

The attached seminar paper by Sue Kleusch,
entitled “Academic Misconduct in Online Education”, when completed,
is to be submitted to the Graduate Faculty of the University of Wisconsin-Platteville
in partial fulfillment of the requirements for the Degree
Master of Science in Distance Education Leadership is hereby:

Approved: *Derek Dachelet* Date 5/23/2018

Dr. Derek Dachelet, Advisor

ACADEMIC MISCONDUCT IN ONLINE EDUCATION

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ACADEMIC MISCONDUCT IN ONLINE EDUCATION

A Seminar Paper

Presented to

The Graduate Faculty of

University of Wisconsin - Platteville

In Partial Fulfillment

Of the Requirement for the Degree

Master of Science – Distance Education Leadership

By

Sue Kleusch

2018

ACKNOWLEDGEMENTS

I am so thankful for all of the support I have received from my family and friends in the past many years that I have been working on completing my Masters' Degree. The journey, culminating in the completion of this Seminar Paper, has been a long one. I am a non-traditional student and truly appreciate everyone's efforts and commitment to my success.

My husband Pete has been nothing but a strong supporter the entire time I pursued my education. Pete never wavered in support for me to finish my education, even though at many times it took me away from our family time together. He worked hard to support our household and family functions and was a constant cheerleader for my cause. Beyond that, he was a great proofreader for me and always kept my spirits up, even during the times I felt I couldn't complete my goal. It is fair to say that I could never have done this without him.

Our son Mitch was in high school when I started this journey and is now in college himself. He sat with me doing his own homework, as I worked on mine. I appreciate the fact that he understood all of the time I needed to spend away from him to work on my education, as he is the reason I kept working so hard. I wanted Mitch to see that an education will always bring value to life and help secure a future. I know Mitch will be successful in his future now!

Along my journey, I was blessed with an outstanding advisor, Julie Hewitt, who always 'had my back'. She kept me on course, checked in on me often, and always provided the encouragement I needed to proceed. I owe a deep sense of gratitude to Julie, as there were many times over the years that I needed to have someone believe in me and keep pushing me towards my goal.

And finally, a special thanks to Dr. Derek Dachelet, who hung in there with me through the culmination of this seminar paper. His quick answers to my questions, feedback to my inquiries and overall guidance through the entire process was key to my getting this seminar paper completed.

Without the support of all of these people, I wouldn't be in the position I am today. I truly believe that it took an army to get me to this point and will never forget any of those who had a part in my reaching this goal.

Thank you for being my Warriors!
I will never forget your kindness.

Sue

ACADEMIC MISCONDUCT IN ONLINE EDUCATION

Sue Kleusch

Under the supervision of Dr. Derek Dachelet

ABSTRACT

Statement of the Problem

Research shows that online education has been increasing at a rapid rate over the past many years. The ability to take classes at remote locations, other than in a classroom, has opened doors to students who otherwise wouldn't have thought they could continue their education. With college courses being administered in a variety of technological ways through the use of online platforms and distance education classrooms, instructors are no longer in the same room as their student.

While online education has been growing, so has the concern over security of the information being transmitted. This may provide an invitation for academic dishonesty to occur. Because of this, university administrations have updated their integrity policies and have created policies to mandate stricter monitoring of students in these courses. With new policies and anti-cheating technology in place, universities aim to curb academic misconduct in all of its forms.

Methods and Procedures

An analysis of data compiled from previous studies of academic misconduct in higher education provided an in-depth look at the various ways student cheat, and how students, administration and instructors perceive this academic misconduct. Both quantitative and

qualitative data prove there is occurrence of cheating in higher education, specifically to online education. Student viewpoints are also presented in part of the study, in which they discuss not only their thoughts about cheating but also the ways in which they cheat. Authors also investigated ways in which faculty can prevent academic misconduct in their virtual classrooms.

Summary of Results

Academic misconduct in higher education is an ongoing concern, as well as a growing concern, when taking into account the dramatic increase of distance education in the past many years. This paper answers the question of whether or not academic misconduct is prevalent in Higher Education, specifically distance or online education. The study further looks into ways students cheat, as well as the reasons they confess for doing so.

According to the analysis, there have been a variety of cheating methods used throughout the years, and various reasons stated for the misconduct. And while negative consequences are often the case, ethical dilemmas become apparent with varying perceptions of academic integrity and the relative importance of deceit over success. There are many factors given for this type of behavior. Instructors, university policies, as well as personal situations of students, all play roles in the differing cases of academic misconduct.

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Chapter 1: INTRODUCTION

Statement of the Problem

As online education has grown, so too has the concern over whether academic dishonesty occurs in this environment. No matter how our students are chosen, what precautions are taken or how the courses are designed, there is a possibility to cheat. Perhaps the rudimentary basis to any question of cheating goes back to Mark Twain saying, “Of all the animals, man is the only one that lies” (Varvel, 2005, p.1). In the words of Anon, the hope is that “integrity, when you do the right thing even though no one is watching” is a steadfast trait of most students. (Varvel, 2005, p.6)

Academic misconduct has multiple problematic causes and effects in the context of distance online education, and higher education more generally. Cheating is an issue that traditional, face-to-face education has always tried to stop but has never completely eradicated (Mills, 2010). When online instruction became inevitable to instructors, they were more focused on their teaching techniques than with cheating to start (Roach, 2001). With the increased interest in higher education due to the availability of online courses, questions of the integrity of online courses have gotten more intense.

But at the same time, companies were seeing a business advantage blossoming. Securexam introduced their Remote Proctor, which scans fingerprints and captures a 360-degree view around students, while Kryterion’s Webassessor lets human proctors watch students on Web cameras and listen to their keystrokes (Parry, 2009). Webcams and keystroke monitoring of exams are in use by proctors even a few hundred miles away. Proctors who use electronic monitoring methods can monitor how frequently a student’s eyes shift from the computer screen

or can listen for sounds of possible helpers in the room. Computer browsers can be locked remotely to prevent internet searches, and typing patterns are analyzed (Gordon, 2013).

Academic misconduct includes, among other things, plagiarism, cheating in exams or assignments, inappropriate collusion, theft of other students' work, paying a third party for assignments, downloading whole or part of assignments from the internet, falsification of data, misrepresentation of records, and other actions that undermine the integrity of education and occurs at all grades levels (Bretag, 2013). Plagiarism is given as a specific example of a form of academic misconduct which students can avoid if they receive education and support about what plagiarism is, how to avoid unintentional plagiarism, and how to avoid the kind of crisis situations in an academic career that could provoke panic cheating or panic plagiarism. Beyond the student level, academic misconduct and plagiarism accusations are made against career researchers, academics, and professional writers. In 2011, Johann Hari who was a journalist for The Independent, a U.K. newspaper, stepped down amid allegations of plagiarism. He admitted that he did two things that were wrong. He inserted quotes that were not his own into interviews and edited the entry on himself in Wikipedia, using an alter ego to edit other people's entries (O'Carroll, 2011). Therefore, academic misconduct can be seen as a problem that affects students, professionals, research institutions, and more generally, society and culture.

There are many stake-holders in the debate surrounding academic misconduct, and many who stand to lose if academic misconduct is a growing problem with the advent of online distance education classes. Academic misconduct and cheating involve a wider range of behaviors than only plagiarism; however, the problems with plagiarism are similar to the problems with academic misconduct more broadly. Penalties resulting from infractions vary in nature. When committed within higher education institutions, penalties can include assigning a

score of zero to a question a student has copied from another, or even an exam that the student copied, or a written paperwork that was the result of copying parts or in its entirety from the others. Other penalties include failing in a course if a student has repeatedly copied texts and issues submitted for review and suspension of student activities during certain periods when it turns out that the student may have committed plagiarism of a more serious nature. In the case of the preparation of monographs, master thesis and doctoral dissertations, the observation of plagiarism in small portions may lead evaluators to require a new writing and resubmission of the work. In the case of plagiarism noted in extensive writings, the student enrollment may be finished (Wagner, 2011). In the case of teachers and researchers, plagiarism in scientific studies can result in many different sanctions including warning, public apology, suspension of its activities for a specified period and even dismissal. The consequences in these cases can be a profound damage to the career of professionals, which can be severe. However, the main consequence of plagiarism seems to be a deep personal frustration and demoralization on the part of whom commits it (Wagner, 2011).

Academic misconduct serves to undermine trust in the academic process, profession, findings and the development of knowledge and understanding. The opposite of academic misconduct can be understood as academic integrity. In a situation that fosters academic integrity, the students and educators alike act honestly and with best intentions. This strengthens their own personal growth and development, as well as that of the educational institutions with which they are affiliated. Academic misconduct of all kinds undermines general trust and belief in the educational work and research being undertaken by students, researchers, institutions and educators. When this trust has been undermined, individuals and groups may encounter

difficulties with post-education employers, research funding, or developing a career based on professionally published written work.

Cheating and academic misconduct have clear and observable negative consequences for the student and the institution they attend. Students found guilty of serious academic misconduct are commonly removed from their course of study which may have major potential consequences professionally, socially, personally and in economic terms. Student loans are not forgiven if an individual is ejected from their course of study after being found guilty of academic misconduct. Institutions known to have relatively high rates of academic misconduct or cheating may lose reputation and research funding (Bretag, 2013).

Cheating and academic misconduct are not geographically limited, and part of the current study will be an international comparison of data, research literature and other evidence to consider cultural attitudes, judgments and tactics that relate to cheating behaviors by students, and their detection and punishment by institutions and agencies. Many of the published studies regarding academic misconduct and the contemporary cheating culture are based on data from U.S. institutions. However, international data can be used for comparison with academic misconduct practices, history and culture in the United States. Academic misconduct appears to be on the increase in tandem with the increases in distance learning and online education in the modern United States. Distance and online learning, which has been facilitated by modern technological developments, is an environment in which academic misconduct is both easier to perpetuate, and more difficult to detect.

Academic misconduct is defined as:

“Unfair practices including plagiarism, cheating in exams or assignments, inappropriate collusion, theft of other students' work, paying a third party for assignments,

downloading whole or part of assignments from the Internet, falsification of data, misrepresentation of records, or other actions that undermine the integrity of scholarship” (Bretag, 2013, p.1).

Plagiarism is strongly disapproved of within the range of behaviors that constitute academic misconduct as the representation of another author’s ideas as one’s own is a behavior that undermines the integrity of academic research and publication as a whole. While it is possible to plagiarize unintentionally, much of the academic censure and punishment of plagiarism hinges on the idea that this is commonly a planned cheating behavior that is inherently deceitful and unfair to the original authors of the work.

Plagiarism is defined as “the use of others' words, ideas, or creative work without appropriate acknowledgment, and does not necessarily imply intentional deceit” (Bretag, 2013, p.1). Plagiarism and other forms of academic misconduct may occur at higher rates in distance and online learning for several reasons. It is easier to undertake planned academic misconduct, and more difficult to detect in the absence of face-to-face interaction between students and educators. Furthermore, students who learn online or at a distance often lack the academic support and academic community that can prevent unintentional or deliberate academic misconduct.

Background Information

There are two categories of cheating and academic misconduct. Panic cheating refers to a situation in which a student panics due to a high-intensity academic situation. Examples include peeking at another student’s answers in a test and copying those answers. By contrast, planned cheating is prepared in advance and does not involve high-intensity situations. Both panic

cheating and planned cheating are extremely old and predate the contemporary era in which digital technology and connectivity have facilitated the development of online and distance learning.

The present study is grounded in the question of whether there has been an increase in planned cheating as opposed to panic cheating, particularly in the realm of modern online education. The relationships that historically developed in the context of classroom academics have changed or been eroded with the development of online learning and distance learning. In the context of massive open online classes (MOOC), the educator cannot personally get to know students and understand their academic needs and voices. In a classroom with the instructor present, it is likely that the educator would know when a student turned in a piece of written work that was not in their own written voice. This would lead the educator to suspect academic misconduct or plagiarism from the words of another. When there is no written relationship between educator and student, a major behavioral barrier to cheating has been removed. In this case the student does not feel that they owe academic integrity and effort to the educator. The student does not feel they are letting down an unknown educator if they have not met or communicated directly. Online and digital capabilities and culture alike have removed barriers to planned cheating in contemporary academia.

Published literature suggests institutions and educators should be more proactive, and supportive, with the design and operation of online and distance education courses. Advocates ask for “targeted induction, support, and training for all students; and strategies to deter plagiarism include giving advice regarding assessment development, curriculum design, and academic skills education” (Bretag, 2013, p.2). Such proactive strategies can help to lessen the

pressures that can contribute to either panic cheating or planned cheating by online and distance learning students.

In addition to detection and prevention strategies, there are policies and procedures regarding academic misconduct in place at almost all institutions, and these are made known to students at the point of entry to a course of study. Institutions of higher education commonly have specific policies and penalties that are triggered by cases of student academic misconduct. Commercial “plagiarism detection” tools can be used to scan and assess the work that students submit; proprietary programs include Turnitin or SafeAssign, which work by performing a search for text matches with published work, previously-submitted student work, and internet sources. While these tools may be effective in deterring and detecting “cut and paste” plagiarism, they are not broadly effective at detecting cheating that does not involve copying existing text.

Plagiarism and academic misconduct represent:

“Symptom[s] of a deeply entrenched academic culture that arguably places tangible rewards (grades, diplomas, publications, promotions, grants) above the intrinsic value of learning and knowledge creation. To address the ongoing issue of plagiarism and other breaches of academic conduct, the faculty of higher education institutions must work towards fostering a culture of integrity that goes beyond deterrence, detection, and punishment of students” (Bretag, 2013, p.3).

Rather, the culture of integrity must have the rights of students in mind to protect their online privacy.

Purpose of the Study

The purpose of the present study is to understand the issues associated with academic misconduct in the context of online and distance learning. The increase in online and distance

learning has correlated with an increase in actual and detected academic misconduct and cheating by students. The understanding of, and reaction to, academic misconduct is also of interest in this study.

Significance of the Study

This study will look at cheating behaviors within online and distance education and possible ways to curtail those cheating behaviors. Misconduct detection processes will also be examined, and conclusions will be drawn as to the effectiveness of current anti-cheating efforts. Lastly, the study will end with suggestions for future practices and procedures with which to detect and deter student academic misconduct in the context of distance learning.

The present research study of higher education will consider academic misconduct of students, instructors, and administrators. Education of today exists in a technological landscape, with the development of online and distance learning. Given this fact, cheating may be easier to undertake, and more difficult to detect, than it was in a pre-digital age. While anti-plagiarism software such as Turnitin is intended to detect students submitting written work that is copied from another source, there are methods of planned cheating that will not be detected by such software. The landscape and culture of higher education has changed significantly, and with the development of mass enrollment online courses and distance learning, educators often have little to no contact or relationship with the individual students they teach in large online groups. Therefore, the educator who is marking a student's work will have, often, no idea who that student is. This makes it more difficult for the educator to detect or suspect that a student has turned in another person's work as their own submitted plagiarized content.

Theoretical Foundations

The research will be grounded in theories relating to academic misconduct as a range of behaviors that are connected to broader culture and society. Understanding societal attitudes towards cheating, and how these change over time and by location, will be a major part of the present study. While technological developments may have made planned cheating easier, quicker, and cheaper than in the past, there are also societal and cultural changes regarding cheating in and out of academia. It is suggested a cheating culture exists which cuts across social and national boundaries. Cheating is normalized, and even culturally admired, as a smart way to operate. An obvious example is finding ways to avoid paying taxes through loopholes and omissions, which is common behavior for individuals and corporations alike. Students grow up witnessing these cheating behaviors by family members, employers and friends, and this could certainly affect their attitudes toward academic misconduct (Callahan, 2004).

The study will also seek to understand which groups of students are most likely to engage in academic misconduct, as well as what interventions and academic support might effectively be offered to these higher risk groups. It is indicated in some literature that academic misconduct occurs at a higher rate among the population of students who are non-native speakers of English. This makes sense as a causal factor; learners of English as an additional language (EAL) may inherently find that academic written work in English takes much longer to complete than it does for their native English-speaking classmates. Educator expectations regarding homework requirements, and the expected time burden of this work, may be calibrated to native English speakers, and not leave EAL students sufficient time to complete the assignments themselves, as writing in an additional language commonly proceeds more slowly than in the first language that an individual learned to speak and write. Likewise, research in English-language journals and

books is likely to take longer for EAL students, and this could leave them overwhelmed by the time burden of academic work and apt to see either panic cheating or planned cheating as a viable solution to this problem.

Plagiarism by students for whom English is an Additional Language (EAL) at both undergraduate and postgraduate levels has been noted. EAL students are significantly more likely to have engaged in serious forms of plagiarism (83%) than non-EAL students (65%) (Marshall and Garry, 2006). It was further determined that 47% of EAL graduate students had plagiarized in their research proposals, versus 16% of non-EAL students (Vieyra, Strickland and Timmerman, 2013). It was also determined that 76% of non-native English-speaking graduate students had at least one passage in a writing sample (half of which were completed PhD theses) where over 70% of the text was taken from source material (Pecorari, 2003). A recent survey of 15,304 Australian students, from a range of disciplines both undergraduate and postgraduate, reported that international students were more than twice as likely as domestic students to convey a lack of confidence in how to avoid an academic integrity breach (Bretag, 2013).

The present study will consider these theories regarding demographics and groups of students more likely to engage in academic misconduct, whether such misconduct is intentional or unintentional. Together with the increase in detected academic misconduct that has accompanied the explosion in online and distance learning, there have been calls for educators and institutions to be more proactive in reaching these groups and offering academic support that will reduce unintentional cheating. Additionally, reducing the sense of overwhelm or panic with academic work that can commonly lead to panic-cheating should be a priority for educational institutions and educators alike.

At least some portion of detected academic misconduct by students in online and distance education can be attributed to a general lack of academic support and preparation for these students. Understanding the root causes of academic misconduct in this context is the first step towards helpful interventions and suggestions that can reduce cheating behavior and other academic misconduct. Some studies show it is becoming increasingly apparent that many graduate students are not prepared for the challenges of postgraduate study and that academic integrity policy infractions do occur among these students (Bretag, 2013). Studies found that 42.6% of research proposals by science, technology, engineering, and mathematics graduate students contained plagiarism (Gilmore, Strickland, Timmerman, Maher and Felden, 2010). There was 27% plagiarism in master's theses (McCulloch & Holmburg, 2005) and 5% of medical residency applications had at least one instance of plagiarism (Segal, Gelfand, Hurwitz, Berkowitz and Ashley, 2010). Results from the *Academic Integrity Standards Project* indicated that one in five postgraduate research students had never heard of academic integrity and two in five postgraduate students said they did not know whether their university had an academic integrity policy (Bretag, Mahmud, East, Green, James, McGowan, Partridge, Walker & Wallace, 2011).

Methods and Procedures

Self-report methodologies were used, and the target population consisted of students with the common characteristic of being in online and distance education classes (Creswell, 2005). Through anonymous survey responses, students provide data regarding their own behaviors and academic misconduct. The idea behind having anonymous survey answers is that students are relatively more likely to report honestly regarding their behaviors. Additionally, ethical requirements governing academic research with human study subjects require that personal data

be anonymized to protect individual privacy. In addition to the survey data to be collected by the present study, there will be a broad-based narrative literature review conducted as a major part of the present research study. Considered will be the existing published literature and research that has been conducted into academic misconduct in the United States and in international contexts. As the use of technology in education has risen, the learning and teaching processes using information technology exposes students to easily accessible resources. The narrative literature review will draw on research that has been published by mainstream publishers, in academic journals, and in peer-reviewed contexts that should assure its integrity. To gather data, the researcher employed a modified version of the Academic Integrity Survey to find responses to which safeguards instructors use in their classroom to ward off cheating, how often students cheat, and what the instructor response is to their cheating (Bretag, et al, 2011).

It will also be necessary to consider any research bias in the published literature. Researchers employed by an institution with accusations of high levels of student academic misconduct may have a vested interest in protecting the reputation of that institution. Potentially, instructors may wish to downplay reported or detected academic dishonesty, to protect the reputation of the institution that is their employer. Likewise, companies that produce anti-plagiarism checking software may have a vested interest in over-stating the incidence and severity of student academic misconduct or over-stating the efficacy of their software in detecting plagiarism and other student academic misconduct.

Throughout the literature review, there is potential for bias or skewed data regarding academic misconduct. The topic of academic misconduct, by its nature, makes it difficult to find exact numbers and uncover the full truth. Demographics, perceptions, safeguards, reasons, responses and ethics all play a part in the events and outcomes of academic dishonesty.

Chapter 2: LITERATURE REVIEW

Introduction

Academic misconduct and dishonesty in online courses indicate significant problems for higher education administration as students use technologically innovative tools to cheat, commit plagiarism, and pay individuals with strong academic credentials to act as impersonators. Plagiarism is only one form of academic misconduct that draws the attention of concerned instructors and faculty members who implement policies enforced only in the most shocking cases. In another realm, stakeholders involved in maintaining institutional functions risk losing credibility by allowing instructors and faculty members to suspend or expel students for engaging in academic misconduct. Here, stakeholders reinforce a cultural problem on how academic misconduct and dishonesty are critical to university culture. The cultural problem, as explained further, reflects the perceptions that student life involves maintaining an extremely social life of celebrating newly discovered independence in young adulthood. Yet, the increasing popularity of online education, distance learning, and massive open online courses (MOOC) suggests that plagiarism and other forms of cheating will remain problematic and cheating detection tools need to be used. Preventing academic misconduct in virtual environments entails a process of ensuring that instructors and faculty members acquire knowledge about which software tools will produce the most effective qualitative results.

Theoretical Background

The theoretical research in academic misconduct and dishonesty provides information about a wide range of behaviors linked to broader culture and society. The theoretical research

highlights social attitudes towards cheating as well as the changes in these attitudes over time and place. It is believed that a cheating culture cuts across social norms and national boundaries (Callahan, 2004). Accordingly, in the author's case study research provides several examples in which cheating and deliberate rule-breaking were normalized. The normalization of academic misconduct and dishonesty replaces the ethos of working harder with working smarter (Callahan, 2004). Examples of tax evasion and the exploitation of legal loopholes indicate the normalization of misconduct, and dishonesty in academia reflects corporate strategies by which law-abiding and rule-conforming individuals are unsuccessful in their endeavors. Conversely, the normalization of misconduct and dishonesty suggests that deliberate rule-breaking is a hallmark of innovation in thought and practice.

The theoretical research literature also addresses how some groups of students are more likely to engage in academic misconduct and dishonesty as institutional policies lack transparent mechanisms that apply universally. Students whose first language (L1) is not English are the most likely to engage in academic misconduct and dishonesty as academic discourse in the United States is markedly different than that which takes place in their home country (Bretag, 2013). Theoretical literature also addresses how the length of time necessary to complete academic coursework requires diligent effort and acute critical thinking skills. While critical thinking has its benefits for acquiring knowledge about which strategies will most likely produce successful outcomes in real-world contexts, its application in an academic context implies that cheating and other forms of misconduct reflect innate psychological drives.

Having detailed knowledge of administrative requirements entails that academic misconduct and dishonesty demand that instructors and faculty members apply underhanded tactics to remain successful (Bretag, 2013). The application of critical thinking skills acquired

from rigorous academic training suggests a university life in which personal politics lay a dynamic playing field where all individuals aim to achieve success only for themselves. However, one recently published study included results suggesting that graduate students in advanced science, technology, engineering, and/or mathematics programs are the most likely to engage in academic misconduct (Leonard, Schwieder, Buhler, Bennett, & Royster, 2015).

Such findings indicate that graduate students acquire knowledge in a silo, based on the assumption that chairpersons of specialized graduate-level training programs do not encourage an individual to draw inspiration from other disciplines. Chairpersons of specialized graduate-level training programs many times encourage students to delve deeply into subjects that may have few if any connections with life occurring outside of an institutional context. All knowledge produced by scholars in graduate-level training programs must ultimately have a solid foundation that draws inspiration from only one theorist or scholar to avoid the risk of outright dismissal and ridicule. An inference to draw from the extant theoretical research literature is that students whose L1 is not English may contribute more authentic scholarship if the institutional infrastructure of academic institutions encourage instructors and faculty members to demonstrate open-mindedness towards including alternative research practices.

More relevant to the context of academic misconduct and dishonesty is how some researchers adapted a General Theory of Crime from prior literature to suggest that factors such as impulsiveness and opportunism reflect how normalized practices like cheating and plagiarism have become (Tinkelman, 2011). Impulsiveness and opportunism are indicative of how most university students must participate in all available opportunities or risk become an object of derision and ridicule. Cheating and plagiarism are rarely planned. Thus, the drive to cheat and plagiarize written works do not require forethought. Rather, the drive to commit academic

misconduct and dishonesty are doubly reflective of contemporary American culture and market-driven behaviors (Farisi, 2013). International studies suggest that academic misconduct is also extensive and prevalent outside of the U.S. (Khalid, 2015). In considering the subject of this seminar paper, the drive to commit academic misconduct and dishonesty reflect the motivations to achieve success beyond the university context.

Holding two thoughts that are inconsistent with one another is cognitive dissonance. While cognitive dissonance is a state of psychological tension concerning the existential quandary of "to cheat or not to cheat," cheating in an academic context reflects a drive to obtain approval from others for engaging in morally nefarious behaviors (Stuber-McEwen, Wiseley, & Hoggatt, 2009). People don't just attempt to reduce the existence of cheating, they "actively avoid situations and information which would likely increase cheating. Few students actively choose to read their school or university policies concerning academic integrity; indeed, many may be subconsciously avoiding doing so. Schools have a student code of conduct or some formal statement that communicates the standards of ethical behavior students are expected to uphold. What's often absent is the salience of these statements, and the obligations they carry with them (Festinger, 1962).

In drawing from the General Theory of Crime, research literature contains assertions suggesting that blatant lies disguised as truth generate profits at the psychological and material expense of another (Tinkelman, 2011). However, the research literature that draws inspiration from decision theory suggests that academic misconduct and dishonesty often go unacknowledged despite its ubiquity (Milliron & Sandoe, 2008). Existential quandaries aside, the administrative decisions of university faculty members reflect a philosophical notion of promoting academic freedom. If no student were allowed to engage freely in academic pursuits

based on personal interest, then cheating or plagiarism would never exist. Of course, truth only exists in an ideal world that does not represent reality, and everyone must face the truth that lying is somehow necessary to preserve a perception of having personal integrity. It is thought the decision-making processes of university faculty members to not take disciplinary action on most incidents involving misconduct and dishonesty merely reinforces the problem. Choosing to take action on all instances of misconduct and dishonesty would produce institutional conditions that resemble a police state (Milliron & Sandoe, 2008).

The research literature contains assumptions that the decision to commit academic misconduct and dishonesty represents a learning experience by which all students observe the behaviors of others and emulate them for others to follow. Social learning theory suggests that personal and professional support compels all individuals into taking full advantage of opportunities whenever and wherever they are present (Farisi, 2013). Institutional policies which warn about the consequences of cheating, plagiarism and other forms of misconduct are tactics used to deter cheating. Institutions that adopt and effectively communicate policies and increase student awareness of the penalties associated with academic misconduct and its enforcement tend to reduce cheating (Aaron, 1992; Crown & Spiller, 1998; Gerdeman, 2001; McCabe, & Bowers, 1994; McCabe & Treviño, 1997; McCabe et al., 2001; Stuber-McEwen, Wiseley, & Hoggatt, 2009). Cognitive dissonance creates an unpleasant psychological tension that subsequently motivates an individual to try to resolve this dissonance. One way to reduce the discomfort or guilt (i.e., cognitive dissonance) associated with cheating in school is to show approval of, or support for, other students who engage in academic dishonesty. If a student already engages in cheating behavior, he or she is probably more likely to aid and abet others as a way to resolve the dissonance, to justify his or her actions, or to view their transgressions in a less negative way.

Aiding and abetting easily reduces their cognitive dissonance. It suggests friendship and a willingness to help (Storch & Storch, 2003). Cognitive dissonance aside, the theoretical research literature highlights how all individuals confront the temptation to engage in academic misconduct and dishonesty. Whether the decision to follow through on committing academic misconduct and dishonesty will produce any negative consequences indicates that the distance between participant and observer is simultaneously too close and too far to distinguish.

Review of Literature

Following from the theoretical background, the proceeding review of research literature includes insights from earlier publications that discuss academic misconduct and dishonesty in online coursework concerning how students may effectively utilize the distance between themselves and instructors to engage in deceptive behaviors. Teachers and institution of higher education perceived that the frequency of cheating would be higher in online courses because students and faculty do not interact directly (Grijalva, Nowell & Kerkvliet, 2006). The internet and technology has simplified the act of cheating for those so inclined to do so (Boehm, Justice, & Weeks, 2009). Distance learning environments provide and promote opportunities for academic dishonesty to a degree greater than found in traditional learning environments (Kennedy, Nowak, Thomas & Davis, 2000).

As observed in the third full section of this review, online tools and plagiarism detection software programs provide instructors and university faculty members with knowledge of where academic misconduct and dishonesty has a presence in written assignments. The third full section also accounts for technologically-oriented initiatives to reduce academic misconduct and dishonesty wherever possible. The review of the existing research literature refers to how

universities implement policies and codes warning about the consequences of engaging in academic misconduct and dishonesty. Subsequently, the review of the present research literature provides a description of reasons why students enrolled in online coursework cheat, plagiarize, and commit other forms of academic misconduct and dishonesty.

Insights from earlier Research Publications

The earlier research literature that discusses academic misconduct and dishonesty in online coursework concerns how students may engage in deceptive behaviors because of the observed distance between themselves and instructors. Online classes are virtual havens in which students may only serve to heighten perceptions of the distance between themselves and instructors (Stuber-McEwen, Wiseley, & Hoggatt, 2009). By contrast, traditional classroom settings may also contribute to perceptions of distance between instructors and students. However, instructors and university faculty assume that academic misconduct and dishonesty occurs in virtual environments as students use technological savvy by hiding behind a veil of anonymity (Milliron & Sandoe, 2008; Stuber-McEwen, Wiseley, & Hoggatt, 2009). Concerning deception, some of the earlier research literature also addressed how students engage in this practice when the payoffs for completing online coursework are not immediate. Cheating and other forms of deception results from lapses in judgment. Older students enrolled in online courses are more likely to engage in cheating and deception than are younger students. Also, older students believe that education is simply a “check-off list” that has no relation to expected learning outcomes (Bedford, Gregg, & Clinton, 2011).

As social norms evolved over the years, there has become more leniency towards cheating (Bedford, et al., 2011). Students rationalized that it is better to cheat on a test than to

cheat on a paper and also stated that if they had cheated once, they felt it easier to cheat again. Students also believed that if there was little chance of them getting caught they were more likely to believe there would be no consequences to cheating (Bedford, et al., 2011).

Academic misconduct and dishonesty in online coursework is a matter of self-control, and it does not require careful attention to planning. By applying a "fraud triangle," it was observed that academic misconduct can occur in multiple stages by which cheating depends on factors such as prior experience, the ability to cheat, detection risk, perceived benefits of cheating, norms, and other obligations (Farisi, 2013; Tinkelman, 2011). The intent for some students of online courses to cheat depends on various situational factors that encourage university faculty to implicitly promote academic misconduct (Conway-Klaassen & Keil, 2010). Perhaps not very surprisingly, university faculty members encourage students to cheat and engage in deceptive practices to achieve the best possible outcomes. Student culture of many universities encourages a social life that extends beyond institutional confines, leading to the denial of responsibility and academic workload (Milliron & Sandoe, 2008). Extenuating circumstances aside, academic misconduct and dishonesty produce consequences that appeal to higher loyalties and maintain the integrity of institutional functions.

Cheating, deception, and other forms of academic dishonesty effectively reduce pressures on achieving high academic performance whereas honesty requires an over-extension of physical and mental efforts. Cheating has links to factors not limited to technological savvy and social networking connections with peers (Milliron & Sandoe, 2008). Students who use technological devices primarily for non-academic purposes may seek assistance from peers who have connections with university-educated individuals who possess a degree and have encyclopedic knowledge about a wide variety of subjects. In fact, many students who use technological for

non-academic purposes may use social networking connections to inquire into who may have resources for completing multiple-choice quizzes or exams that take place in an online format (Fask, Englander & Wang, 2014). Technologically savvy students frequently practice deviant strategies to maintain a semblance of academic integrity by actively searching for excuses to sustain a social life.

Insights from more recently Published Research Literature

Academic misconduct and dishonesty through cheating or other deceptive practices often involve acts of bribery to obtain assistance from others who have educational credentials. It has been noted how cheating often occurs in relation to formal academic exercises regardless of whether students learn in virtual or traditional environments (Farisi, 2013). Between one-half and three-fourths of all university students cheat or engage in deceptive practices to present an impression of maintaining academic integrity. Forms of cheating and deceptive practice can include plagiarism, collusion, falsification, misrepresentation, and impersonation (Farisi, 2013; McGee, 2013). Many university students who cheat may use any or all of these dishonest practices to somehow escape detection by instructors and faculty who likely cheated during their enrollment as a student in the past. In a nearly universal context, students who cheat or engage in forms of academic misconduct may experience panic at forgetting about a deadline and may, therefore, utilize social networking connections to seek near immediate assistance (Farisi, 2013; McGee, 2013).

In consideration of the aforementioned reasons, researchers noted how both students and faculty members believe that academic misconduct occurs more frequently in virtual environments (Farisi, 2013). Other studies show academic misconduct occurs at relatively similar rates regardless of whether students participate in online or traditional environments

(McGee, 2013). The irony here is that many students believe that cheating occurs less in online environments than in traditional environments. A considerable amount of disagreement exists pertaining to the evidence about how likely a student may engage in misconduct. While some evidence exists regarding how cheating and other forms of academic misconduct are less likely to occur in traditional classroom environments, few studies to date have produced conclusive results pointing to which whether these and virtual environments are more conducive towards influencing university students into engaging in academic misconduct. Students who use socially networked peers to complete online course presents an increasing concern among instructors and university faculty (McGee, 2013). Most of the extant research literature includes self-reported measurements of academic misconduct and dishonesty and, as a consequence, cannot produce complete results of whether cheating and other deceptive practices will occur more frequently in either a traditional or virtual environment.

Weaknesses in administrative procedures reflects how students enrolled in online courses use anonymity as a legitimizing excuse to avoid detection by instructors and university faculty (Tinkelman, 2011). Students enrolled in online courses may justify cheating and other forms of academic misconduct by presuming that they are inevitable consequences of university lifting words directly from scholarly sources and claiming them for oneself (Conway-Klaassen & Keil, 2010). In many respects, students enrolled in online courses may believe that cheating is necessary to earn future career prospects. For these students, cheating is unethical despite its potential consequences once instructors and university faculty detect its occurrence among one or more individuals. Accordingly, instructors and university faculty are overworked insofar as the ability to detect cheating and other forms of academic misconduct that can escape them (Conway-Klaassen & Keil, 2010). Recent technological innovations have, nevertheless,

produced a wide variety of tools that provide instructors and university faculty with systematized knowledge of which deceptive practices are most likely to occur across multiple disciplinary contexts. Accordingly, systematized knowledge has broader implications as the technological tools for detecting instances of cheating and plagiarism incite questions regarding the protection and potential violation of privacy right (Conway-Klaassen & Keil, 2010).

Even more recently, it was highlighted that some administrative university faculty members are currently taking proactive measures to implement technological initiatives that detect academic misconduct more effectively (Oravec, 2018). More troubling is how some of the proposed technological initiatives that contain algorithms inaccessible to students and other computer users for detecting academic misconduct are of a propriety nature, such as “nested black boxes”. This is where the outsourcers involved in these efforts have provided one level of secrecy and educational administrators involved yet another level (Oravec, 2018). To draw from the research in deterrence theory, initiatives proposed for implementing proprietary black boxes imply that all students are likely to commit academic misconduct and that the data collection procedures are systematic if not arbitrary (Farisi, 2013; Oravec, 2018). Historically, however, the use of black boxes date back to the Second World War when indecipherable codes were necessary to deter enemies from stealing confidential information about the strategies used by one active military fleet against another (Oravec, 2018). The intent of implementing black boxes was to conduct basic operations in secrecy and protect proprietary information. Extended to the realm of online courses, however, proposed initiatives for implementing black boxes reinforce a psychological drive to protect the apparent integrity of information included in written assignments and monitor all students who, in some ways, cheat or engage in other forms of misconduct.

Online Tools and Plagiarism Detection

Online tools and plagiarism detection software packages such as Turnitin especially provide instructors with knowledge of where plagiarism is present in written assignments (Ison, 2014). The creators of Turnitin divided the level of plagiarism present in written assignment into five color coded categories that indicate overlap between work submitted by students and articles published in peer reviewed journals. While “blue” indicates that no plagiarism is present in a written assignment, “green” implies that a written assignment has between one word and 24% plagiarized from at least one peer-reviewed source. Next, “yellow” indicates that between 25% and 49% of a written assignment has words and sentences directly lifted from peer-reviewed sources that do not receive a proper citation or credit (Ison, 2014). Still, Turnitin software includes an “orange” category indicating that written assignments submitted to instructors have between one-half and three-fourths of the work directly plagiarized from peer-reviewed sources. Lastly, the “red” category indicates that between 75% and 100% of a written assignment has content directly plagiarized from peer-reviewed sources.

Some instructors allow students to submit written assignments with as much as 30% of the work directly plagiarized from peer-reviewed sources. For most cases, however, instructors permit up to 15% plagiarism on written assignments and recommend a closer review of works that have between 15% and 40% plagiarized content. Ironic here is how written assignments with less than 15% plagiarized content is "legitimate" research (Ison, 2014). In cases where students enrolled in graduate-level online courses submit written works, incidences of plagiarism are higher as limited institutional resources exist that encourage instructors or faculty to detect cheating (Conway-Klaassen & Keil, 2010; Leonard et al., 2015).

Information systems and accounting texts often include ethics segments or ethics cases in many of their chapters. Graduate students in the science, technology, engineering, and mathematics (STEM) disciplines are evidently more likely to commit academic misconduct as many assignments require the use of detailed formulas and calculations that reflect empirical research values (King & Case, 2014). Graduate students enrolled in the STEM disciplines are equally as likely to have an acute awareness of administrative procedures for detecting plagiarism and other forms of academic dishonesty (Leonard et al., 2015). Graduate students acutely aware of administrative procedures may then utilize existing policies only to subvert them for personal gain. Here, the research literature confirms that academic misconduct is endemic to university student life as the veil of anonymity reflects presumptions that cheating will guarantee future success.

In relation, the research literature that cites the legitimacy of plagiarism detection software detection programs like Turnitin reflects how some instructors and university faculty members require students to sign "honesty pledges" to ensure that no academic misconduct will take place (Bedford, et al., 2011). Many instructors provide information about the use of Turnitin and the consequences of plagiarism in course syllabi. Written statements about plagiarism and its detection in course syllabi merely constitute window dressing. Browser lockdown tools and identity detection facilities provide instructors and university faculty members with more efficient tools to detect plagiarism in written assignments (McHaney, Cronan, & Douglas, 2016). Browser lockdown tools and identity detection facilities should encourage instructors and faculty members to promote an institutional culture in which students take the first step in learning as diligently as possible about the content contained in instructional curricula. Yet, the same researchers suggested that more research is necessary for developing more effective tools

capable of combating plagiarism and other forms of academic misconduct detected in written assignments (McHaney, et al., 2016). More effective administrative procedures are necessary to ensure that instructors and faculty members are capable of using plagiarism detection tools available in online environments. In order to develop a university culture firmly rooted in academic integrity, instructors and university faculty members must join forces to motivate students into believing that all forms of knowledge acquired in virtual and traditional environments have intrinsic worth.

Detering Academic Misconduct in Virtual Environments

Pertaining to regulations that deter students from committing academic misconduct, an article written for the *University of Wisconsin-Milwaukee Post* noted:

Academic misconduct is an act in which a student seeks to claim credit for the work or efforts of another without authorization or citation, uses unauthorized materials or fabricated data in any academic exercise, forges or falsifies academic documents or records, *intentionally impedes or damages the academic work of others*, engages in conduct aimed at making false representation of a student's academic performance, or assists other students in any of these acts (Dequaine, 2012; p.5).

Specifically, the academic misconduct policy for the UW-Milwaukee implies that plagiarism, impersonation, and even collusion constitute problematic behaviors that require correction (UW-Milwaukee, 1989). However, the academic misconduct policy does not indicate anything about the possible sanctions for engaging in the aforementioned problematic behaviors. Also, the same policy contains no information regarding the consequences of cheating, plagiarism, or other forms of misconduct and dishonesty committed by students enrolled in online courses. Highlighted is that plagiarism is an increasingly problematic behavior (Dequaine, 2012).

However, faculty members affiliated with UW-Milwaukee wanted to know how students truly felt about plagiarism. Surveying students about their perceptions of plagiarism implies that academic misconduct is a matter of honoring personal and professional integrity. Yet, discrepancies exist between what students feel about academic misconduct and their direct or indirect participation in it. Students under a considerable amount of pressure from parents may feel desperate to pull a few strings regardless of the consequences (Dequaine, 2012). A study was done of 270 faculty to determine if they were faced with academic dishonesty by way of plagiarism, and if so, if they felt prepared to deal with it. It was found that faculty members' perceptions of severity strongly mediate the consequences they recommend (Robinson-Zanartu, Pena, Cook-Morales, Pena, Afshani, Nguyen, & D'Amato, 2005).

Some feel that student awareness is the key to prevention versus prosecution of academic misconduct. Creating awareness of the problem of academic misconduct is of big consideration to faculty, students and administrators. Academic integrity must be constantly respected at all levels, and students must be able to understand what that means, in order to obtain a successful learning culture. If students can understand why it is so important to promote integrity within academia, they are more likely to live by it. Doing so will help them be able to take pride in their work. Academia values the importance of building each student's self-image and takes every opportunity to prevent and discourage students from cheating and plagiarism. In actively demonstrating that there is value in academic integrity, academia can easily see progress being made in creating better student outcomes over the past several generations (Michael & Williams, 2013).

However, students who have the knowledge to collude with instructors and university faculty members may legitimize alleged acts of academic misconduct by petitioning an

administrative board to make exceptions. Instead of allowing a student to fail, an instructor or administrative faculty member may permit some forms of academic misconduct as long as enough substantial evidence exists to support claims that conforming to current policies will produce disastrous consequences. Interestingly enough, one online source reflected some of the possible strategies that instructors and university faculty may utilize to detect plagiarism in written assignments as well as promote academic integrity. Students enrolled in online courses caught cheating or plagiarizing written assignments had their computer browser locked to prevent searching the internet for academic information. Accordingly, some universities like Western Governors University, an online-based institution, have administrative mechanisms in place to curb incidences of academic misconduct from occurring (Gordon, 2013).

Preserving the individual privacy rights of students enrolled in online courses is thought to be significant for a wide variety of reasons and administrative mechanisms implemented at the institutional level to curb academic misconduct are equally as necessary to promote critical thinking skills and authentic engagement with instructional materials. As for massive open online courses (MOOCs), the administrative capacity to implement plagiarism detection software and other innovative technological tools suggests that academic misconduct will remain an endemic element of university life among students who are simply pressed for time or need simple excuses to avoid applying critical thinking skills (Shapiro et al., 2017). One online article indicates that many university students find higher education an obligatory task. In fact, many university students find academic coursework so difficult or too arduous that paying another individual to act as an impersonator in a virtual environment is equally efficient and rewarding (Gordon, 2013).

Businesses that offer services to students that provide a surrogate to take their online course is on the rise (Newton, 2015). However, the author's experiences with engaging in academic misconduct were years before online education and MOOCs gained considerable notoriety. Market trends create niches where individuals with strong academic credentials impersonate currently enrolled students and complete online courses for the duration of a quarter, term, or semester (Newton, 2015). To wit, however, none of the published academic research literature highlights how market trends require individuals with strong academic credentials to impersonate students enrolled in online courses. An inference to draw from the above statement is that the individuals with strong academic credentials who impersonate students enrolled in online courses recognize the apparently endemic nature of academic misconduct that includes cheating, plagiarism, and other deceptive or dishonest practices. Perhaps these same individuals attempted to maintain an air of academic integrity during their enrollment in graduate-level courses but succumbed to the frustrations associated with actively participating in administrative politics (Leonard et al., 2015; Newton, 2015). Undergraduate students enrolled in online courses who utilize services that involve individuals with strong academic credentials who, then, act as an impersonator present a wide range of attitudes about using innovative technologies to commit academic misconduct.

The use of online proctoring services via plagiarism detection software and webcams is the next step that university faculty members have taken to reduce academic misconduct and dishonesty (Fry, 2013). However, the use of webcams to deter academic misconduct and dishonesty suggests that students must waive protections of individual privacy. To draw from the research inspired by deterrence theory, the use of webcams to prevent academic misconduct and dishonesty may reinforce what students believe about institutional conditions representative of a

police state (Farisi, 2013; Fry, 2013). Deterrence theory contains the suggestion that any institutional or administrative system designed to stop students from committing academic misconduct and dishonesty must reflect guidelines considered enforceable by university faculty members. For university faculty to prevent academic misconduct and dishonesty in an effective manner, students must psychologically internalize the potential consequences before making a decision to cheat or not to cheat (Farisi, 2013). Considering how some administrative faculty members want to install webcams on the computers of students enrolled in online courses, internalizing the consequences for cheating or plagiarizing the written works of another reflect a need to present a semblance of conformity to institutional policies (Conway-Klaassen & Keil, 2010). To internalize the consequence of committing academic misconduct and dishonesty, students must first imagine that university faculty members are keeping close surveillance. However, webcams already exist on laptop computers. Administrative faculty members must not only gain the permission of students but must also involve representatives of multiple government agencies responsible for collecting data. Most students would find such a notion highly unpopular, and they may, for good reason, decide to stage mass protests.

Conversely, the fact that many online courses seem to have a relatively impersonal nature is a reflection of how proposals for university faculty to install webcams is a completely unfeasible solution. Students enrolled in online business courses are the most likely to use “cheat sheets” as multiple-choice quizzes and exams draw directly from a course textbook (Wood, 2010). Yet, students enrolled in online businesses courses are not the only groups of individuals subject to this matter of intellectual regurgitation. Across most disciplines, instructors encourage students to complete take-home essay exams that involve the direct use of specific chapters in a course textbook (Farisi, 2013). The existential quandary of “to cheat or not cheat” regarding

take-home essay exams that draw directly from key chapters in a course textbook indicates how most students internalize the consequences of committing academic misconduct and dishonesty but ultimately decide to utilize copy-and-paste techniques then cite appropriately.

Instructors of online classes who provide students with opportunities to complete take-home essay exams implicitly encourage the application of critical thinking skills (Fask, Englander, & Wang, 2014; Gordon, 2013; Leonard et al., 2015; Wood, 2010). In assuming that students enrolled in online courses actually read a textbook, instructors believe that academic integrity should matter regardless of the distance between themselves and students (Kidwell & Kent, 2008). Yet, the same instructors may subconsciously believe that a significant portion of the students enrolled in an online course will either cheat or have another individual with strong academic credentials complete the work. Despite how instructors strongly discourage students from allowing another individual to complete coursework for them, anti-plagiarism policies are ineffective regardless of how many, or how few, students legitimately read through a course textbook to acquire knowledge about a specific subject. Similarly, the reasons for engaging in academic misconduct and dishonesty are equally wide and varied.

Reasons Students Engage in Academic Misconduct

Reasons students plagiarize in online courses are both qualitative and quantitative. Some of the reasons given include "easy access to information, not enough time, procrastination and too many assignments to complete" (Moten, Fitterer, Brazier, Leonard, & Brown, 2013, p.142). Almost three-fourths of students enrolled in online courses find it simpler and more efficient to cheat even when instructors include written disclaimers in syllabi (Moten et al., 2013). Yet, experienced instructors who included clear statements about the consequences of academic dishonesty witnessed an overall decline in plagiarism and other forms of misconduct (Moten et

al., 2013). Experienced instructors who clearly articulate the consequences of plagiarism in course syllabi encourage students enrolled in online courses to identify the intrinsic value of learning. Students enrolled in online courses led by instructors who include strict but clear policies against academic dishonesty and misconduct ultimately develop the critical thinking skills necessary for navigating a wide range of real world contexts (Conway-Klaassen & Keil, 2010). Higher education authorities have a role to play in creating online courses with instructors who strictly adhere to guidelines for admonishing academic misconduct. An environment that is not conducive to misbehavior creates students who are less likely to cheat or engage in other forms of deceptive practices (Bretag, 2013). Similarly, students enrolled in online courses with instructions which clearly articulate the consequences of academic misconduct are less likely to participate in corrupt or ethically questionable activities (Bretag, 2013).

Students Misconduct Methods

Students have been found cheating in the online environment by working together either in the same location or different locations by creating a Google Doc of answers to questions which they shared (Young, 2012). Repurposing labels on soda bottles is another avenue to cheat. Instructors have to stay on the lookout for wireless earphones that allow students to share answers via their cellphones or MP3 players. And incidents of pen and button cameras that connect wirelessly to a computer and send real-time images has also been uncovered (Yaccino, 2008). Students can use a combination of testing together techniques to bypass the learning process altogether. A student admitted that he and several other classmates took turns, maintained their own Google Docs file of the randomized questions (complete with certified answers) and worked simultaneously to avoid studying or learning in an online course. The

student thought the university had not thought it through enough, therefore not stopping or catching cheating (Young, 2012).

A much different type of cheating in online courses surfaced in 2014 when two sisters and their cousin were sentenced for financial aid fraud. In spring 2014, this team of three were sentenced to serve U.S. federal prison terms and ordered to pay over \$417,000 in restitution for running a student financial aid fraud ring between the years of 2003 to 2011 (U.S. Department of Education, 2014). The ring leaders used the identities of at least 20 people, logged themselves into online courses as these ‘straw students’ and submitted work on their behalf. These virtual students work would resemble cheating to a professor who was paying attention. However, their interest was not in gaining a college education, as none of the three had even had a high school diploma or GED (U.S. test to obtain certificate equivalent of high school diploma). Their interest through the eight years of fraud was to obtain and pocket the excess balance or difference between the amount of financial aid awarded and the cost of tuition (U.S. Department of Education, 2014).

Course cheating for financial aid fraud follows the general model that a ringleader recruits people willing to steal the identity of people not likely to learn of the fraud until years later. Often times this may be someone incarcerated and working on an online degree. This fraud occurred in online college application processes that have low identity requirements and because U.S. Title IV financial aid forms do not require confirmation of identity (U.S. Department of Education, 2011 & 2013). Usually targeted are open-enrollment colleges, colleges with low tuition, colleges that focus on achieving headcount rather than a reputation for educational quality, and online programs that lack requirements for any physical presence. Again, the reason

for this scam is not to achieve the college degree, but rather to obtain financial aid refund amounts that exceed tuition and fee costs (U.S. Department of Education, 2011 & 2013). Cheating for academics and cheating for financial aid fraud are two very different forms of cheating in an online environment (Appendix A).

Instructor Responses to Student Academic Misconduct

Instructors who teach fully online at a community college in Florida, as well as online instructors from two other Florida Community Colleges were used in a study where Dr. McCabe gave written permission to the researchers to use his Academic Integrity Survey (Sue and Ritter, 2007; DuPree & Sattler, 2010). With regards to the response to cheating from the institutions, instructors and institutions alike worked very hard by changing exams regularly, using specialized software to detect plagiarism and using on-campus proctoring services. (Appendix B). It was also found that female instructors were 16 percentage points more likely to fail a student for the test or assignment than her male counterpart. A growing trend is that females were more likely to respond to the survey than males. There were a variety of different responses to online cheating which included reprimanding the student, lowering the student's grade, failing the student for the assignment or course and more (Appendix C).

Some universities have implemented written advice on how their instructors should try to prevent academic dishonesty. Many university websites have academic integrity sections which outline past examples of academic dishonesty in their programs and list ways to discourage or prevent cheating. These websites provide instructors with necessary procedures and documents to assist with creating an honorable environment, as well as complete appeals processes and forms if cheating is caught (Rutgers University, 2010).

Student Perceptions of Academic Misconduct

The perceptions of students towards cheating, deception, plagiarism, and other forms of academic misconduct and dishonesty may reflect psychological drives to preserve personal integrity. However, many instructors and faculty members believe that most students are completely ignorant of what precisely constitutes academic misconduct and dishonesty. Work has been done to determine student's attitudes as to what constitutes academic dishonesty violations, and their perceptions of the seriousness of it. Students commonly respond that cheating during testing is not serious in their eyes (Baker, Barry & Thornton, 2008).

Saudi State University recognized a study had never been done as to whether cheating and plagiarism were prevalent on their campus, and what student's perceptions and attitudes were about the subject. They then administered a survey of 138 first year male undergraduate students in a business administration degree program. The survey found that 35% of those who responded were not sure what plagiarism meant. Of those who did understand what it was, 42% had considered paying a third party to write their assignments. Interestingly enough, nearly 80% of respondents were not aware plagiarism software was being used by the University to detect academic dishonesty. Asked whether the use of that software would prevent them from cheating, 33% responded No, while 34% responded they were Not Sure. The survey further asked them if the University had ever advised them of the consequences of academic dishonesty, and 60% answered No. 24% of the students answered that they would only expect a light warning or even no punishment if caught being academically dishonest (Tayan, 2017).

Students enrolled in first-year-level courses may receive course syllabi that include detailed information about policies intent on deterring academic misconduct and dishonesty from ever occurring. Yet, many of the same students simply regard syllabi as a mere formality

(MacWilliams, 2005). For students, and perhaps many other individuals who include instructors and faculty members, the policies against misconduct and dishonesty contained in syllabi are only one element of a regulatory control system (MacWilliams, 2005). Faculty members from UW-Milwaukee say the process for filing academic misconduct cases is a hassle. Faculty members suspects that the plagiarism cases caught are not the first ones the student has committed. Because of student privacy laws, the University cannot tell professors who has committed plagiarism in the past (Dequaine, 2012).

Assessing college students' perceptions as to the level of seriousness of academic dishonesty was the goal. Based on the information received from their survey, the students lacked an understanding of the seriousness of academic integrity violations. They had no clear understanding of what constitutes an academic violation and approximately 60% of the students who responded indicated that cheating during a test is not serious (Baker et al, 2008). Studies find that many ways of cheating occur in every school year of college, so it is not specific to one year of study or another. Likewise, the reasons students cheat is varied (Appendix D).

Students enrolled in MOOCs perceive the instructional design of coursework as conducive towards cheating, plagiarism, and other forms of academic misconduct and dishonesty (Shapiro et al., 2017). The reasons why some students enroll in MOOCs constitute one area that researchers who perform future investigations may consider as internal and external factors influence behaviors that may or may not necessarily constitute misconduct and dishonesty (Shapiro et al., 2017). Perhaps not so surprisingly, few instructors express praise for MOOCs give that their impersonal nature presents numerous opportunities for students to engage in blatant and undetectable misconduct (Shapiro et al., 2017). Similarly, many instructors believe that MOOCs are not representative of an authentic university experience (Shapiro et al., 2017).

Massive open online courses do not encourage direct interactions between students and instructors. If any interactions occur within the virtual environment, their intent is to provide curt statements about individual progress. Accordingly, the perceptions that students have towards MOOCs suggest that even the slightest degree of anonymity invites academic misconduct and dishonesty as the learning process typically incurs a need to derive knowledge from various sources (Shapiro et al., 2017).

Massive open online courses promote cognitive dissonance, as this learning platform provides an environment where students must avoid the temptation to engage in misconduct and dishonesty (Shapiro et al., 2017; Stuber-McEwen, Wiseley and Hoggatt, 2009). If students who enroll in MOOCs or other types of online courses perceive that cheating and plagiarism are inherently wrong, they will likely experience feelings of regret associated with working diligently and not receiving immediate rewards (Stuber-McEwen, et al, 2009). Concurrently, instructors of MOOCs dole out high marks as long as students complete all coursework in a timely manner according to instructions (Stuber-McEwen, et al, 2009).

Chapter 3: SUMMARY OF THE LITERATURE REVIEW

The theoretical background of the preceding literature review highlighted how the shifts in social attitudes towards academic misconduct and dishonesty reflect the degree to which students normalize cheating, plagiarism, and deception (Bretag, 2013; Callahan, 2004). While some groups of students, like graduate students in STEM disciplines and students whose L1 is not English, are more likely to engage in academic misconduct and dishonesty, others face dilemmas that reflect to comply with formal policies that ideally deter cheating, plagiarism, and deception. In relation, the research literature that emphasized a General Theory of Crime suggested impulsiveness and opportunism reflect the degree to which students enrolled in online

courses cheat, plagiarize, and/or deceive (Tinkelman, 2011). The research in cognitive dissonance theory reinforced how students who commit academic misconduct and dishonesty experience psychological tension despite acknowledging that cheating, plagiarism, and deception is present (Stuber-McEwen, Wiseley, & Hoggatt, 2009). Likewise, the research in deterrence theory suggested that formal institutional policies that warn about the consequences of cheating, plagiarism, deception, and other forms of academic misconduct and dishonesty merely function as tactics designed to distinguish between conformists and non-conformists (Farisi, 2013; Fry, 2013). The research in deterrence theory, furthermore, suggests that proposed initiatives to implement monitoring devices in the computers of students enrolled in online courses advance a police state. The perceptions that students have towards academic misconduct and dishonesty also received attention as psychological drives to preserve personal integrity supersede a need to conform with formal policies warning about the consequences of getting caught for cheating and plagiarizing (Dequaine, 2012). However, future research is necessary to determine how students truly feel about academic misconduct and dishonesty.

Chapter 3. RECOMMENDATIONS

Future investigations may produce valuable insights as researchers examine the tendency for students enrolled in online classes to commit academic misconduct and dishonesty (King & Case, 2014). Accordingly, future investigations may draw from insights gleaned in prior research to examine how students internalize formal policies that warn about the consequences of cheating, plagiarism, and deception. Students enrolled in online courses who believe that academic integrity no longer exists may stand corrected if instructors and university faculty members institute policies with enforceable mechanisms that transfer into professional environments (Conway-Klaassen & Keil, 2010). Here, researchers who conduct future

investigations should consider which issues influence how students enrolled in online courses perceive the tendency to commit academic misconduct and dishonesty. As such, instructors of online courses should join forces with university faculty members to ensure that students understand the consequences of committing academic misconduct and dishonesty. However, the strategies used for ensuring students of consequences for cheating, plagiarizing, and deceiving should not violate personal freedoms or remove all rights to privacy.

Concerning the tendency for some students enrolled in online courses to commit academic misconduct and dishonesty, researchers who perform future investigations should consider identifying the values of testing in virtual environments in contrast to testing in traditional environments (Milliron & Sandoe, 2008). While the demand for online courses continues to increase, instructors and university faculty members should consider how some students learn best by working independently and setting their own schedule. Students who work best on their own schedule understand the consequences of academic misconduct and dishonesty. However, the same students would most likely feel violated if instructors and university faculty members required them to install monitoring devices into computers. Still, researchers who perform future investigation should consider including the opinions of instructors and university faculty members who express legitimate concerns about the increasing demand for online courses by students (Ison, 2014). Instructors and university faculty members may provide researchers with expert opinions on how to handle alleged misconduct and dishonesty by students by drawing from professional experience.

Thirdly, researchers who perform future investigations may benefit from including the opinions of graduate students and students whose L1 is not English to consider their perceptions of academic misconduct and dishonesty. While not all individuals affiliated with these two

groups of students are likely to commit academic misconduct and dishonesty, the decisions made by researchers to include their perceptions of cheating, plagiarism, and deception may indicate an acute philosophical awareness of how higher education does not necessarily produce the most profitable results (Bedford, Gregg, & Clinton, 2011; Callahan, 2004). Surely, many graduate students and students whose L1 is not English are undoubtedly aware that the consequences of committing academic misconduct and dishonest could end their academic career as well as ruin professional prospects.

However, researchers who perform future investigations should consider how most university programs require students to follow honor codes that preserve scholarly integrity (Jones, Blankenship, & Hollier, 2013). In future studies, researchers may consider how instructors and university faculty members differ greatly in defining what precisely constitutes misconduct and dishonesty. From there, future studies may produce valuable insights into how instructors and university faculty members collaborate to reform as well as clarify perceptions about the reasons why students may or may not deliberately engage in misconduct.

Conclusion

It has been proven that many forms of academic misconduct exist and are being actively used in higher education. It is also evident that university administrations are being proactive with their academic misconduct, integrity and ethical policies to make certain faculty and students are well aware of them. While the information about academic misconduct as well as ramifications of doing so is well covered, there is uncertainty regarding the entire process of accusation and follow through to response levels. There is much debate about the subject of academic misconduct regarding the balance between the reputation of the institution and faculty, vs. the accusation of

the student. Institutions need to make certain processes are in place to minimize opportunities for students to cheat, in order to maintain their accreditation.

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Appendix A

Cheating to Achieve Academic Fraud vs. Cheating to Achieve Financial Fraud

Table 1
Cheating to Achieve Academic Fraud vs. Cheating to Achieve Financial Fraud

	ACADEMIC FRAUD		FINANCIAL AID FRAUD	
	Traditional Academic Cheaters	Financial Aid Abusers	Financial Aid Scammers	Financial Aid Fraud Rings
WHO	Individual students or cheating ring	Individual students or parents	Individual students	-Ring leaders -Straw students
MOTIVES	Obtain higher grade than deserved for or effort invested	Lower cost of academic access	Obtain financial benefit for self without regard to educational outcome	-Ring leader: obtain financial benefit for self across many students without regard to educational outcome -Straw student: flat fee payment from ring leader for permitting use of personal information or in the case of identity theft, no benefit at all
IDEAL TARGET SCHOOLS	Any	Highest ranked school for which this student can qualify	-Low, easy entrance requirements -Low tuition and fees	-Online application, online program -No proof of identity required in application or for course or program completion -Low entrance requirements -Low tuition and fees
METHODS	-Plagiarize work of other students or sources -Obtain unauthorized course materials	Misreport qualifications for aid (e.g., income in aid applications)	-Apply to schools with lower costs than financial aid benefits	-Apply ringleaders and straw students to schools with lower costs than financial aid benefits
SIGNALS	-Evidence of plagiarized work and/or unauthorized course materials, AND -An attempt to complete a course of study with highest marks for least amount of effort	-Sincere effort as a student AND -Evidence that qualifications were misrepresented	-Evidence of traditional academic cheating early in course -Weak effort; e.g., minimal attendance or minimal online login meant to give an appearance of activity -Minimal concern for grade; even a failing grade is acceptable -Less or total absence of participation after financial aid checks are mailed	-Almost exclusively online courses -Evidence of traditional academic cheating early in course -Weak effort; e.g., minimal attendance or minimal online login meant to give an appearance of activity -Minimal concern for grade; even a failing grade is acceptable -Same student is always involved in plagiarism issues (the ringleader; cheating is otherwise rotated among the straw students who never respond to accusations or complain when accused of cheating) -Timing of online logins are sequential among same group of students -Less or total absence of participation after financial checks are mailed

OWEN / doi:10.5929/2016.6.2

Appendix B
Instructor Methods to Reduce Cheating

Aggregated Survey Responses: Safeguards to Reduce Cheating

<i>N</i> = 131	<i>N</i>	% Yes
14a. None	2	1.5
14b. Internet or plagiarism software	78	59.5
14c. Provide information about cheating	86	65.6
14d. Change exams regularly	67	51.1
14e. Different versions of exams	46	35.1
14f. Discuss importance of honesty	69	52.7
14g. Remind students about policy	58	44.3
14h. Closely monitor students taking exam	33	25.2
14i. On-campus proctored testing center	47	35.9
14j. Off-campus proctored testing center	20	15.3
14k. At-home webcam computer proctor	13	9.9
14l. Password protected exams	49	37.4
14m. Secure exam browser lockdown	23	17.6

Bemmel, 2014

Appendix C
Instructor Responses to Cheating

Aggregated Cross-Tabulation: Responses to Cheating by Gender

Response to cheating	Male (<i>n</i> = 28) % Yes	Female (<i>n</i> = 41) % Yes	Pearson chi- square
Reprimand or warn the student	11.6	21.7	.24
Lower the student's grade	7.2	14.5	.75
Fail the student for the test/assignment	18.8	34.8	1.17
Fail the student for the course	7.2	13	.216
Require student to retake test/redo assignment	7.2	8.7	
Report student to the Dean of Students	8.7	11.6	
Report student to your Chair/Director or Dean	7.2	7.2	
Do nothing about the incident	1.4	1.4	
Other	1.4	2.9	

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Appendix D

Student Methods of Cheating

Table 4. Student Responses Categorized by the Year in College

%	All	Freshman	Sophomore	Junior	Senior	Graduate
Internet	32	41	42	40	26	22
Plagiarism	36	32	40	40	51	39
Collaboration	17	15	6	8	17	11
Pay/buy	5	7	8	2	1	6
Using text/notes	10	5	4	11	5	22

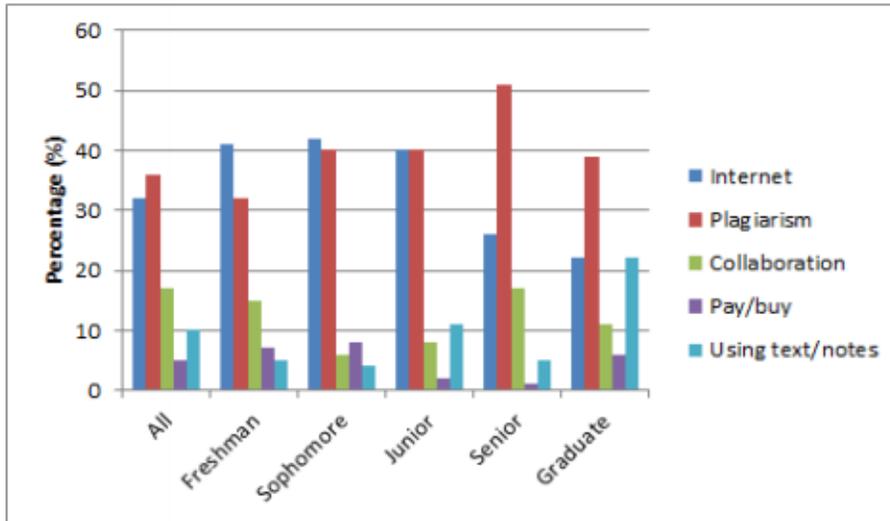


Figure 7. Student Modes of Cheating Based on Year in College

Khalid, 2015