was available for students to complete for three to four weeks, depending on when the school reached out to the student body. If students chose to decline, a pop-up window thanked them for their time. If students chose to participate, they were guided through the survey and a pop-up window appeared at the end thanking them for their willingness to participate.

## Data Analysis

A bivariate linear regression analysis was conducted to predict the relationship between the level of religiosity and the propensity to cheat of students on private Christian college campuses. This analysis was chosen because the researcher analyzed the degree of relationship between two variables (Gall et al., 2007; Green & Salkind, 2014; Warner, 2013). After all data was collected, results to the responses to the ICAI and DUREL were placed into the data editor of the Statistical Package for the Social Sciences (SPSS) program. First, to avoid the generation of biased results, the data were screened to remove missing data, and all respondents who did not answer the questions to measure religiosity and propensity to cheat were excluded. The frequencies (counts and percentages) of the categorical demographic variables (academic standing, gender, approximate age, domestic or international status, full or part-time status, marital status) were computed.

The level of religiosity of each respondent was measured by computing the total scores for the five individual religiosity items in the DUREL listed in Table 1 (see Appendix I). The reported Likert score for each item ranged from 1 to 6, where 1 = minimum and 6 = maximum.

The higher the total score, then the higher the level of religiosity. The propensity to cheat of each respondent was measured by computing the total score for the 30 individual items of the ICAI in Q14: "Please check how often, if ever, in the past year you have engaged in any of the following behaviors". The 30 items are listed in Table 2 (see Appendix J). The reported Likert scores for each item were coded by 0 = Not relevant; 1 = Never, 2 = Once; 3 = More than Once. Therefore, the higher the total score, the more frequently the student engaged in cheating behaviors.

Table 1

*Items Used to Measure Level of Religiosity*

1. How often do you attend church or other religious meetings?
2. How often do you spend time in private religious activities, such as prayer, meditation, or Bible study?
3. In my life, I experience the presence of the Divine (i.e., God).
4. My religious beliefs are what really lie behind my whole approach to life.
5. I try to carry my religion over into all other dealings in life.

The descriptive statistics (mean, standard deviation, median, minimum, and maximum) were computed to summarize the level of religiosity and the propensity to cheat. A bivariate correlation and a simple linear regression analysis were conducted to predict the propensity to cheat as the dependent or criterion variable using the level of religiosity as the independent predictor variable. These methods were chosen because they were appropriate to test the null hypothesis that there would be no significant statistical relationship between the two variables (Gall et al., 2007; Green & Salkind, 2014; Warner, 2013).

A bivariate linear regression and correlation required that x assumptions were met. First the Assumption of Normality, which tests whether the frequency distribution differs significantly

from the normal, or other words, the two variables must be normally distributed. For this, a Kolmogorov-Smirnov (K-S) test was conducted to test for normality because the sample was greater than 50 (Gall et al., 2007). Deviation from normality was indicated if $p < .05$ for the K-S test (Gall et al., 2007). For the Assumption of Bivariate Outliers, a box and whisker plot was utilized. The skewness of the frequency distributions, and the presence of outliers (i.e., extremely large or small scores, outside the limits of a normal distribution) were identified using box and whisker plots. Second, the two variables must be reliably measured. Cronbach's alpha was computed to evaluate the internal consistency reliability of the level of religiosity and the propensity to cheat. Cronbach's alpha > .7 indicated a good level of reliability (Gall et al., 2007).

Third, for the Assumption of Linearity, there must be a linear (i.e., straight line) relationship between the level of religiosity and the propensity to cheat. A scatterplot was rendered to determine visually if this relationship appeared to be a straight line. Pearson's *r* correlation coefficient was computed to determine the strength and direction (positive or negative) of the linear relationship between the level of religiosity and the propensity to cheat. For Pearson's *r*, the correlation was statistically significant if $p < .001$, and the correlation was not statistically significant if $p \geq .001$.

Finally, the Assumption of Homoscedasticity, which measures the equality of variance of the dependent variable across the levels of the independent variable, was checked using a scatterplot of the standardized residuals vs. the predicted values. A cigar shaped curve formed by a random scatter of the standardized residuals on either side of their mean (zero) value indicates the assumption is tenable, whereas a geometric pattern in the shape of a wedge or triangular shape indicates that this assumption was violated (Warner, 2013).

Table 2

*30 Items Used to Measure Propensity to Cheat*

1. Fabricating or falsifying a bibliography.
2. Working on an assignment with others when the instructor asked for individual work.
3. Working on an assignment with others (using digital means like email, text messaging, or social media) when the instructor asked for individual work.
4. Getting questions or answers from someone who has already taken a test.
5. In a course requiring computer work, copying another student's work rather than writing your own.
6. Helping someone else cheat on a test.
7. Fabricating or falsifying lab data.
8. Fabricating or falsifying research data.
9. Copying from another student during a test WITH his or her knowledge.
10. Copying from another student during a test or examination WITHOUT his or her knowledge.
11. Using digital technology (such as email, text messaging, or social media) to get unpermitted help from someone during a test or examination.
12. Receiving unpermitted help on an assignment.
13. Copying (by hand or in person) another student's homework.
14. Copying (using digital means such as email, text messaging, or social media) another student's homework.
15. 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.
16. Turning in a paper from a "paper mill" (a paper written and previously submitted by another student) and claiming it as your own work.
17. Paraphrasing or copying a few sentences of material from an electronic source-e.g., the internet-without citing them in a paper you submitted.
18. Submitting a paper you purchased or obtained from a website and claimed it as your own work.
19. Using handwritten crib notes (or cheat sheets) during a test or exam.
20. Using electronic crib notes (stored in tablet, phone, or calculator) to cheat on a test or exam.
21. Using an electronic/digital device as an unauthorized aid during an exam.
22. Copying material, almost word for word, from any written source and turning it in as your own work.
23. 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.
24. Using a false or forged excuse to obtain an extension on a due date or delay taking an exam.
25. Turning in work done by someone else.
26. Receiving requests from another person to copy your homework.
27. Submitting the same paper in more than one course without specific permission.
28. Using Cliff Notes or Spark Notes and not citing.
29. Using a drug such as Adderall to aid in studying/taking an exam.
30. Cheating on a test in any other way.

The regression equation for predicting the level of religiosity score was

$$Y = b_0 + b_1X \pm \varepsilon$$

where Y is the propensity to cheat; $b_0$ is a constant (i.e., the intercept, indicating the propensity to cheat when the level of religiosity is zero); $b_1$ is the slope (unstandardized regression coefficient); X is the level of religiosity, and ε is the residual error (Foster, 2017). The null hypothesis was tested that there would be no significant predictive relationship between the level of religiosity and the propensity to cheat.

After the data was reported and the statistical information presented in table and figure formats, the researcher used this data to determine whether to reject the null hypothesis which states that no significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges can be accurately identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire. Interpreting data from the *t*-test statistic and *p*-value for the slope ($b_1$) was utilized. If $p < .001$ for the *t*-test, then the null hypothesis was rejected. If $p \geq .001$ for the *t*-test, then the null hypothesis was retained. The effect size was indicated by $R^2$, which was the proportion of the variance in the propensity to cheat explained by the level or religiosity. $R^2$ was significantly different from zero if $p < .001$ for the *F*-test statistic (Fisher Statistics Consulting, 2018). This predictive correlational study conducted on the campuses of large, medium, and small private Christian colleges in the southeastern United States provided rigorous statistical information pertaining to the relationship between the level of religiosity and the propensity to cheat offering educational institutions insight as they work toward cultivating campus cultures of integrity.

Chapter Three set the stage for this predictive correlational design which was chosen to determine how accurately a significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges can be identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire, or if no significant predictive relationship exists between the level of religiosity and the propensity to cheat. The volunteer response sample of college students from private Christian colleges in the southeastern United States provides data for the research through anonymous surveys measuring the level of their religiosity and their level of cheating. Specific procedures were presented that took place once IRB approval was obtained. Once the data was collected from the surveys and placed in the Statistical Package for the Social Sciences (SPSS) program, a bivariate linear regression analysis was utilized, and all assumptions were tested. After all the analyses were run, the data and statistical information was documented and reported in Chapter Four. This fourth chapter presents all findings ascertained from the student surveys, and the data provided evidence to reject the null hypothesis: No significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges can be accurately identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire. Finally, after the hypothesis was rejected, all descriptive statistics and results were set forth in Chapter Four.

# CHAPTER FOUR: FINDINGS

## Overview

Chapter Three presented a description of the methods utilized to implement the correlational research design of a bivariate linear regression to determine if a significant predictive relationship could be identified between the level of religiosity and the propensity to cheat of students at private Christian colleges. The volunteer sample of college students from private Christian colleges in the southeastern United States provided the response data for the research through an anonymous survey which measured the level of their religiosity (DUREL) and the level of their self-reported cheating (ICAI). Chapter Four presents the findings in five sections: the research question and null hypothesis restated in the first two sections, the descriptive statistics presented in section three, statistical evidence to address the research question and test the stated null hypothesis in section four, and a summary of the results in section five.

## Research Question

**RQ1:** How accurately can a significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges be identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire?

## Null Hypothesis

**$H_0$1:** No significant predictive relationship between the level of religiosity (intrinsic, organizational, nonorganizational) and the propensity to cheat at private Christian colleges can be accurately identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire.

## Descriptive Statistics

Descriptive statistics were computed for $N = 830$ respondents who replied "Yes" to the question "Do you consent to be in this study? and also completed all of the items used to measure the level of religiosity with the DUREL and the propensity to cheat with the ICAI questionnaire. The remainder ($n = 464$) were excluded. Table 3 (see Appendix K) presents a summary of the demographic characteristics of the 830 respondents. The majority were undergraduates ($n = 722$, 86.9%) and most were female ($n = 536$, 64.6%).

Table 3

*Demographic Characteristic of Respondents (N = 830)*

| Characteristic | Category | *f* | percent |
|---|---|---|---|
| Academic class standing | 1st year undergraduate (Freshman) | 138 | 16.6 |
| | 2nd year undergraduate (Sophomore) | 177 | 21.3 |
| | 3rd year undergraduate (Junior) | 178 | 21.4 |
| | 4th year undergraduate (Senior) | 196 | 23.6 |
| | 5th year undergraduate | 33 | 4 |
| | 1st year MA | 42 | 5.1 |
| | 2nd year MA | 41 | 4.9 |
| | 3rd year MA | 12 | 1.4 |
| | Ph.D. Candidate | 2 | 0.2 |
| | Non-degree seeking | 1 | 0.1 |
| | Continuing Education | 2 | 0.2 |
| | No response | 8 | 1.0 |
| Gender | Male | 283 | 34.1 |
| | Female | 536 | 64.6 |
| | No response | 11 | 1.3 |
| Age (Years) | Under 18 | 13 | 1.6 |
| | 18 to 24 | 725 | 87.3 |
| | 25 to 39 | 64 | 7.7 |
| | 40 or older | 19 | 2.3 |
| | No response | 9 | 1.1 |
| Domestic or International | Domestic | 768 | 92.5 |
| | International | 51 | 6.1 |
| | No response | 11 | 1.3 |
| Marital Status | Single | 740 | 89.2 |
| | Married | 65 | 7.8 |
| | Divorced/Other | 16 | 1.9 |
| | No response | 9 | 1.1 |

As noted earlier, 1,294 students responded to the survey but only 830 respondents completely filled out the questionnaire. As seen in Table 3 (see Appendix K), the predominant age group for the 830 respondents was 18 to 24 years old ($n$ = 725, 87.3%). The marital status of most students was single ($n$ = 740, 89.2%), and the vast majority were domestic students ($n$ = 768, 92.5%).

Figure 1 displays a frequency distribution histogram of the total scores for the level of religiosity obtained by summation of the scores for the five survey items included in the DUREL listed in Table 1. The level of religiosity of each student ranged from a minimum Likert score of 5.0 to a maximum of 27.0. The frequency distribution of the level of religiosity was found to deviate strongly from normality. The scores were negatively skewed indicated by: (a) the frequency distribution histogram was asymmetrical and not bell-shaped; (b) the clustering of most of the scores toward the top end of the scale between 20.0 and 27.0 reflected the generally high level of religiosity of most of the students; (c) the mean score ($M$ = 25.41) was lower than the median score ($Mdn$ = 26.00) and the mean score was also lower than the score with the highest frequency ($Mode$ = 27.00); (d) the dispersion of the scores ($SD$ = 2.63) was low, because most of the scores were clustered toward the top end of the scale; and (e) the Kolmogorov-Smirnov test ($Z$ (830) = 7.82, $p < .001$) was statistically significant. Furthermore, the asymmetrical box and whisker plot illustrated in Figure 2 also reflected the strong deviation of the level of religiosity from normality, with a total of 29 outliers (excessively small scores) identified by the points in the lower portion of the plot. The internal consistency reliability of the five items used to measure the level of religiosity, however, was good (Cronbach's alpha = .803).

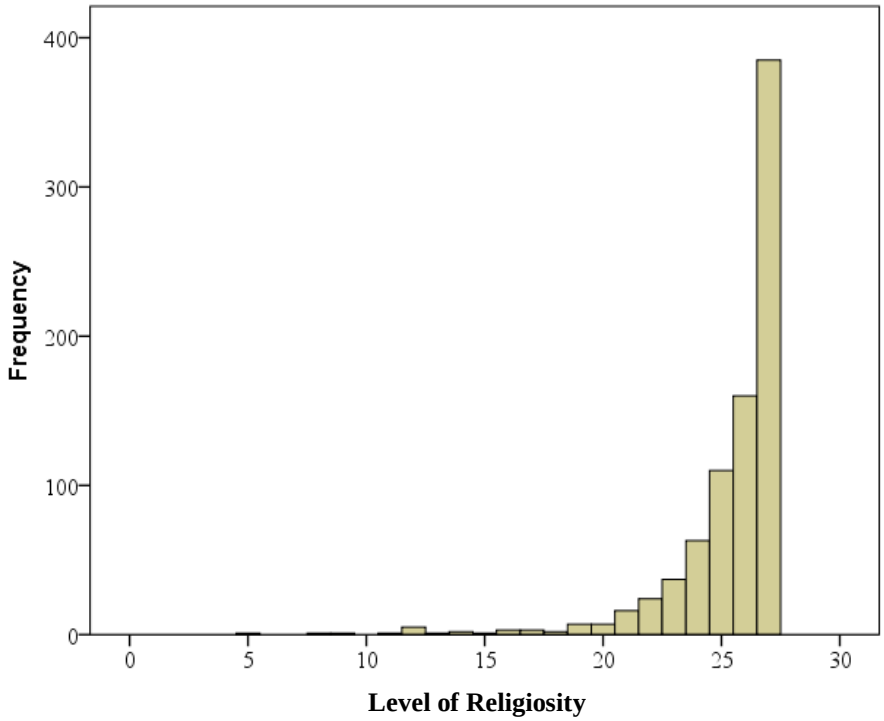


*Figure 1.* Frequency distribution histogram of level of religiosity (*N* = 830)

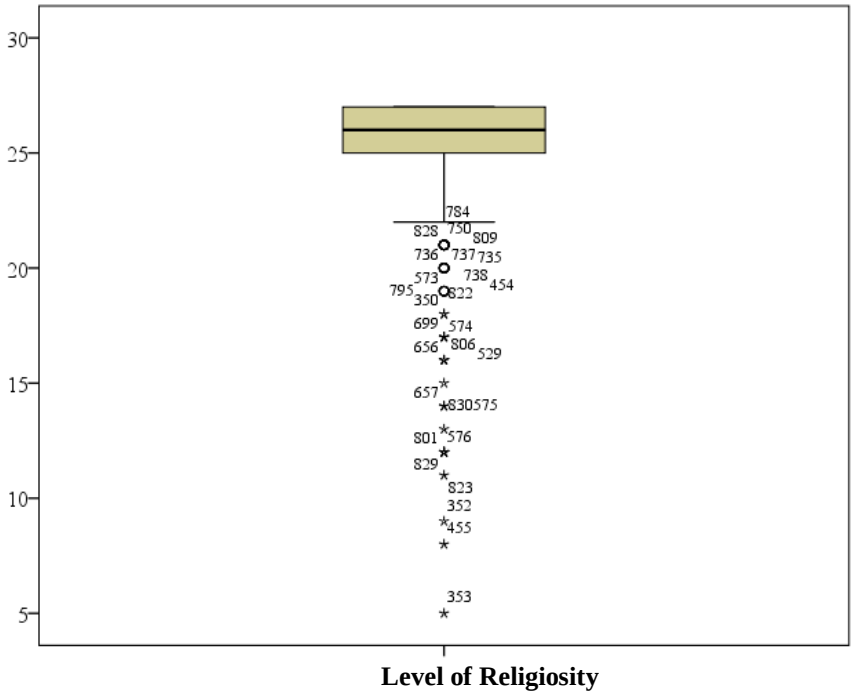


*Figure 2.* Box and whisker plot of level of religiosity (*N* = 830)

The propensity to cheat was computed by summation of the scores for the 30 items in the ICAI questionnaire listed in Table 2 (see Appendix J) in response to Q14 "Please check how often, if ever, in the past year you have engaged in any of the following behaviors." A frequency distribution histogram of the total scores for the propensity to cheat is displayed in Figure 3. The propensity to cheat of each student ranged from a minimum of 14.0 to a maximum of 93.0. The frequency distribution of the propensity to cheat was found to deviate from normality, as indicated by: (a) the frequency distribution had a very high peak near the center, but was not symmetrically bell-shaped; (b) the mean score ($M$ = 34.41) was higher than the median score ($Mdn$ = 32.00) and the mean score was also higher than the score with the highest frequency ($Mode$ = 31.00); (d) the dispersion or scattering of the scores ($SD$ = 6.58) was low, because most of the scores were clustered around the median score; and (e) the Kolmogorov-Smirnov test ($Z$ (830) = 7.04, $p < .001$) was statistically significant.

Furthermore, the asymmetrical box and whisker plot illustrated in Figure 4 also reflected the strong deviation of the propensity to cheat from normality, with a total of 27 outliers (excessively small and large scores indicated by the points in the upper and lower portions of the plot). The internal consistency reliability of the 30 items used to measure the propensity to cheat, however, was good (Cronbach's alpha = .892).

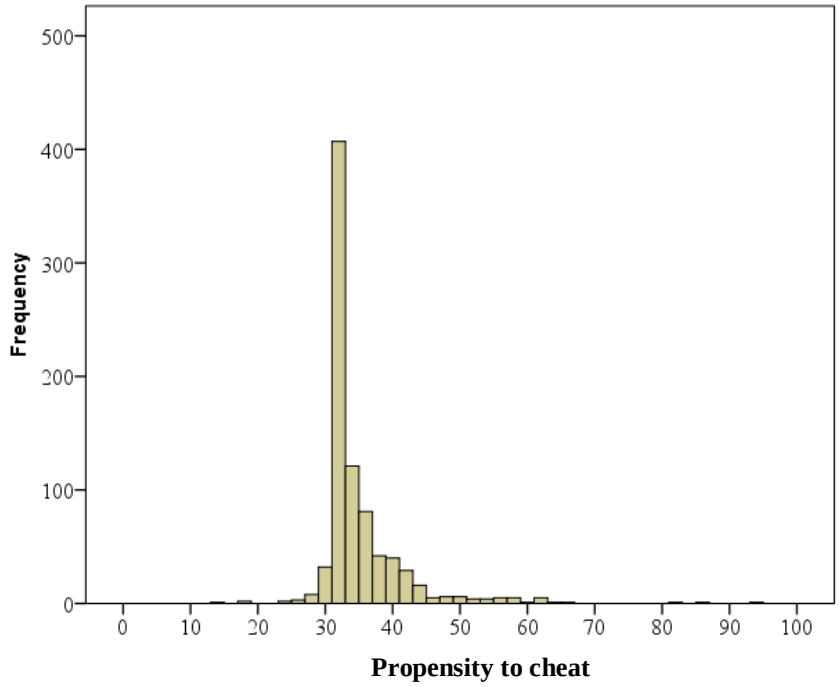


*Figure 3.* Frequency distribution histogram of propensity to cheat (*N* = 830)

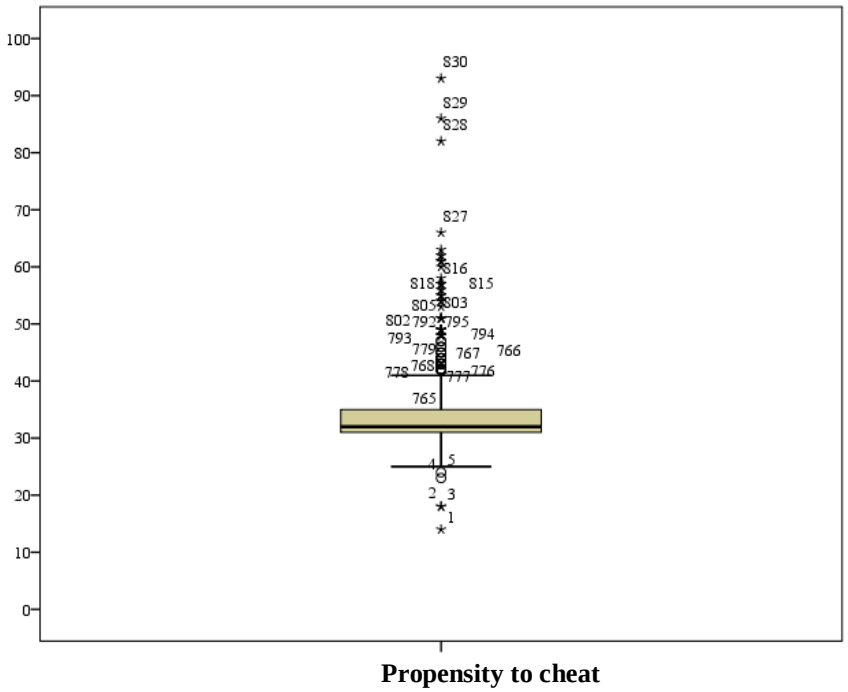


*Figure 4.* Box and whisker plot of propensity to cheat (*N* = 830)

## Results

This final section of Chapter Four presents the evidence to test the null hypothesis that there will be no significant predictive relationship between the level of religiosity and the propensity to cheat at private Christian colleges. Visual examination of the scatterplot in Figure 5 reflects that this relationship was not obviously linear, because the pattern of points did not define a clear straight line. Nevertheless, correlation analysis indicated a statistically significant negative correlation between propensity to cheat and level of religiosity at the .001 level (Pearson's $r$ = -256, $p < .001$); thus, the null hypothesis was rejected.

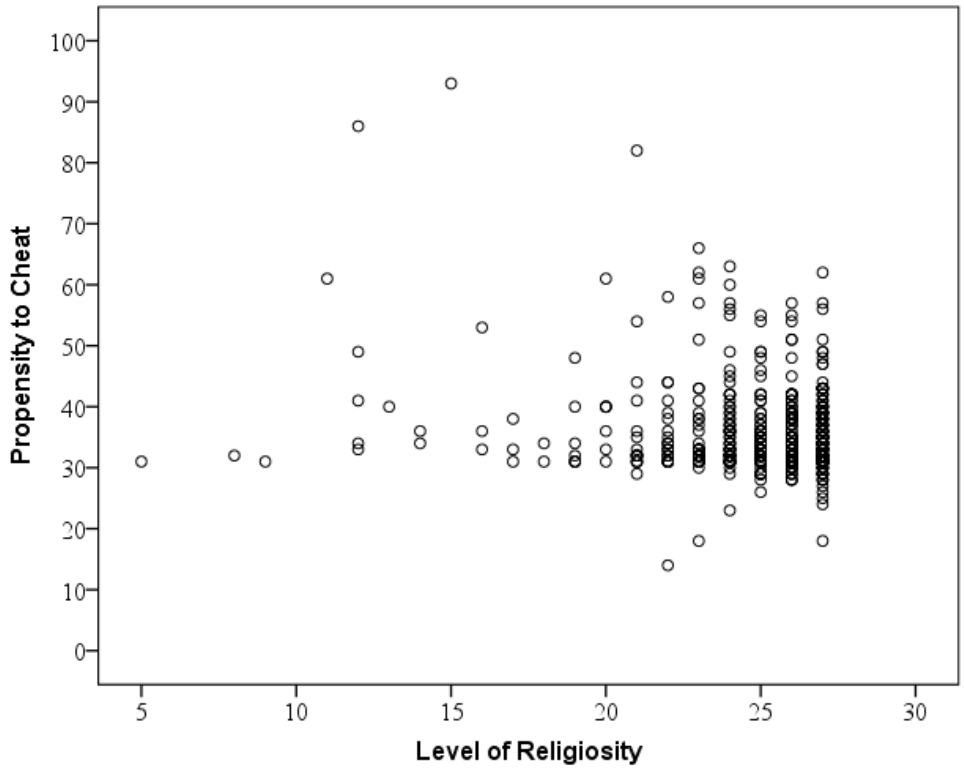


*Figure 5.* Scatterplot of propensity to cheat vs. level of religiosity ($N$ = 830)

Using a scatterplot, Figure 6 illustrates the results of the visual test for homoscedacity. The standardized residuals did not appear to be randomly distributed on either side of their mean

(zero) value, suggesting deviation from homoscedacity. However, there was not a distinct geometric pattern of residuals in the shape of a wedge or triangle reflecting heteroscedacity, which means that the variance in the propensity to cheat increased or decreased systematically with respect to an increase or decrease in the level of religiosity.

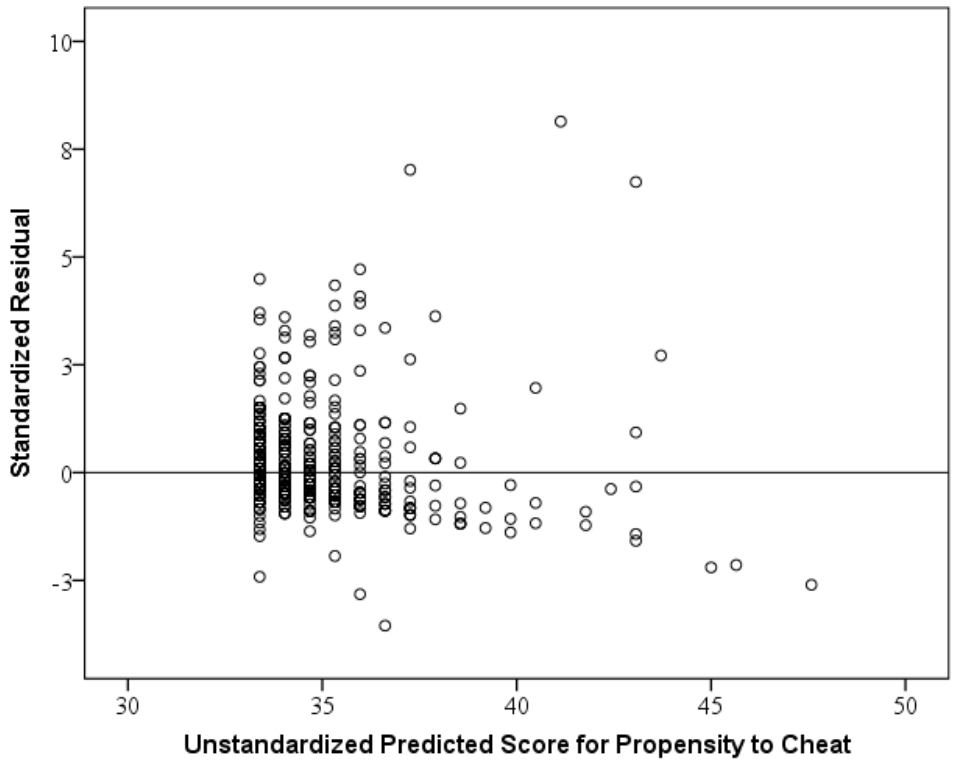


*Figure 6.* Residual plot to test for homoscedacity

The results of linear regression analysis are presented in Table 4 (see Appendix L). The negative regression coefficient ($b_1$ = -0.65, *SE* = 0.09, 95% *CI* = -0.81, - 48) was statistically significant at the .001 level (*t* (828) = -7.63, *p* < .001). The effect size ($R^2$ = .066) was significantly greater than zero at the .001 level (*F* (1, 828) = 51.19, *p* < .001).

Table 4

*Linear Regression of Propensity to Cheat on Level of Religiosity*

| | b | SE | t | p | 95% CI |
|---|---|---|---|---|---|
| Constant | 50.81 | 2.16 | 23.52 | <.001 | 46.57, 55.05 |
| Slope | -0.65 | 0.09 | -7.63 | <.001 | -0.81, -0.48 |

The final questions within this survey were open ended, allowing the students to voice their thoughts regarding their school and cheating. The information collected in question 39 "What specific changes would you like to see your school take in support of academic integrity? What role should students play in this process?" proved to be significant for this study and is reported in Table 5 (see Appendix M). The responses received from 291 students were coded, tabulated, and calculated.

Table 5

*Question 39 Statistical Information (N = 291)*

| Category | *f* | percent |
|---|---|---|
| Student accountability | 34 | 11.7 |
| No student accountability | 26 | 8.9 |
| Stronger monitoring by faculty | 14 | 4.8 |
| Know more about cheating and Consequences meted by college | 49 | 16.8 |
| Add software detection | 4 | 1.4 |

## Summary

Statistical evidence was provided using correlation and linear retrogression analysis to reject the null hypothesis, based on data provided by $N = 830$ respondents who replied "Yes" to the question "Do you consent to be in this study? and also completed all of the items used to measure the level of religiosity and the propensity to cheat. The conclusion is that a significant predictive relationship between the level of religiosity (intrinsic, organizational,

nonorganizational) and the propensity to cheat at private Christian colleges was identified from the total scores on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire. The regression model Y = 50.81 - 0.65 X (using the unstandardized regression coefficient) predicted that when the level of religiosity increased by one unit, the propensity to cheat declined by -0.65 of a unit. Consequently, those students with high levels of religiosity tended to have a lower propensity to cheat, whereas those students with low levels of religiosity tended to have a higher propensity to cheat.

This conclusion is subject to certain limitations caused by violations of the assumptions, including the lack of a clear linear relationship, the deviation from normality, and a tendency toward homoscedacity. The effect size ($R^2 = .066$) reflected that only 6.6% of the variance in propensity to cheat was explained by the level of religiosity. Consequently, the accuracy of the prediction and the scientific insights yielded by the statistical analysis may be compromised (Fisher Statistics Consulting, 2018). These limitations are discussed in Chapter Five along with other discussions, implications, and future research recommendations.

# CHAPTER FIVE: CONCLUSIONS

## Overview

As reported through research and surveys by Donald McCabe and the International Center for Academic Integrity over the past 12 years, 68 percent of undergraduates and 43 percent of graduates have cheated on written assignments and tests (Farkas, 2017); thus, academic dishonesty is an issue that plagues educational institutions, especially higher levels of learning. Whether secular or private Christian institutions of higher learning, the digital age equipped with 21st century skills (Voogt & Knezek, 2013) provides technological temptations students utilize to meet continual educational demands. Born in sin, man struggles with temptation and the fight to choose right over wrong. Students in the classroom setting have the same challenge pertaining to cheat or not to cheat. The propensity to be dishonest is not new. This nature began with Adam and Eve in the garden of Eden when they chose to disobey God. Historically, the first documented cheating took place over 1,000 years ago. The "Cribbing garment," worn by Chinese civil service men as they took their test, was covered with writing on every portion of the inside and outside which provided the person wearing it and those seated around him the answers to the test (Plaks, 2004). With time the problem continued to grow. It is reported in the 1940s that about 20% of college students admitted to cheating during high school. This was reported through surveys which stated that the students cheated in high school and or college. Today there are between 75-98% of students who report cheating in high school or college (Farkas, 2017; NewsOne, 2011; Stanford University, 2016; StatCrunch, 2013; Study.com, 2011). This rise should not be a surprise since the news reports daily unethical behavior of business leaders and educators. The business world has seen the Enron scandal (Hanna, Crittenden, & Crittenden, 2013), the Arthur Anderson Scandal, and the ImClone/Martha

Stewart scandal (Conroy & Emerson, 2006). And educators were shocked with the Atlanta School scandal (Saultz, Murphy, & Aronson, 2016), and more recently the Ohio State University cheating scandal (Ciaccia, 2017). Although much has been documented on the secular side of education regarding cheating, there is very little recorded pertaining to Christian schools. Donald McCabe, a leader in the study of academic cheating coined the phrase campus culture or the campus climate, which he proposed as the most important rationale of the level of on campus cheating by students (McCabe & Trevino, 1996). Test and quiz scores were affected by this behavior and this lack of integrity made its way to the workforce, through shoddy workmanship and dishonesty (Chiu, Hong, & Chiu, 2016; VanMeter, Grisaffe, Chonko, & Roberts, 2013). The difference in student and teacher perceptions of cheating and the inconsistency as to the policies and disciplinary actions surrounding offenders prove to be causes affecting academic behaviors (Burrus et al., 2011; Owunwanne et al., 2010; Pincus & Schmelkin, 2003; Wei et al., 2014). Research indicates that though technology and man's ability to use it continues to develop, academic dishonesty continues to be a significant issue and educational institutions are working to cultivate campus cultures of integrity (Hsiao, 2015; Ip et al., 2016; Wilks et al., 2016).

With these factors in mind, this chapter discusses the purpose of the study while examining the results of the research, the implications of the research and how it impacts todays' student body on the college level and discusses the limitations to the research and recommendations for further research that will aide administration and faculty as they endeavor to create college campuses of academic integrity.

## Discussion

The purpose of this predictive correlational study was to provide rigorous statistical research to aid the administration in private Christian colleges as they build campus cultures of

academic integrity by investigating the theory of planned behavior and self-efficacy as it relates to the level of religiosity and the propensity to cheat. The population for this study consisted of 830 students from 1 large, 2 medium, and 4 small private Christian colleges from the southeastern United States during the spring semester of 2018. One would think that since the population utilized were Christian college students, the outcome to this study would be a given fact that all students would be above board and that definitely there would be a correlation between religiosity levels and the lessening of the propensity to cheat, but one must also remember that not all Christian college students live at the same level of religiosity. For some students, their faith has not been internalized; thus, they do not live by the guidance of the Holy Spirit in their day-to-day activities. There is no desire in their lives to live by Psalm 119:11, "Thy word have I hid in mine heart, that I might not sin against thee" (KJV); thus, it is not a given that all Christian college campuses will not have instances of cheating. The study utilized a questionnaire to assess the level of a student's religiosity, categorical demographic variables, and 30 items to gauge the propensity to cheat. Descriptive statistics were computed for $N = 830$ respondents who consented to be a part of the study and completed all of the questionnaire. The majority of the respondents were undergraduates ($n = 722$, 86.9%), most were female ($n = 536$, 64.6%), the predominant age group was 18 to 24 years old ($n = 725$, 87.3%), most were single ($n = 740$, 89.2%), and most were domestic students ($n = 768$, 92.5%). The data were then entered into SPSS software screening for missing data to avoid biased results and excluding those respondents from the data collection. A bivariate linear regression test and subsequent assumption tests were conducted to test for a significant predictive relationship between a student's level of religiosity and the student's propensity to cheat. It was hypothesized that there would be no significant predictive relationship between the level of religiosity (intrinsic,

organizational, nonorganizational) and the propensity to cheat at private Christian colleges identified from the total score on the Duke University Religion Index (DUREL) and the International Center for Academic Integrity (ICAI) questionnaire. The results of this study produced a high level of religiosity with only 29 outliers identified as a deviation from the normal, and only 27 outliers identified as a deviation from the normal pertaining to the propensity to cheat. The dispersion of scores for the level of religiosity (SD = 2.63) were low, due to the scores being clustered toward the top of the scale demonstrating a high level of religiosity, while the dispersion of scores for the propensity to cheat (*SD* = 6.58) was also low, and the scores clustered around the median score. The regression model Y = 50.81 - 0.65 X predicted that when the level of religiosity increased by one unit, the propensity to cheat declined by -0.65 of a unit. The assumption testing was statistically significant; thus, the null hypothesis was rejected. Although with any research there are limitations and scientific insights that may be compromised by violations of the assumptions and student self-reporting, having a better understanding of the climate of the Christian college student body is paramount and a help to the administration and faculty as they endeavor to create a campus climate of academic integrity.

This research is a direct result of the lack of material available to Christian administrators as it pertains to cheating at Christian colleges. Much documentation concerning campus cultures exists in the public higher education setting (Coren, 2012; Curtis & Clare, 2017; Henslee et al., 2017; McCabe & Makowski, 2001; Palmer et al., 2016); yet very little research outside of a few dissertations documenting campus culture in the Christian realm is available (Bradley, 2015; Longjohn, 2013; Robertson, 2008). Administrators and faculty need to know the climate of their campus as it pertains to academic integrity. Character development occurs over time (Billings & Terkla, 2014; Graham, & Diez, 2015; Kuh & Umbach, 2004), and safeguards, programs, and

opportunities to grow in character must be implemented during the students' educational journey at the college or university.

Identifying the campus culture and implementing programs to help the students to continue to mature and grow is important to foster a campus of integrity. Students who are spiritually grounded will stand for the truth and make good decisions. The theory of planned behavior and self-efficacy identify with this research in that students with intrinsic religiosity are most likely to have a strong sense of efficacy and are more likely to instill safe guards in their lives to deter opportunities for cheating. Peer pressure to cheat and not turn in a fellow student for cheating exists in colleges across the nation (Beasley, 2014; Burnett et al., 2016; Harding et al., 2012; Hsiao, 2015; Huang & Yang, 2015; McCabe & Trevino, 1993a, 1997; Minarcik & Bridges, 2015; Rennie & Crosby, 2002). It was reported earlier in this study that Pan Hellenic/sorority, fraternity membership brought about the more likelihood to cheat than nonmembers (Burrus, McGoldrick, & Schuhmann, 2007; Chapman, Davis, Toy, & Wright, 2004; Harding et al., 2012; Hsiao, 2015; McCabe & Bowers, 2009; McCabe & Trevino, 1997; McKibban & Burdsal, 2013). Harding, Carpenter, and Finelli (2012) revealed in their study that fraternity and sorority membership did not directly affect students' intentions to cheat in the future but rather reduced their sense of moral obligation to avoid cheating. Part of self-efficacy is the willingness to do what is right and turn in someone who is cheating. In their 2002 research, Rennie and Crosby reported that only 13% of students were willing to report their peers. Scrimpshire, Stone, Kisamore, and Jawahar (2017) noted in their study, that out of the 550 undergraduate business students who had witnessed cheating, only 3-5% reported the cheating to someone official. Question 39 of the questionnaire for this research study allowed the students to voice their opinions regarding cheating. Out of the 291 students who responded

to this question, 34 mentioned that student accountability to tell the authority figure in charge that another student cheated was recorded for 11.7% of those who responded to the question, while 8.9% or 26 of their fellow students replied that it is not the student's responsibility to monitor for cheating but rather that of the instructor. There is an increase in the percentage of Christian students vs. the secular college students who take the responsibility to report cheating to the authority in charge, but who is to say that the 3-5% of students in the secular realm are Christian students attending a secular university, or that the 8.9% (Scrimpshire, Stone, Kisamore, & Jawahar, 2017) of students at the Christian college could be unsaved individuals attending a Christian college with no desire to be led of the Spirit to do right. The greatest surprise was the decrease in those secular students in 2002 (13%) who would turn in their peers for cheating and the secular students in 2017 (3-5%). This is a very large decrease. There is no evidence in the Christian realm for a comparison; thus, there is no way of knowing if an increase or decrease exists. Whether self-efficacy, planned behavior, or the depth of religiosity, data from this research and past research show that the higher these levels of character, the less the propensity to cheat in the life of the individual.

## Implications

The campus culture of integrity must be more than "window dressings" (McCabe & Trevino, 1993a). College students, often viewed as emerging adults, deal with many life changes as they enter college. Maturity in their faith directly correlates with their purpose in life (Piedmont, 2001; Reymann, Fialkowski, & Stewart-Sicking, 2015); thus, the stronger their faith, the better their moral temperature as they make their way through their college journey (Molasso, 2006). Internal expression of religion during this timeframe becomes more prevalent than the outward expression such as church attendance (Koenig, 2015, Smith & Snell, 2009).

Belief in God's existence dropped from 71% in 2007 to 63% in 2014 and those who claimed religion to be important in their lives dropped from 56% to 53%, which has most likely been driven by the rapid growth of religiously unaffiliated populations of Americans which rose from 16% in 2007 to 23% in 2014 (Lipka, 2015). In 2015, Pew Research reported that young adults (24-29) recorded that an estimated 72% believed in God, but only 50% of those viewed God as personal and involved Him in their daily lives. This places a very large burden on the administration and faculty of Christian colleges to reach the 50% and help them see the importance of a daily walk with Him. This research study presented a prediction that as the level of religiosity increased by one unit, the propensity to cheat declined by -0.65 a unit (6.6%). The research reported that those students with high levels of religiosity tended to have a lower propensity to cheat, whereas those students with low levels of religiosity tended to have a higher propensity to cheat. Knowing that the slightest increase of religiosity provides a decrease in the propensity to cheat creates a foundation for which administrators and faculty can begin to make opportunities to encourage student spiritual growth.

The spiritual growth may come in many forms. In question 39, Table 5 (see Appendix M), of this study, students responded with comments regarding stronger monitoring during tests, adding cheating software, and knowing more as it pertains to what the institution considers cheating and what punishment is meted out for cheating infractions. There were 5% of the 291 respondents which commented regarding stronger measures toward monitoring tests. These students proposed smaller class sizes, larger rooms where the desks were more spread out, and teachers actually walking around during the test instead of sitting at a desk grading papers. Positive role modeling is important for college students; thus, teachers need to be attentive during testing and set the proper example (Young, Miller, & Barnhardt, 2018).

Students responding (17%) to question 39 also expressed the idea that the administration present to the student body a clearer vision of what cheating is and what consequences are meted out by the administration for violations. Students wanted better instruction as to what is considered plagiarism, how to cite all forms of information, and when to cite specific forms of information whether direct quotes or paraphrased material. The respondents also included comments as to the consequences for infractions. There were comments such as being consistent, the entire faculty need to enforce the policies that are set forth instead of just a few, and students should be reminded before every quiz and test of the possible consequences that could occur if they decided to cheat or plagiarize a paper. First semester engineering students were questioned about their previous knowledge regarding plagiarism. Henslee et al. (2017) reported that 90% of first year engineering students said they had received prior training pertaining to citing works, but when asked to apply that knowledge, about 51% failed to understand how to paraphrase, use quotation marks, or set up a proper citation. Students and faculty must have a mutual understanding as to what constitutes unethical behavior/academic cheating (Camara et al., 2017; Henslee et al., 2017).

The final area addressed in question 39 was that of adding plagiarism software. Although this report only yielded 1% of the 291 respondents for a total of 4 students, there were many respondents who claimed their school already used software and appreciated the extra step taken to catch those who intentionally purchased papers or used another's work for their own purposes. These same respondents also reported that they wished faculty would understand that not all errors are intentional. As an extra safeguard in the framework developed to catch those plagiarizing and committing acts of academic dishonesty, many college administrators have turned to software such as Turnitin.com and others (Kashian et al., 2015; Reisig & Bain, 2016;

Youmans, 2011). For schools dealing with online learning and online test taking, Examity, Gauge, and Proctoru provide secure proctoring for online students. Students who may not be able to procure a proctor can use these services anywhere in the world provided there is internet access and their computer has a camera (Examity, 2017; Gauge, 2017; Proctoru, 2016). The use of software to check for plagiarism and test proctoring is another way the administration sets the right and consistent example for the students in developing a campus culture of academic integrity.

Christian college campuses that set high standards of conduct, consistently keep those standards, and develop students with strong spiritual faith will provide wonderful citizens that eventually join the workforce in the community (Exposito, Ross, & Matteson, 2015; VanMeter et al., 2013). The students' level of religiosity and propensity to cheat have a direct impact on the student, who in turn, has an impact on the workforce and the community including the church, the shopping malls, the grocery store, and other places of business (Hsiao, 2015; Minarcik & Bridges, 2015). It was noted that this trend in cheating was not only affecting the test scores and academic culture of the campus, but the community was impacted by the lack of integrity as well. Students joined the workforce only to carry over their lack of integrity to their current jobs (Chiu, Hong, & Chiu, 2016; VanMeter, Grisaffe, Chonko, & Roberts, 2013). Extra training of supervisors by their employer was required because of the unethical behavior in the workforce which resulted in a burden to the society (Plinio, Young, & Lavery, 2010).

Hsiao (2015) reported other contextual factors that impact academic dishonesty including the student's fear of being caught, the student's fear of penalties, and the fear of catching a peer in the act of academic dishonesty and the pressure to report the act, the difference in faculty and student perceptions of cheating, student perceptions of peer behavior, faculty and

student perceptions of the academic integrity policies or honor codes put in place by the administration. Christian colleges have the opportunity to put in place opportunities for their students to instill in their own lives a strong internalized level of religiosity by setting academic standards, explaining those standards of conduct in meetings, making sure all faculty uphold the standards, and provide opportunities of service to strengthen their character. Faculty need to continually monitor test taking and challenge students prior to testing as to their own level of character, and that they are not only sinning against God, but they are robbing themselves of a quality education.

## Limitations

As in any research, there are always opportunities for limitations, and this research, though proven statistically significant, was not immune. The first limitation comes with the fact that the data was collected from a self-reported survey. Students may falsely report information to make themselves or their institution look good, as one respondent noted in the open-ended questions at the end of the survey. Psalm 10:4 records, "The wicked, through the pride of his countenance, will not seek after God" (KJV), which lends itself to this very thought that man given the opportunity can succumb to the propensity to cheat. This limitation can only be decreased with a student body deeply devoted to the Savior and living a life that sees lying and cheating as the sin that it is and reports honestly to all questions on the survey.

Another limitation is the data collected for the research. Out of the 7,666 students to receive the email requesting their help with the study, only 1,294 responded and of those, only 830 completed the entire survey. The limitation comes when one considers who the respondents were, those who are highly religious, which in this study seems to be the case with the mean score ($M$ = 25.41). The maximum score for religiosity was 27; thus, most of the respondents

were self-reported as highly religious. This poses a limitation in that this small sample provided a statistically significant study, but does it accurately provide a snapshot of the religious perspective and the propensity to cheat of the entire student body of Christian college campuses? Since this was an anonymous survey, there was no way to reward those who participated, which may have caused others not to respond to the study. Some students may have been fearful that their IP address could be traced back to them (although this feature was disabled for this survey); thus, they did not participate for fear of being caught and turned in for their honesty on the survey.

The researcher was also limited in the private Christian colleges utilized in the study. Choosing to employ the students of private Christian colleges solely in the southeastern United States was challenging. The researcher contacted fifteen private Christian colleges and universities and only seven of those volunteered their entire student body for this research. The volunteer response regarding large private Christian colleges posed a challenge, as well. There were seven large private Christian colleges in the southeastern United States contacted, but only one college positively responded to allow the entire student body to participate in this study; thus, there could be no comparison within the two campuses.

Another limitation presented itself regarding the assumption testing. Small portions of the student bodies violated the assumptions, including the lack of a clear linear relationship, the deviation from normality, and a tendency toward homoscedacity. Although these limitations did not bar the study from being statistically significant, the effect size ($R^2 = .066$) reflected that only 6.6% of the variance in the propensity to cheat was explained by the level of religiosity; therefore, the scientific insights yielded by the statistical analysis and the accuracy of the

prediction may be compromised. These limitations can only be lessened by a larger sample of respondents, which may be possible with a longer collection time.

The final limitation concerns the length of time given to the students for completing the survey. Initially the students were to have two months, but a later Institutional Review Board acceptance date produced a shorter time frame (three to five weeks) for data collection. The two medium sized schools joined the study in the last two weeks; thus, their students had a shorter amount of time to respond to the email. It was also recorded in the final open-ended questions that a few majors were not represented in the list on the ICAI survey; thus, those respondents surveys may have been discarded since they did not respond to that particular question. For future testing, the researcher should seek permission to add an additional choice, "other," for students whose major does not appear on the list provided in this survey tool. Providing a longer collection time may increase participation, and then again it may not change the number of participants. Some students are wary of electronic tracking and do not wish to put their sensitive information onto a system that might be able to track their location.

Despite the limitations, the research provided statistically significant information for administrators and faculty to utilize as they endeavor to create college campuses that reflect academic integrity. These limitations, though few in number remind the researcher and those to follow that all meaningful work has its limitations and drawbacks. In this particular study, Satan would love to deter the data collection to help further his mission on earth, which is to thwart the spiritual growth in the lives of Christians. The researcher that puts forth a study that sheds light on the religiosity level of a Christian college or university draws a large bullseye on his or her back for Satan to take aim to stop these findings from being discovered, recorded, and shared with administration and faculty to keep the academic integrity level high on their campuses. To

better prepare future generations of college students both secular and Christian, further research in the area of academic integrity and the climate of religiosity must be conducted.

## Recommendations for Future Research

The findings in this research, though minuscule in light of the research represented in the secular realm (Dix et al., 2014; Gullifer & Tyson, 2014; Hsiao, 2015; Kuntz & Butler, 2014; Minarcik & Bridges, 2015; Patall & Leach, 2015), demonstrated that there still remains a gap in the literature as it pertains to Christian college campuses. Recommendations for further research include

1. A comparison of public versus Christian college campuses
2. Revisit the same schools utilized in this survey and use parts of the questionnaire with the faculty and administration
3. Revisit the same schools or utilize new campuses to investigate the student body's upbringing and the effect it has on the level of religiosity
4. Utilize this research having three dependent variables that can be extracted from the survey data:
    a. Propensity to cheat by plagiarizing,
    b. Propensity to cheat on tests, and
    c. Propensity to cheat by falsifying excuses.
5. Using colleges from the northeast, Midwest, southeast, or southwest for the research
6. Study the differences between international students and American students within the study

A comparison of public vs Christian college campuses, in which the researcher could use the information from this study and another secular study or utilize two new college campuses could

prove very profitable for an administrator on either type campus attempting to create a college campus with sound academic integrity. The researcher should endeavor to gain access to the entire student body and provide ample time for data collection.

The second recommendation revisits the same schools utilized in this survey and uses parts of the questionnaire with the faculty and administration. This would validate whether or not the faculty and administration have the same perceptions of cheating and consequences for cheating. This survey could utilize the ICAI instrument honing in on questions 1-9, 11, 12, 15, 16, 20, 21, 23, 25, 26, 35, 36. A comparison of the perceptions of cheating by faculty and administration and that of the student body would greatly help as the college works toward building a campus of academic integrity.

The third recommendation would utilize new campuses or revisit the same schools to investigate the student body's upbringing and the effect it has on the level of religiosity. Are the respondents from Christian or secular homes, are they public school, Christian school, or home schooled? Are the respondents regular church attendees or sporadic attendees? Are the respondents from a broken home, a traditional home, or a disciplined home? As reported by Qualls (2014) and other researchers, disciplinary practices during the college students' childhood have bearing on the moral values internalized by that child. It was reported that students receiving harsh corporal punishment, not a normal spanking, had more of a propensity to cheat than those students who were spoken to by a parent or received a normal spanking, and these students who received harsh corporal punishment had decreased internalized moral values (Grusec & Goodnow, 1994; Hart, Atkins, & Ford, 1999; Rothbaum & Weisz, 1994; Smetana, 1999). Planned behavior and self-efficacy would be strengthened or weakened by the increase or decrease of internal moral values. Proverbs 22:15 and 23:13 admonish parents to correct their

children to help the child depart from foolishness, but the Bible does not present harsh corporal punishment; thus, this would be another area to explore regarding internalized moral values and the level of religiosity and the effect it has on campus cultures of academic integrity.

The fourth recommendation occurred during the data analysis as the researcher discovered that there could have been three dependent variables from which easy data collection would have been possible. This would provide a researcher with a statistical significant start to further research providing specific information regarding the propensity to cheat by way of plagiarism, cheating on tests and quizzes, and falsifying excuses.

The final recommendations pertaining to utilizing students from different parts of the country and international students offer another avenue from which the researcher can approach this study. Payan, Reardon, and McCorkle (2010) conducted a comparison study of the United States and several foreign countries revealing that the international students had a stronger propensity to cheat than their United States counterparts. This could offer great insight for the administration and faculty in their understanding of the disparity between the two types of students and their perceptions as to what constitutes cheating and their personal level of religiosity and the propensity to cheat.

Since Adam and Eve sinned in the garden (Genesis 3:6-24), man has been born with the propensity to sin. Down through the ages there are recorded instances of cheating whether with clothing (Plaks, 2004), cheat sheets and various other ways to hide answers (Auger, 2013; Bernardi et al., 2008; McCabe & Trevino, 1993a, 1993b, 1995; McClung & Schneider, 2015), or by ways of technology (Bachore, 2014; Josien & Broderick, 2013; Lipson & Karthikeyan, 2016; Ma et al., 2008). Administrators face the daunting task to direct their faculty in ways to guide students and promote growth in academic integrity which will increase the students character and

value system to choose that which is right and have a decreased propensity to cheat. The extended research of Donald L. McCabe (2012) over the years has produced many studies which focus on academic integrity and the advancement of learning. Students at private Christian colleges are not immune to the temptation of cheating. Promoting a campus culture of academic integrity is a daunting task facing each administrator in this burgeoning 21st century technological classroom setting. This research presented statistical evidence (6.6%) that as the level of religiosity strengthened, the propensity to cheat lessened. Although this is not a large percentage, the fact of the matter is that there is evidence that the student with more internalized religiosity has the self-efficacy to guard the heart and mind and set safeguards to help ward off the propensity to cheat. Administrators and faculty need to work together to be sure that the students and their perceptions of cheating are the same, which could be accomplished through general meetings. The school policies must be known and upheld by students and faculty alike. There should be no question as to the consequences meted out for failure to comply with the policies set forth, and there should be no retribution for those who have the fortitude and character to step forth and turn in a peer for violating the policies. Administration should work hard to be sure that anonymity is maintained to protect the student who stepped forward to uphold the cheating policy.

The students of this millennial generation have information at their fingertips and can access almost any piece of knowledge as fast as the internet access their device provides. With this quick speed of access also comes the danger of quick dispensing of materials that should not be shared such as tests, quizzes, and work used for prior assignments. As a Christian administrator or faculty member, one should work toward developing a campus that promotes honest integrity through chapel messages that deal with character qualities such as honesty,

integrity, sin, pride, and other subjects that pertain to spiritual growth and making wise decisions. The internet and YouTube are teeming with short videos showing students how to cheat. The only recourse is to teach character on a daily basis and model Christian character within the classroom settings. Helping students to understand that their sin not only effects them but also others and hurts the heart of God is the first step to curbing the propensity to cheat. Guidance for time management, community service opportunities, explanation of the perceptions of cheating and the consequences, and kind and caring direction from faculty and administration could be the factors that help create academic integrity that honors the Lord and creates a campus climate that deters the propensity to cheat in the student body. Students need to be reminded that God sees all and knows all. They need to be reminded of Genesis 16:13, "Thou God seest me" (KJV). Another verse to share periodically is James 4:17 which states, "Therefore to him that knoweth to do good, and doeth it not, to him it is sin" (KJV). Equipped with these verses and a caring administration and faculty the Christian college student is ready to battle Satan and the propensity to cheat, and the college sends a spiritually strong Christian into the workforce and society with a stronger sense of doing right. This quality will then be passed on to the next generation as these students train their own children in the way they were trained. It is the responsibility of every administrator and faculty member to create a campus culture that promotes academic integrity, a strong internal religiosity, and perpetuates Christian character that reaches far into the future for His honor and glory.

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## APPENDIX A: ACADEMIC INTEGRITY SURVEY

McCabe's Academic Integrity Survey (M-AIS) now known as International Center for Academic Integrity Survey (ICAI) *Question 25 has been returned to its original Male/Female setup by dropping the Transgender/Other wording that was not part of the M-AIS survey when reliability and validity scores were computed but rather added more recently.

Test Survey--ICAI Student

Q1 How would you rate:

| | Very Low | Low | Average | High | Very High |
|---|---|---|---|---|---|
| The severity of penalties for cheating at _____? | ❍ | ❍ | ❍ | ❍ | ❍ |
| The average student's understanding of campus policies concerning student cheating? | ❍ | ❍ | ❍ | ❍ | ❍ |
| The faculty's understanding of these policies? | ❍ | ❍ | ❍ | ❍ | ❍ |
| Student support of these policies? | ❍ | ❍ | ❍ | ❍ | ❍ |
| Faculty support of these policies? | ❍ | ❍ | ❍ | ❍ | ❍ |
| The effectiveness of these policies? | ❍ | ❍ | ❍ | ❍ | ❍ |

Q2 Have you been informed about the academic integrity or cheating policies at _____?

❍ Yes

❍ No

Q3 Where and how much have you learned about these policies?

| | Learned Little or Nothing | Learned Some | Learned A Lot |
|---|---|---|---|
| First-year orientation program or registration program | ❍ | ❍ | ❍ |
| Campus website | ❍ | ❍ | ❍ |
| Student handbook | ❍ | ❍ | ❍ |
| Program counselor, residential advisor, or faculty advisor | ❍ | ❍ | ❍ |
| Other students | ❍ | ❍ | ❍ |
| Faculty | ❍ | ❍ | ❍ |
| Teaching assistant | ❍ | ❍ | ❍ |
| Dean or other administrator | ❍ | ❍ | ❍ |

Q4 To what extent do you have a clear understanding of _____'s policies regarding academic honesty?

❍ Not at all
❍ A Little
❍ Average
❍ A Lot
❍ Greatly

Q5 Before you came to _____, were you aware that the school had an honor code?

❍ Yes
❍ No

Q6 Did the fact that _____ has an honor code impact your decision to attend?

❍ Yes
❍ No

Q7 In the past year, how often, on average, did your instructors discuss policies concerning:

| | Never | Very Seldom | Seldom/Sometimes | Often | Very Often |
|---|---|---|---|---|---|
| Plagiarism | ❍ | ❍ | ❍ | ❍ | ❍ |
| Guidelines on group work or collaboration | ❍ | ❍ | ❍ | ❍ | ❍ |
| Proper citation/referencing of written sources | ❍ | ❍ | ❍ | ❍ | ❍ |
| Proper citation/referencing of Internet sources | ❍ | ❍ | ❍ | ❍ | ❍ |
| Falsifying/fabricating course lab data | ❍ | ❍ | ❍ | ❍ | ❍ |
| Falsifying/fabricating research data | ❍ | ❍ | ❍ | ❍ | ❍ |

Q8 How frequently do you think the following occurred at your secondary school/high school?

| | Never | Very Seldom | Seldom/Sometimes | Often | Very Often |
|---|---|---|---|---|---|
| Plagiarism on written assignments. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Inappropriately sharing work in group assignments. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Cheating during tests or examinations. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Submitting the same paper in more than one course without specific permission. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Purchasing papers. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Use of electronic/digital devices as an unauthorized aid during an in-class test. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Falsifying information on an exam or paper after it has been graded/submitted. | ❍ | ❍ | ❍ | ❍ | ❍ |

Q9 How frequently do you think the following occur at _____?

| | Never | Very Seldom | Seldom/Sometimes | Often | Very Often |
|---|---|---|---|---|---|
| Plagiarism on written assignments. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Inappropriately sharing work in group assignments. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Cheating during tests or examinations. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Submitting the same paper in more than one course without specific permission. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Purchasing papers. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Use of electronic/digital devices as an unauthorized aid during an in-class test. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Falsifying information on an exam or paper after it has been graded/submitted. | ❍ | ❍ | ❍ | ❍ | ❍ |

Q10 How often, if ever, have you seen another student cheat during a test or examination at your secondary school/high school?

❍ Never
❍ Once
❍ A Few Times
❍ Several Times
❍ Many Times

Q11 How often, if ever, have you seen another student cheat during a test or examination at _____?

- ❍ Never
- ❍ Once
- ❍ A Few Times
- ❍ Several Times
- ❍ Many Times

Q12 Have you ever reported another student for cheating?

- ❍ Yes
- ❍ No

Q13 Please check how often, if ever, in the past year you have engaged in any of the following behaviors.

| | Never | Once | More than Once | Not Relevant |
|---|---|---|---|---|
| Fabricating or falsifying a bibliography. | ❍ | ❍ | ❍ | ❍ |
| Working on an assignment with others (in person) when the instructor asked for individual work. | ❍ | ❍ | ❍ | ❍ |
| Working on an assignment with others (using digital means like email, text messaging, or social media) when the instructor asked for individual work. | ❍ | ❍ | ❍ | ❍ |
| Getting questions or answers from someone who has already taken a test. | ❍ | ❍ | ❍ | ❍ |
| In a course requiring computer work, copying another student's work rather than writing your own. | ❍ | ❍ | ❍ | ❍ |
| Helping someone else cheat on a test. | ❍ | ❍ | ❍ | ❍ |
| Fabricating or falsifying lab data. | ❍ | ❍ | ❍ | ❍ |

| | | | | |
|---|---|---|---|---|
| Fabricating or falsifying research data. | ❍ | ❍ | ❍ | ❍ |
| Copying from another student during a test WITH his or her knowledge. | ❍ | ❍ | ❍ | ❍ |
| Copying from another student during a test or examination WITHOUT his or her knowledge. | ❍ | ❍ | ❍ | ❍ |
| Using digital technology (such as email, text messaging, or social media) to get unpermitted help from someone during a test or examination. | ❍ | ❍ | ❍ | ❍ |
| Receiving unpermitted help on an assignment. | ❍ | ❍ | ❍ | ❍ |
| Copying (by hand or in person) another student's homework. | ❍ | ❍ | ❍ | ❍ |
| Copying (using digital means such as email, text messaging, or social media) another student's homework. | ❍ | ❍ | ❍ | ❍ |

Q14 Please check how often, if ever, in the past year you have engaged in any of the following behaviors.

| | Never | Once | More than Once | Not Relevant |
|---|---|---|---|---|
| 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. | ❍ | ❍ | ❍ | ❍ |
| Turning in a paper from a "paper mill" (a paper written and previously submitted by another student) and claiming it as your own work. | ❍ | ❍ | ❍ | ❍ |
| Paraphrasing or copying a few sentences of material from an electronic source - e.g., the internet - without citing them in a paper you submitted. | ❍ | ❍ | ❍ | ❍ |
| Submitting a paper, you purchased or obtained from a website and claimed it as your own work. | ❍ | ❍ | ❍ | ❍ |
| Using handwritten crib notes (or cheat sheets) during a test or exam. | ❍ | ❍ | ❍ | ❍ |

| | | | | |
|---|---|---|---|---|
| Using electronic crib notes (stored in tablet, phone, or calculator) to cheat on a test or exam. | ❍ | ❍ | ❍ | ❍ |
| Using an electronic/digital device as an unauthorized aid during an exam. | ❍ | ❍ | ❍ | ❍ |
| Copying material, almost word for word, from any written source and turning it in as your own work. | ❍ | ❍ | ❍ | ❍ |
| 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. | ❍ | ❍ | ❍ | ❍ |
| Using a false or forged excuse to obtain an extension on a due date or delay taking an exam. | ❍ | ❍ | ❍ | ❍ |
| Turning in work done by someone else. | ❍ | ❍ | ❍ | ❍ |
| Receiving requests from another person (in person or using electronic means) to copy your homework. | ❍ | ❍ | ❍ | ❍ |

| | | | | |
|---|---|---|---|---|
| Submitting the same paper in more than one course without specific permission. | ❍ | ❍ | ❍ | ❍ |
| Using Cliff Notes or Spark Notes and not citing. | ❍ | ❍ | ❍ | ❍ |
| Using a drug such as Adderall to aid in studying/taking an exam. | ❍ | ❍ | ❍ | ❍ |
| Cheating on a test in any other way. | ❍ | ❍ | ❍ | ❍ |

Q15 Please rate how serious you believe each type of behavior is.

| | Not Cheating | Trivial Cheating | Moderate Cheating | Serious Cheating |
|---|---|---|---|---|
| Fabricating or falsifying a bibliography. | ❍ | ❍ | ❍ | ❍ |
| Working on an assignment with others (in person) when the instructor asked for individual work. | ❍ | ❍ | ❍ | ❍ |
| Working on an assignment with others (using digital means like email, text messaging, or social media) when the instructor asked for individual work. | ❍ | ❍ | ❍ | ❍ |
| Getting questions or answers from someone who has already taken a test. | ❍ | ❍ | ❍ | ❍ |
| In a course requiring computer work, copying another student's work rather than writing your own. | ❍ | ❍ | ❍ | ❍ |
| Helping someone else cheat on a test. | ❍ | ❍ | ❍ | ❍ |
| Fabricating or falsifying lab data. | ❍ | ❍ | ❍ | ❍ |

| | | | | |
|---|---|---|---|---|
| Fabricating or falsifying research data. | ❍ | ❍ | ❍ | ❍ |
| Copying from another student during a test WITH his or her knowledge. | ❍ | ❍ | ❍ | ❍ |
| Copying from another student during a test or examination WITHOUT his or her knowledge. | ❍ | ❍ | ❍ | ❍ |
| Using digital technology (such as email, text messaging, or social media) to get unpermitted help from someone during a test or examination. | ❍ | ❍ | ❍ | ❍ |
| Receiving unpermitted help on an assignment. | ❍ | ❍ | ❍ | ❍ |
| Copying (by hand or in person) another student's homework. | ❍ | ❍ | ❍ | ❍ |
| Copying (using digital means such as email, text messaging, or social media) another student's homework. | ❍ | ❍ | ❍ | ❍ |

Q16 (Continued) Please rate how serious you believe each type of behavior is.

| | 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. | ❍ | ❍ | ❍ | ❍ |
| Turning in a paper from a "paper mill" (a paper written and previously submitted by another student) and claiming it as your own work. | ❍ | ❍ | ❍ | ❍ |
| Paraphrasing or copying a few sentences of material from an electronic source - e.g., the internet - without citing them in a paper you submitted. | ❍ | ❍ | ❍ | ❍ |
| Submitting a paper, you purchased or obtained from a website and claimed it as your own work. | ❍ | ❍ | ❍ | ❍ |
| Using handwritten crib notes (or cheat sheets) during a test or exam. | ❍ | ❍ | ❍ | ❍ |

| | | | | |
|---|---|---|---|---|
| Using electronic crib notes (stored in tablet, phone, or calculator) to cheat on a test or exam. | ❍ | ❍ | ❍ | ❍ |
| Using an electronic/digital device as an unauthorized aid during an exam. | ❍ | ❍ | ❍ | ❍ |
| Copying material, almost word for word, from any written source and turning it in as your own work. | ❍ | ❍ | ❍ | ❍ |
| 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. | ❍ | ❍ | ❍ | ❍ |
| Using a false or forged excuse to obtain an extension on a due date or delay taking an exam. | ❍ | ❍ | ❍ | ❍ |
| Turning in work done by someone else. | ❍ | ❍ | ❍ | ❍ |
| Receiving requests from another person (in person or using electronic means) to copy your homework. | ❍ | ❍ | ❍ | ❍ |

| | | | | |
|---|---|---|---|---|
| Submitting the same paper in more than one course without specific permission. | ❍ | ❍ | ❍ | ❍ |
| Using Cliff Notes or Spark Notes and not citing. | ❍ | ❍ | ❍ | ❍ |
| Using a drug such as Adderall to aid in studying/taking an exam. | ❍ | ❍ | ❍ | ❍ |
| Cheating on a test in any other way. | ❍ | ❍ | ❍ | ❍ |

Q17 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.
- ❍ Have only used hard (paper) copies of sources.
- ❍ Have primarily used Internet or other electronic means.
- ❍ Have primarily used hard (paper) copies of sources.
- ❍ Have used both methods pretty equally.

Q18 Have you ever taken an online test or exam at _____?

- ❍ Yes
- ❍ No

Answer If Have you ever taken an online test or exam at _____? Yes, Is Selected

Q19 If you have taken an online test or exam at _____, have you ever (check all that apply):

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

Q20 How likely is it that:

| | Very Unlikely | Unlikely | Likely | Very Likely |
|---|---|---|---|---|
| You would report an incident of cheating that you observed? | ❍ | ❍ | ❍ | ❍ |
| The typical student at _____ would report such violations? | ❍ | ❍ | ❍ | ❍ |
| A student would report a close friend? | ❍ | ❍ | ❍ | ❍ |

Q21 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 _____. | ❍ | ❍ | ❍ | ❍ | ❍ |
| The investigation of suspected incidents of cheating is fair and impartial at _____. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Students should be held responsible for monitoring the academic integrity of other students. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Faculty members are vigilant in discovering and reporting suspected cases of academic dishonesty. | ❍ | ❍ | ❍ | ❍ | ❍ |
| Faculty members change exams and assignments on a regular basis. | ❍ | ❍ | ❍ | ❍ | ❍ |
| The amount of course work I'm expected to complete is reasonable for my year level and program. | ❍ | ❍ | ❍ | ❍ | ❍ |
| The degree of difficulty in my exams and assignments is appropriate for my year level and program. | ❍ | ❍ | ❍ | ❍ | ❍ |
| The types of assessment used in my courses are effective at evaluating my level of understanding of course concepts. | ❍ | ❍ | ❍ | ❍ | ❍ |
| The types of assessment used in my courses are effective at helping me learn course concepts. | ❍ | ❍ | ❍ | ❍ | ❍ |

Q22 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 | ❍ | ❍ | ❍ | ❍ |
| A casual acquaintance or classmate | ❍ | ❍ | ❍ | ❍ |
| Your parents | ❍ | ❍ | ❍ | ❍ |

Q23 What do you see as successful strategies toward combating academic dishonesty on campus (check all that apply)?

- ❑ Institution of an honor code.
- ❑ Better education regarding academic dishonesty in a First-Year program.
- ❑ Better education regarding academic dishonesty in the departments/programs.
- ❑ Harsher sanctions for academic dishonesty violations.
- ❑ Use of Turnitin.com or other software designed to detect plagiarism.

Q24 What is your academic class standing?

- ❍ 1st year undergraduate (Freshman)
- ❍ 2nd year undergraduate (Sophomore)
- ❍ 3rd year undergraduate (Junior)
- ❍ 4th year undergraduate (Senior)
- ❍ 5th year undergraduate
- ❍ 1st year MA
- ❍ 2nd year MA
- ❍ 3rd year MA
- ❍ 1st year Ph.D.
- ❍ 2nd year Ph.D.
- ❍ 3rd year Ph.D.
- ❍ Ph.D. Candidate
- ❍ Non-degree seeking
- ❍ Continuing Education

Q25 What is your gender?

- ❍ Male
- ❍ Female

Q26 How old are you?

- ❍ Under 18
- ❍ 18 - 24
- ❍ 25 - 39
- ❍ 40 or older

Q27 Are you a domestic or international student?

- ❍ Domestic
- ❍ International

Q28 Are you a part time or full time student?

- ❍ Part time
- ❍ Full time

Q29 What is your marital status?

- ❍ Single
- ❍ Married
- ❍ Divorced
- ❍ Other

Q30 What is your current living situation?

- ❍ Dorm - alone or with roommates
- ❍ Apartment - alone or with roommates
- ❍ Home - alone or with roommates
- ❍ Home - with parents

Q31 What is your declared or intended academic concentration?

- ❍ Accounting
- ❍ Agribusiness
- ❍ Agricultural Mechanization and Business
- ❍ Animal and Veterinary Sciences
- ❍ Anthropology
- ❍ Applied Economics
- ❍ Architecture
- ❍ Art
- ❍ Automotive Engineering
- ❍ Biochemistry
- ❍ Bioengineering
- ❍ Biological Sciences
- ❍ Biomedical Engineering
- ❍ Biosystems Engineering
- ❍ Business Administration
- ❍ Chemical Engineering
- ❍ Chemistry
- ❍ City and Regional Planning
- ❍ Civil Engineering
- ❍ Communications Studies
- ❍ Computer Engineering
- ❍ Computer Information Systems
- ❍ Computer Science
- ❍ Construction Science and Management
- ❍ Digital Production Arts
- ❍ Early Childhood Education
- ❍ Economics
- ❍ Electrical Engineering
- ❍ Elementary Education
- ❍ English
- ❍ Environmental and Natural Resources
- ❍ Environmental Engineering
- ❍ Financial Management
- ❍ Food Science
- ❍ Forest Resource Management
- ❍ Genetics
- ❍ Geology
- ❍ Graphic Communications
- ❍ Health Science
- ❍ History

- Horticulture
- Industrial Engineering
- Landscape Architecture
- Language and International Health
- Language and International Trade
- Management
- Marketing
- Materials Science and Engineering
- Mathematical Sciences
- Mathematics Teaching
- Mechanical Engineering
- Microbiology
- Modern Languages
- Nursing
- Packaging Science
- Pan African Studies
- Parks, Recreation, and Tourism Management
- Philosophy
- Physics
- Plant and Environmental Sciences
- Political Science
- Production Studies in Performing Arts
- Psychology
- Religious Studies
- Science Teaching
- Secondary Education
- Sociology
- Special Education
- Sports Communication
- Turf grass
- Wildlife and Fisheries Biology
- Women's Leadership
- World Cinema
- Youth Development Studies

Q32 If you plan to declare, or have declared a second major, what is it?

- ❍ Accounting
- ❍ Agribusiness
- ❍ Agricultural Mechanization and Business
- ❍ Animal and Veterinary Sciences
- ❍ Anthropology
- ❍ Applied Economics
- ❍ Architecture
- ❍ Art
- ❍ Automotive Engineering
- ❍ Biochemistry
- ❍ Bioengineering
- ❍ Biological Sciences
- ❍ Biomedical Engineering
- ❍ Biosystems Engineering
- ❍ Business Administration
- ❍ Chemical Engineering
- ❍ Chemistry
- ❍ City and Regional Planning
- ❍ Civil Engineering
- ❍ Communications Studies
- ❍ Computer Engineering
- ❍ Computer Information Systems
- ❍ Computer Science
- ❍ Construction Science and Management
- ❍ Digital Production Arts
- ❍ Early Childhood Education
- ❍ Economics
- ❍ Electrical Engineering
- ❍ Elementary Education
- ❍ English
- ❍ Environmental and Natural Resources
- ❍ Environmental Engineering
- ❍ Financial Management
- ❍ Food Science
- ❍ Forest Resource Management
- ❍ Genetics
- ❍ Geology
- ❍ Graphic Communications
- ❍ Health Science
- ❍ History

- Horticulture
- Industrial Engineering
- Landscape Architecture
- Language and International Health
- Language and International Trade
- Management
- Marketing
- Materials Science and Engineering
- Mathematical Sciences
- Mathematics Teaching
- Mechanical Engineering
- Microbiology
- Modern Languages
- Nursing
- Packaging Science
- Pan African Studies
- Parks, Recreation, and Tourism Management
- Philosophy
- Physics
- Plant and Environmental Sciences
- Political Science
- Production Studies in Performing Arts
- Psychology
- Religious Studies
- Science Teaching
- Secondary Education
- Sociology
- Special Education
- Sports Communication
- Turf grass
- Wildlife and Fisheries Biology
- Women's Leadership
- World Cinema
- Youth Development Studies

Q33 What is your approximate cumulative grade point average?

- ❍ 3.50-4.00
- ❍ 3.00-3.49
- ❍ 2.50-2.99
- ❍ 2.00-2.49
- ❍ Below 2

Q34 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.

| | 1-10 Hours Per Week | 11-20 Hours Per Week | 21-30 Hours Per Week | 31-40 Hours Per Week | 40+ Hours Per Week |
|---|---|---|---|---|---|
| Paid employment | ❍ | ❍ | ❍ | ❍ | ❍ |
| Caring for a dependent or family member | ❍ | ❍ | ❍ | ❍ | ❍ |
| Social fraternity/sorority/club | ❍ | ❍ | ❍ | ❍ | ❍ |
| Athletics | ❍ | ❍ | ❍ | ❍ | ❍ |
| Academic club or group | ❍ | ❍ | ❍ | ❍ | ❍ |
| Student government | ❍ | ❍ | ❍ | ❍ | ❍ |
| Non-athletic organization that regularly travels (Model UN, Debate, etc.) | ❍ | ❍ | ❍ | ❍ | ❍ |
| Other | ❍ | ❍ | ❍ | ❍ | ❍ |

Q35 What specific changes would you like to see _____ take in support of academic integrity? What role should students play in this process?

Q36 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.

McCabe, D. L., Butterfield, K. D., & Treviño, L. K. (2012). *Cheating in college: Why students do it and what educators can do about it*. Baltimore: Johns Hopkins University Press.

Permission for McCabe's Academic Integrity Survey (M-AIS) now known as International

Center for Academic Integrity Survey (ICAI)

David Rettinger
Thu 3/16/2017, 7:45 AM Williams, Linda
Ms. Williams,
You would be welcome to use the survey as published for your dissertation. That's a bedrock expectation of research integrity, and since data from the survey instrument has been published, we're happy to share the survey.

I've attached a sample survey from a few years ago for your use. Linda Trevino will probably know the history better than I do, but I expect that if you cite McCabe, Butterfield, and Trevino, 2012 that would be fine.

DR
--
David Rettinger
Executive Director
Center for Honor, Leadership, & Service
Associate Professor of Psychology
**University of Mary Washington**
540-654-1364
http://students.umw.edu/CHLS

Permission to use the questionnaire in this paper.

David Rettinger
Tue 4/17, 6:48 AMWilliams, Linda
Flag for follow up. Start by Tuesday, April 17, 2018. Due by Tuesday, April 17, 2018.
May I have your permission to place the questionnaire in the appendix of my dissertation?
Certainly. Congratulations on your successful defense.

DR
--
David Rettinger
Associate Professor of Psychology
Executive Director of the Center for Honor, Leadership, & Service
University of Mary Washington
1301 College Ave.
Fredericksburg, VA 22401

## APPENDIX B: DUKE UNIVERSITY RELIGION INDEX

DUREL: Duke University Religion Index[1]

(available in Spanish, Portuguese, Chinese, Romanian, Japanese, Thai, Persian, Hebrew, German, Norwegian, Dutch, Danish, Italian, Malaysian, Filipino, Serbian, Tamil, and Hindi versions)

Directions: Circle the number in front of the answer that most accurately describes your usual behavior or belief (circle only one answer for each question).

(1) How often do you attend church or other religious meetings?

1. More than once/wk
2. Once a week
3. A few times a month
4. A few times a year
5. Once a year or less
6. Never

(2) How often do you spend time in private religious activities, such as prayer, meditation or Bible study?

1. More than once a day
2. Daily
3. Two or more times/week
4. Once a week
5. A few times a month
6. Rarely or never

*The following section contains 3 statements about religious belief or experience. Please mark the extent to which each statement is true or not true for you.*

(3) In my life, I experience the presence of the Divine (i.e., God).

1. Definitely true of me
2. Tends to be true
3. Unsure
4. Tends *not* to be true
5. Definitely *not* true

(4) My religious beliefs are what really lie behind my whole approach to life.

1. Definitely true of me
2. Tends to be true
3. Unsure
4. Tends *not* to be true
5. Definitely *not* true

[11] Koenig HG, Meador K, Parkerson G. Religion Index for Psychiatric Research: A 5-item Measure for Use in Health Outcome Studies. *American Journal of Psychiatry* 1997; 154:885-886 Reproduced with permission.

(5) I try hard to carry my religion over into all other dealings in life.

1. Definitely true of me
2. Tends to be true
3. Unsure
4. Tends *not* to be true
5. Definitely *not* true

Permission for DUREL: Duke University Religion Index

Harold Koenig, M.D. <harold.koenig@duke.edu>
Wed 3/15/2017, 6:41 AM Williams, Linda
Linda – you have my permission – see attached. HK

Harold G. Koenig, M.D.
Professor of Psychiatry & Behavioral Sciences
Associate Professor of Medicine
Director, Center for Spirituality, Theology and Health
Duke University Medical Center, Durham, North Carolina
Adjunct Professor, Dept. of Medicine, King Abdulaziz University, Jeddah, Saudi Arabia
Adjunct Professor of Public Health, Ningxia Medical University, Yinchuan, P.R. China

Permission to use this questionnaire in my paper.

Williams, Linda
Harold Koenig, M.D.
Dr. Koenig,
I need your written permission to include the questionnaire in the appendix of my dissertation.

Harold Koenig, M.D.
Mon 4/16, 8:52 PMWilliams, Linda
Yes, you have my permission to do that too.

## APPENDIX C: STUDENT EMAIL SOLICITATION

Student Email Solicitation

Dear Students,
My name is Linda Williams, and I am a doctoral candidate at Liberty University in Lynchburg, VA. I would like to invite you to be a participant in a Liberty University approved research study examining the relationship between the religiosity levels and the propensity to cheat.

The purpose of this study is to examine the relationship between college students' level of religiosity and their propensity to cheat while attending a Christian college. You are being contacted because you are a student enrolled at a Christian college. Your participation in this research is voluntary and will not affect your current or future relationship with the university. None of your personal information (e.g., name, e-mail address, or internet protocol address) will be gathered or reported in the final results. All participants will use the same Survey Monkey link, therefore further assuring anonymity. All data will be reported in aggregate form. The survey is anonymous and therefore no data is linked back to any one individual.

The survey should take approximately 15 minutes to complete. I would appreciate you completing the survey no later than February 28, 2018.

If you agree to participate, please click on the following link to access the Survey Monkey questionnaire: https://www.surveymonkey.com_____.
The password to access the survey is: _____
Should you have any questions about this study, feel free to contact me.

Again, thank you for considering participating in this important research. An executive summary of results from this research will be available, upon request. If you wish to be removed from the participant pool please email the principal investigator, Linda Williams, at ----------@liberty.edu

Sincerely,
Linda Williams
Principal Investigator
Liberty University

## APPENDIX D: STUDENT THANK YOU EMAIL

Student Thank You Email-The final screen on the questionnaire

Dear Student,

Thank you for completing this questionnaire. Your help in this research is greatly appreciated. May the Lord bless you for taking time out of your busy day!

Sincerely,
Linda Williams
Principal Investigator
Liberty University

## APPENDIX E: STUDENT FOLLOW-UP EMAIL SOLICITATION

Student Follow-Up Email Solicitation

Dear Student,

You were recently sent an email inviting you to respond to a questionnaire examining college student religiosity levels and the propensity to cheat. The information you and other students provide will help identify areas of strength and weakness as it pertains to the academic integrity and campus culture.

The survey is available at: https://www.surveymonkey.com_____.

The password to access the survey is: _____

The survey should take approximately 15 minutes to complete. I would appreciate you completing the survey no later than February 28, 2018.

Your participation is voluntary. Please be assured that your responses will be anonymous. All student responses will be secure and only summarized by the principal investigator.

Should you have any questions about this study, feel free to contact me at ----------@liberty.edu.

Again, thank you for considering this request! Have a wonderful day!

Sincerely,
Linda Williams
Principal Investigator
Liberty University

## APPENDIX F: FOLOW-UP THANK YOU EMAILS TO UNIVERSITIES AND COLLEGES

Follow-Up Thank You emails to Universities and Colleges

Dear _____ (College President),

I wish to thank you for allowing me the opportunity to reach out to your student body as part of my doctoral research. Your participation is appreciated and needed to complete this large and wonderful endeavor. My continued march toward completion of this degree would not be possible if not for the participation of your student body; thus, I thank you for allowing me to use their completed questionnaires for the research. Final analysis can be sent upon request after the data has been compiled. Of course, all data collected is anonymous to protect the student body. Thank you again for allowing the privilege of accessing your student body for my research. May the Lord bless you and your ministry!

Sincerely,
Linda Williams
Principal Investigator
Liberty University

## APPENDIX G: LIBERTY UNIVERSITY IRB APPROVAL LETTER

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

February 9, 2018

Linda Sue Williams IRB Exemption 3098.020918: Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat

Dear Linda Sue Williams,

The Liberty University Institutional Review Board has reviewed your application in accordance with the Office for Human Research Protections (OHRP) and Food and Drug Administration (FDA) regulations and finds your study to be exempt from further IRB review. This means you may begin your research with the data safeguarding methods mentioned in your approved application, and no further IRB oversight is required.

Your study falls under exemption category 46.101(b)(2), which identifies specific situations in which human participants research is exempt from the policy set forth in 45 CFR 46:101(b):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless: (i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

Please note that this exemption only applies to your current research application, and any changes to your protocol must be reported to the Liberty IRB for verification of continued exemption status. You may report these changes by submitting a change in protocol form or a new application to the IRB and referencing the above IRB Exemption number.

If you have any questions about this exemption or need assistance in determining whether possible changes to your protocol would change your exemption status, please email us at irb@liberty.edu.

Sincerely,
**G. Michele Baker, MA, CIP**
*Administrative Chair of Institutional Research*
**The Graduate School**
*Liberty University | Training Champions for Christ since 1971*

## APPENDIX H: PERMISSION CORRESPONDENCE FROM UNIVERSITIES AND COLLEGES

Correspondence with Appalachian Bible College.

Friday, August 4, 2017

Linda S. Williams
---- Garlia Ct.
Pensacola, FL -----

Dr. Daniel L. Anderson
161 College Dr
Mount Hope, West Virginia 25880

RE: Survey for a Dissertation Project

Dr. Daniel L. Anderson:

My name is Linda Williams. I am in the dissertation stage of my doctoral program in Education at Liberty University in Lynchburg, Virginia. With your permission, I would like to ask your students to participate in an anonymous 41 question online questionnaire that will take approximately 15 minutes. Your students' anonymity will be maintained and only overall information will be shared with the institutions involved.

My dissertation proposal is Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat. Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills provide temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. My research concentrates on college students in the Southeastern United States providing statistical information to assist administration and faculty as they endeavor to create campus cultures of integrity. This questionnaire will provide an insight into the depth of religiosity and the integrity climate of the student body, which in turn could aid the administration and faculty as they work toward providing a campus culture promoting integrity and academic honesty.

I look forward to hearing from you soon. You may call or email me. As soon as I get permission from Liberty's Institutional Review Board (IRB) to begin my data collection, I will be in contact again to access your student body email information. If you wish to see the questionnaire, I will send a copy upon request. Thank you for your time.

Sincerely,
Linda S. Williams

Permission procured from Appalachian Bible College.

David Childs
Mon 8/28/2017, 1:16 PMWilliams, Linda

We will permit you to survey our students for your dissertation. Please correspond with my on this request and I will help facilitate.

David E. Childs
Vice President for Student Services
Appalachian Bible College

Correspondence with Johnson University

Friday, August 4, 2017

Linda S. Williams
---- Garlia Ct.
Pensacola, FL -----

Dr. Trevor Egli
7900 Johnson Drive
Knoxville, TN 37998

RE: Survey for a Dissertation Project

Dr. Trevor Egli:

My name is Linda Williams. I am in the dissertation stage of my doctoral program in Education at Liberty University in Lynchburg, Virginia. With your permission, I would like to ask your students to participate in an anonymous 41 question online questionnaire that will take approximately 15 minutes. Your students' anonymity will be maintained and only overall information will be shared with the institutions involved.

My dissertation proposal is Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat. Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills provide temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. My research concentrates on college students in the Southeastern United States providing statistical information to assist administration and faculty as they endeavor to create campus cultures of integrity. This questionnaire will provide an insight into the depth of religiosity and the integrity climate of the student body, which in turn could aid the administration and faculty as they work toward providing a campus culture promoting integrity and academic honesty.

I look forward to hearing from you soon. You may call or email me. As soon as I get permission from Liberty's Institutional Review Board (IRB) to begin my data collection, I will be in contact again to access your student body email information. If you wish to see the questionnaire, I will send a copy upon request. Thank you for your time.

Sincerely,

Linda S. Williams

Permission procured from Johnson University

Trevor Egli
Wed 2/21, 1:39 PM
Ms. Williams –

Thank you for the e-mail. E-mailing you was on my "to do list" today! I heard back from our administration yesterday regarding approving your study and you now officially have the "green light."

My assumption is that you will send out a link for students to take the survey? The best and easiest option at this point would be for you to forward me the message that you would like posted to the students and then I can send out a campus wide e-mail with that information.

Thank you for your persistence and your patience! Please let me know if you have any questions in the meantime.

Happy thoughts –

te

Trevor J. Egli, Ph.D., CMPC
Associate Professor of Sport & Fitness Leadership
Chair, Institutional Review Board (IRB)
Mental Performance Consultant
7900 Johnson Drive, Knoxville, TN 37998
Office: 865-251-3487 | Fax: 865-251-2337

Correspondence with Mid-Atlantic Christian University.
Friday, August 4, 2017

Linda S. Williams
---- Garlia Ct.
Pensacola, FL -----

Mr. John Maurice
715 North Poindexter Street
Elizabeth City, NC 27909

RE: Survey for a Dissertation Project

Mr. John Maurice:

My name is Linda Williams. I am in the dissertation stage of my doctoral program in Education at Liberty University in Lynchburg, Virginia. With your permission, I would like to ask your students to participate in an anonymous 41 question online questionnaire that will take approximately 15 minutes. Your students' anonymity will be maintained and only overall information will be shared with the institutions involved.

My dissertation proposal is Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat. Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills provide temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. My research concentrates on college students in the Southeastern United States providing statistical information to assist administration and faculty as they endeavor to create campus cultures of integrity. This questionnaire will provide an insight into the depth of religiosity and the integrity climate of the student body, which in turn could aid the administration and faculty as they work toward providing a campus culture promoting integrity and academic honesty.

I look forward to hearing from you soon. You may call or email me. As soon as I get permission from Liberty's Institutional Review Board (IRB) to begin my data collection, I will be in contact again to access your student body email information. If you wish to see the questionnaire, I will send a copy upon request. Thank you for your time.

Sincerely,

Linda S. Williams

Permission procured from Mid-Atlantic Christian University.

August 9, 2017

Linda,

We will allow students to participate once you have permission from the IRB. Please send a copy of the questionnaire.

Blessings,

John W. Maurice
Interim President
252.334.2034| 252.334.2071 (fax)
www.macuniversity.edu

Correspondence with Pensacola Christian College.

Friday, August 4, 2017

Linda S. Williams
---- Garlia Ct.
Pensacola, FL -----

Dr. Troy A. Shoemaker
P.O. Box 18000
Pensacola, FL 32523-9160

RE: Survey for a Dissertation Project

Dr. Troy A. Shoemaker:

My name is Linda Williams. I am in the dissertation stage of my doctoral program in Education at Liberty University in Lynchburg, Virginia. With your permission, I would like to ask your students to participate in an anonymous 41 question online questionnaire that will take approximately 15 minutes. Your students' anonymity will be maintained and only overall information will be shared with the institutions involved.

My dissertation proposal is Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat. Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills provide temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. My research concentrates on college students in the Southeastern United States providing statistical information to assist administration and faculty as they endeavor to create campus cultures of integrity. This questionnaire will provide an insight into the depth of religiosity and the integrity climate of the student body, which in turn could aid the administration and faculty as they work toward providing a campus culture promoting integrity and academic honesty.

I look forward to hearing from you soon. You may call or email me. As soon as I get permission from Liberty's Institutional Review Board (IRB) to begin my data collection, I will be in contact again to access your student body email information. If you wish to see the questionnaire, I will send a copy upon request. Thank you for your time.

Sincerely,

Linda S. Williams

Permission procured from Pensacola Christian College.

Cochran, Raylene
Mon 9/4/2017, 2:27 PM

Hi Linda,

It is good news that you are able to use the original questionnaire that used male/female only. With this change, we are willing to allow you to use PCC students for your study. I do want to point out that the list of academic concentrations given in your survey is odd (likely based on options available at the college where they survey was first used); quite a few common majors are not listed, and there is no option for "other." I don't know if it is possible for you to change that list (or at least add the option to choose "other"), but it will be confusing to students if it is not changed.

Raylene D. Cochran, Ph.D.
*Academic Vice President*
*Pensacola Christian College*

Correspondence with Toccoa Falls College.

Monday, February 12, 2018

Linda S. Williams
---- Garlia Ct.
Pensacola, FL -----

Dr. W. Brian Shelton
107 Kincaid Dr. MSC 840
Toccoa Falls, GA 30598

RE: Survey for a Dissertation Project

Dr. W. Brian Shelton:

My name is Linda Williams. I am in the dissertation stage of my doctoral program in Education at Liberty University in Lynchburg, Virginia. With your permission, I would like to ask your students to participate in an anonymous 41 question online questionnaire that will take approximately 15 minutes. Your students' anonymity will be maintained and only overall information will be shared with the institutions involved.

My dissertation proposal is Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat. Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills provide temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. My research concentrates on college students in the Southeastern United States providing statistical information to assist administration and faculty as they endeavor to create campus cultures of integrity. This questionnaire will provide an insight into the depth of religiosity and the integrity climate of the student body, which in turn could aid the administration and faculty as they work toward providing a campus culture promoting integrity and academic honesty.

I look forward to hearing from you soon. You may call or email me. As soon as I get permission from Liberty's Institutional Review Board (IRB) to begin my data collection, I will be in contact again to access your student body email information. If you wish to see the questionnaire, I will send a copy upon request. Thank you for your time.

Sincerely,

Linda S. Williams

Permission procured from Toccoa Falls College.

Allison Brady
Mon., 2/19/18, 1:11 PMWilliams, Linda
Dear Linda,

The IRB at Toccoa Falls College has reviewed your request and has granted approval to survey the TFC student body.
Please let me know next steps.

Allison

Correspondence with Trinity Baptist College.

Friday, August 4, 2017

Linda S. Williams
---- Garlia Ct.
Pensacola, FL -----

Dr. Matthew A. Beemer
800 Hammond Blvd.
Jacksonville, FL 32221

RE: Survey for a Dissertation Project

Dr. Matthew A. Beemer:

My name is Linda Williams. I am in the dissertation stage of my doctoral program in Education at Liberty University in Lynchburg, Virginia. With your permission, I would like to ask your students to participate in an anonymous 41 question online questionnaire that will take approximately 15 minutes. Your students' anonymity will be maintained and only overall information will be shared with the institutions involved.

My dissertation proposal is Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat. Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills provide temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. My research concentrates on college students in the Southeastern United States providing statistical information to assist administration and faculty as they endeavor to create campus cultures of integrity. This questionnaire will provide an insight into the depth of religiosity and the integrity climate of the student body, which in turn could aid the administration and faculty as they work toward providing a campus culture promoting integrity and academic honesty.

I look forward to hearing from you soon. You may call or email me. As soon as I get permission from Liberty's Institutional Review Board (IRB) to begin my data collection, I will be in contact again to access your student body email information. If you wish to see the questionnaire, I will send a copy upon request. Thank you for your time.

Sincerely,

Linda S. Williams

Permission procured from Trinity Baptist College.

Matthew Beemer
Fri 8/4/2017, 2:46 PMWilliams, Linda

Miss Williams
Trinity Baptist College will participate in your study to the greatest extent possible with the understanding that data will anonymized both in regards to individual student identify and institution identity. I look forward to your study and will wait for you to contact us regarding student emails.
MAB

DR. MATTHEW A. BEEMER
Senior Vice President
Trinity Baptist College
---
Fax 904.596.2532

800 Hammond Blvd., Jacksonville, FL 32221
1.800.786.2206 | TBC.edu

Correspondence with Virginia Baptist College

Saturday, September 30, 2017

Linda S. Williams
---- Garlia Ct.
Pensacola, FL -----

Mr. John Edmonds
4105 Plank Road
Fredericksburg, VA 22407

RE: Survey for a Dissertation Project

Mr. John Edmonds:

My name is Linda Williams. I am in the dissertation stage of my doctoral program in Education at Liberty University in Lynchburg, Virginia. With your permission, I would like to ask your students to participate in an anonymous 41 question online questionnaire that will take approximately 15 minutes. Your students' anonymity will be maintained and only overall information will be shared with the institutions involved.

My dissertation proposal is Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat. Whether public or private Christian institutions of higher learning, moving into the digital age with 21st century skills provide temptations that students are utilizing to meet educational demands. Testing whether religiosity and academic dishonesty of private Christian college students align with the determinants of behavior identified with the theory of planned behavior and self-efficacy is a help to administration and faculty as they endeavor to create a campus culture that will help deter cheating through spiritual growth and integrity. My research concentrates on college students in the Southeastern United States providing statistical information to assist administration and faculty as they endeavor to create campus cultures of integrity. This questionnaire will provide an insight into the depth of religiosity and the integrity climate of the student body, which in turn could aid the administration and faculty as they work toward providing a campus culture promoting integrity and academic honesty.

I look forward to hearing from you soon. You may call or email me. As soon as I get permission from Liberty's Institutional Review Board (IRB) to begin my data collection, I will be in contact again to access your student body email information. If you wish to see the questionnaire, I will send a copy upon request. Thank you for your time.

Sincerely,

Linda S. Williams

Permission procured from Virginia Baptist College.

John Edmonds
Mon., 10/2/17, 3:29 PMWilliams, Linda
Hello Linda,

Congratulations on being near the end! I would be happy for our students to take part. I can disseminate the necessary information and links to our students when you are ready.

Have a great semester.

Thank you,
John Edmonds

# APPENDIX I: TABLE 1

Table 1

*Items Used to Measure Level of Religiosity*

1. How often do you attend church or other religious meetings?
2. How often do you spend time in private religious activities, such as prayer, meditation, or Bible study?
3. In my life, I experience the presence of the Divine (i.e., God).
4. My religious beliefs are what really lie behind my whole approach to life.
5. I try to carry my religion over into all other dealings in life.

## APPENDIX J: TABLE 2

Table 2

*30 tems Used to Measure Propensity to Cheat*

1. Fabricating or falsifying a bibliography.
2. Working on an assignment with others when the instructor asked for individual work.
3. Working on an assignment with others (using digital means like email, text messaging, or social media) when the instructor asked for individual work.
4. Getting questions or answers from someone who has already taken a test.
5. In a course requiring computer work, copying another student's work rather than writing your own.
6. Helping someone else cheat on a test.
7. Fabricating or falsifying lab data.
8. Fabricating or falsifying research data.
9. Copying from another student during a test WITH his or her knowledge.
10. Copying from another student during a test or examination WITHOUT his or her knowledge.
11. Using digital technology (such as email, text messaging, or social media) to get unpermitted help from someone during a test or examination.
12. Receiving unpermitted help on an assignment.
13. Copying (by hand or in person) another student's homework.
14. Copying (using digital means such as email, text messaging, or social media) another student's homework.
15. 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.
16. Turning in a paper from a "paper mill" (a paper written and previously submitted by another student) and claiming it as your own work.
17. Paraphrasing or copying a few sentences of material from an electronic source-e.g., the internet-without citing them in a paper you submitted.
18. Submitting a paper you purchased or obtained from a website and claimed it as your own work.
19. Using handwritten crib notes (or cheat sheets) during a test or exam.
20. Using electronic crib notes (stored in tablet, phone, or calculator) to cheat on a test or exam.
21. Using an electronic/digital device as an unauthorized aid during an exam.
22. Copying material, almost word for word, from any written source and turning it in as your own work.
23. 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.
24. Using a false or forged excuse to obtain an extension on a due date or delay taking an exam.
25. Turning in work done by someone else.
26. Receiving requests from another person to copy your homework.
27. Submitting the same paper in more than one course without specific permission.
28. Using Cliff Notes or Spark Notes and not citing.
29. Using a drug such as Adderall to aid in studying/taking an exam.
30. Cheating on a test in any other way.

## APPENDIX K: TABLE 3

Table 3

*Demographic Characteristic of Respondents (N = 830)*

| Characteristic | Category | *f* | percent |
|---|---|---|---|
| Academic class standing | 1st year undergraduate (Freshman) | 138 | 16.6 |
| | 2nd year undergraduate (Sophomore) | 177 | 21.3 |
| | 3rd year undergraduate (Junior) | 178 | 21.4 |
| | 4th year undergraduate (Senior) | 196 | 23.6 |
| | 5th year undergraduate | 33 | 4 |
| | 1st year MA | 42 | 5.1 |
| | 2nd year MA | 41 | 4.9 |
| | 3rd year MA | 12 | 1.4 |
| | Ph.D. Candidate | 2 | 0.2 |
| | Non-degree seeking | 1 | 0.1 |
| | Continuing Education | 2 | 0.2 |
| | No response | 8 | 1.0 |
| Gender | Male | 283 | 34.1 |
| | Female | 536 | 64.6 |
| | No response | 11 | 1.3 |
| Age (Years) | Under 18 | 13 | 1.6 |
| | 18 to 24 | 725 | 87.3 |
| | 25 to 39 | 64 | 7.7 |
| | 40 or older | 19 | 2.3 |
| | No response | 9 | 1.1 |
| Domestic or International | Domestic | 768 | 92.5 |
| | International | 51 | 6.1 |
| | No response | 11 | 1.3 |
| Marital Status | Single | 740 | 89.2 |
| | Married | 65 | 7.8 |
| | Divorced/Other | 16 | 1.9 |
| | No response | 9 | 1.1 |

## APPENDIX L: TABLE 4

Table 4

*Linear Regression of Propensity to Cheat on Level of Religiosity*

| | b | SE | t | p | 95% CI |
|---|---|---|---|---|---|
| Constant | 50.81 | 2.16 | 23.52 | <.001 | 46.57, 55.05 |
| Slope | -0.65 | 0.09 | -7.63 | <.001 | -0.81, -0.48 |

## APPENDIX M: TABLE 5

Table 5

*Question 39 Statistical Information (N = 291)*

| Category | *f* | percent |
|---|---|---|
| Student accountability | 34 | 11.7 |
| No student accountability | 26 | 8.9 |
| Stronger monitoring by faculty | 14 | 4.8 |
| Know more about cheating and Consequences meted by college | 49 | 16.8 |
| Add software detection | 4 | 1.4 |

## APPENDIX N: CONSENT FORM (PART OF SURVEYMONKEY® QUESTIONNAIRE)

The Liberty University Institutional Review Board has approved this document for use from 2/9/2018 to -- Protocol # 3098.020918

### CONSENT FORM

Academic Integrity: A Correlational Study of Private Christian College Students' Religiosity and the Propensity to Cheat Linda Sue Williams Liberty University School of Education

You are invited to be in a research study of the relationship between religiosity levels and the propensity to cheat of college students on Christian college campuses. You were selected as a possible participant because you are a student at a Christian college and are 18 years of age or older. Please read this form and ask any questions you may have before agreeing to be in the study.

Linda Williams, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

**Background Information:** The purpose of this predictive correlational study is to provide rigorous statistical research to aid the administration in private Christian colleges as they build campus cultures of academic integrity by investigating the theory of planned behavior and self-efficacy as it relates to the level of religiosity and the propensity to cheat.

**Procedures:** If you agree to be in this study, I would ask you to do the following things: Students will be asked to fill out a questionnaire during the first two months of school. The questionnaire should take about 15 minutes and will be administered via SurveyMonkey.

**Risks:** The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life. This is an anonymous survey.

**Benefits:** Students should not expect to receive a direct benefit from participating in this study. Benefits to society include students joining the workforce with a higher level of integrity.
**Compensation:** Participants will not be compensated for participating in this study.

**Confidentiality:** The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely in a password-protected electronic format, and only the

researcher will have access to the records. SurveyMonkey will be used to conduct this research study. Communication between your computer and SurveyMonkey servers will be encrypted using SSL encryption and IP address tracking will be disabled, ensuring anonymity. You may also wish to review SurveyMonkey's privacy policy (https://www.surveymonkey.com/mp/policy/privacy-policy/ ) and security statement (https://www.surveymonkey.com/mp/policy/security/).

Despite these safeguards, please understand Internet communications are insecure and there is a limit to the confidentiality that can be guaranteed due to technology itself. Once the data is received by the researcher, standard confidentiality procedures will be utilized.

The records for this research will be kept private. In any sort of report that I might publish, I will not include any information that will make it possible to identify a participant. The research data will be securely stored in a password-protected computer for three years as required by federal law, after which the records will be destroyed. The researcher will be the only person with access to the records during this time.

**Voluntary Nature of the Study:** Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with ----------, or Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time prior to submitting the survey without affecting those relationships.

**How to Withdraw from the Study:** If you choose to withdraw from the study, please exit the survey and close your internet browser. Your responses will not be recorded or included in the study.

**Contacts and Questions:** The researcher conducting this study is Linda Williams. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at ----------@liberty.edu or ----------. You may also contact the researcher's faculty advisor, Dr. Meredith Park, at ----------.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu.

*Please notify the researcher if you would like a copy of this information for your records.*

**Statement of Consent:** I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

(NOTE: DO NOT AGREE TO PARTICIPATE UNLESS IRB APPROVAL INFORMATION WITH CURRENT DATES HAS BEEN ADDED TO THIS DOCUMENT.)

By selecting "Yes, I consent to participate", you will be taken to the questionnaire. By selecting "No, I do not consent to participate", you will not be taken to the questionnaire.

__ Yes, I consent to participate.

__ No, I do not consent to participate.