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Understanding Influencers of Academic Honesty in Higher Education Accounting Students:  
Perceived Faculty & Student Best Practices

by:

Gordon Lee Saathoff

A dissertation

submitted in partial fulfillment

of the requirements for the degree of

Doctor of Education in the Department of Educational Leadership and Instructional Design

Idaho State University

Spring 2018

## **Committee Approval**

To the Graduate Faculty:

The members of the committee appointed to examine the dissertation of Gordon Lee Saathoff  
find it satisfactory and recommend that it be accepted.

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## **Human Subjects Committee Approval**

October 31, 2017

Gordon Saathoff  
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RE: regarding study number IRB-FY2018-60: UNDERSTANDING INFLUENCERS OF  
ACADEMIC HONESTY IN HIGHER EDUCATION ACCOUNTING STUDENTS:  
PERCEIVED FACULTY & STUDENT BEST PRACTICES

Dear Mr. Saathoff:

I agree that this study qualifies as exempt from review under the following guideline: Category 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. This letter is your approval, please, keep this document in a safe place.

Notify the HSC of any adverse events. Serious, unexpected adverse events must be reported in writing within 10 business days.

You are granted permission to conduct your study effective immediately. The study is not subject to renewal.

Please note that any changes to the study as approved must be promptly reported and approved. Some changes may be approved by expedited review; others require full board review. Contact Tom Bailey (208-282-2179; fax 208-282-4723; email: [humsbj@isu.edu](mailto:humsbj@isu.edu)) if you have any questions or require further information.

Sincerely,

Ralph Baergen, PhD, MPH, CIP  
Human Subjects Chair



**BOISE STATE UNIVERSITY**  
COLLEGE OF BUSINESS AND ECONOMICS  
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G. Lee Saathoff  
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Dear Lee,

You have permission to conduct your research (distributing a survey to our accounting faculty and students for them to complete) at Boise State University within the Department of Accountancy. I wish you all the best in your research endeavors and in completing your degree.

Sincerely,

Troy Hyatt, PhD, CPA  
Chair and Associate Professor Department of Accountancy

October 23, 2017

Dear Lee,

Thank you for registering your study with the University. Your request to engage in research associated with your dissertation and doctoral studies through Idaho State University. Your project on Academic Honesty, IRB#: F17-F07, has been reviewed and is approved upon final receipt of your final informed consent form and data security plan. This approval is valid for 12 months from the date of this letter. Should an extension be necessary to facilitate your study, please contact our office.

Please notify the IRB if you intend to make any significant modifications to the study's design or implementation.

Best of luck with your study.

Respectfully,

Sidney L. Palmer, Ph.D.  
Dean, Faculty Development & Mentored Research  
Director, BYU-Idaho Institutional Review Board



Patrick Thomas Esq.  
Weber State University  
3850 Dixon Parkway Department 1027  
Ogden, UT 84408-1027

Re: "Understanding Influencers of Academic Honesty in Higher Education Accounting Students:  
Perceived Faculty and Student Best Practices"

October 16, 2017

Dear Idaho State University Institutional Research Board:

My name is Patrick Thomas; and I work as the Compliance Officer for the Institutional Research Board (hereinafter "IRB") at Weber State University. I have reviewed Gordon Lee Saathoff's research proposal entitled "Understanding Influencers of Academic Honesty in Higher Education Accounting Students: Perceived Faculty and Student Best Practices" (hereinafter "IRB Proposal").

I grant a conditional permission for Mr. Saathoff to conduct research at Weber State University as outlined in his IRB Proposal so long as all the following occurs:

- 1) Idaho State University approves the IRB Proposal and complies with all the requirements of the Common Rule (see Title 45 Code of Federal Regulations (C.F.R.) Part 46);
- 2) Weber State University is not involved in the collection of the data so the data is not "education records" for purposes of the Family Educational and Privacy Act (hereinafter "FERPA") (see 20 United States Code (U.S.C.) § 1232g; 34 C.F.R. 99.1 et al.); or, alternatively, Mr. Saathoff enters into a separate FERPA agreement with Weber State University;
- 3) In accordance with in Idaho State University's Policies and Procedures, Mr. Saathoff complies with all relevant data management policies including but not limited to ITS Access Control ISUPP 2410, ITS Information Security ISUPP 2500, ITS Physical Environmental Security ISUPP 2510 and any other related policy (see <https://www.isu.edu/policy/information-technology-services/>); and
- 4) Mr. Saathoff reports only aggregated de-identified information that is not readily re-identifiable based on reasonable standards (see e.g. NISTIR 8053 De-Identification of Personal Information <http://nvlpubs.nist.gov/nistpubs/ir/2015/NIST.IR.8053.pdf>).

Please feel free to contact me at my office via telephone at 801-626-7619 or email at [patrickthomas@weber.edu](mailto:patrickthomas@weber.edu).

Kindest Regards,

Patrick Thomas (Electronic Signature)

Patrick Thomas Esq.  
IRB Compliance Officer  
Weber State University

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# **Understanding Influencers of Academic Honesty in Higher Education**

## **Accounting Students: Perceived Faculty & Student Best Practices**

### **Dissertation Abstract--Idaho State University (2018)**

The volume of cheating, according to professional studies, has increased dramatically over the past 50 years. The research shows that across demographics cheating is more prevalent. This increase has caused some researchers to feel that higher education has developed a cheating culture.

This study looks to find ways to combat a cheating culture by examining “Best Practice Initiatives” that have been surmised, if implemented, would reduce cheating. There are 16 initiatives researched in the study. The study specifically surveys faculty and students in accounting programs to determine their perceptions of which best practice initiatives would reduce cheating among accounting majors. Frequencies of responses are analyzed and Categorical Principal Components Analysis (CATPCA) is used to determine meaningful constructs.

The study was performed at four universities, three public and one private, in the Rocky Mountain Region of the United States. The results of the survey are that five initiatives are perceived to have a moderate to great effect on reducing cheating, with two of the initiatives perceived to have the greatest effect. The first of the two initiatives is: “Placing an ‘XF’ on official transcripts when a student has been found responsible for cheating.” The second is: “Provide training for faculty on academic integrity issues such as how to discourage cheating via effective classroom management, how to properly confront infractions, and what current research offers as to why students cheat.” The other three initiatives that are perceived to reduce cheating significantly focus on educating students through effective classroom management

strategies, which includes discussing real-world ethics cases and providing clear definitions of what constitutes cheating.

Overall it appears that implementation of procedures and strategies to enforce honor code policies; use of classroom management and education strategies to educate and support administration, faculty, and students; developing and culture and perception that honor is highly valued; and having consequences that hold students accountable for knowing and following the honor system are key components to reducing academic dishonesty and building a culture of ethics in accounting departments and presumably on campuses.

# **CHAPTER I**

## **INTRODUCTION**

The development of quality leaders, specifically in accounting, is vital in our society. Madsen (2008) recognized this need. “Developing leaders is a crucial issue in today’s higher education, business, and public arenas. We need strong, prepared, and ethical leaders” (p. 288). Many of these future leaders will attend institutions of higher education. Through this process, these future leaders will work to earn degrees and thus gain an education that should help them in their future leadership roles. However, a lack of academic integrity can weaken the purposes of educating future leaders.

Academic integrity is important for the benefit of students and society, because higher education plays a significant role in developing future leaders and should help instill ethical values in those individuals. McCabe, Butterfield, and Treviño (2012) stated:

We should care about academic integrity because we believe it is one of the issues that students face in college for which colleges and universities can make a difference, providing society’s future leaders with an experience of living within a community of integrity—a touchstone for their future. (p. 4)

Hence, all members of a campus community should view the importance of not only teaching subject matter to students but helping students learn integrity principles that can carry with them after their time at the higher education institution. There is substantial research on academic dishonesty and some specific research about academic dishonesty among accounting majors; however, there is very little empirical research that directly supports specific strategies to decrease students’ levels of academic dishonesty and to increase students’ levels of academic honesty. This research study helps to bridge that gap by looking at best practice strategies that

can be implemented to help, specifically accounting students, be more academically honest and to help higher education accounting instructors not only teach subject matter, but to help students develop morally.

One view of the general goals of higher education institutions is to “prepare educated citizens, advance knowledge, and engage in service in ways that benefit individuals” (Gappa, Austin, & Trice, 2007, p. 3). The first goal in that list is to prepare educated citizens. That goal is attained by conveying knowledge to students. The way an educator determines if the knowledge has been conveyed is through some form of assessment. Assessment is defined by Huba and Freed (2000) in the following way:

Assessment is the process of gathering and discussing information from multiple and diverse sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experiences; the process culminates when assessment results are used to improve subsequent learning.

(p. 8)

Based on this definition, formative and summative assessments help inform an educator about whether or not a student is expanding his or her knowledge. The results of an assessment can then be used to move forward in the teaching and learning process or will show the need for remediation. The process of assessment is undermined when individuals commit acts of academic dishonesty. This dishonesty not only weakens the assessment process but negatively affects the student and can negatively affect the higher education institution and the educational process. As Gallant (2008) stressed, “When it is the academic misconduct of students in question, campus officials and faculty are primarily concerned with the negative impact on two aspects of the educative process—learning and fair evaluation of students’ work” (p. 94).



Therefore, faculty and administration need to focus on limiting academic dishonesty and increasing students' ethical behavior.

Ultimately, if students are allowed to be academically dishonest, they are highly likely to carry that trait with them into their personal and professional lives, which is what Sims (1993) found. She stated:

Subjects who admitted to having engaged in a wide range of academic dishonesty also admitted to a wide range of work-related dishonesty. Additionally, those subjects who engaged in behaviors considered severely dishonest in college also engaged in behaviors considered severely dishonest at work. (p. 207)

Lawson (2004) found that students still in school already held beliefs that correlated with either future ethical employment practices or unethical employment practices. Lawson found that students who are likely to cheat in school believe that the business world is unethical and that they will probably need to act unethically to advance in the business world. Students who are less likely to cheat feel upset if others cheat and view the business world as more ethical and that they will probably not have to act unethically to advance in their careers. These findings show that people are creating a world that matches their perception of the world. Unfortunately, peer pressure can also play a major role in how individuals perceive the world. If students see others cheat and "succeed," they may choose to cheat because they think everyone else is doing it so cheating will level the playing field, so to speak (Ariely, 2013; Callahan, 2004; McCabe, Butterfield, & Treviño, 2012). If accounting educators can help accounting students perceive the world as more ethical, then this may help educate students to be more ethical, not only in their academic pursuits but also in their future employment.

Dishonesty in the corporate world seems to have increased in the past few decades. The Federal Bureau of Investigation (FBI) reported in 2005 that “there are presently 405 Corporate Fraud cases being pursued by FBI field offices throughout the United States. This represents a 100 percent increase over the number of Corporate Fraud cases pending at the end of Fiscal Year 2003” (Federal Bureau of Investigation, 2005, General Overview, para. 3). In a subsequent report published by the FBI, the number of Corporate Fraud Pending Cases went from 529 in fiscal year 2007 to 726 in fiscal year 2011, which is a 37.2% increase over this time period (Federal Bureau of Investigation, 2011, Overall Accomplishments, chart). Therefore, the number of fraud cases had risen and likely continued to rise. This increase may be due to either more dishonesty or to better policing of businesses so that more dishonest acts are being found and prosecuted. Either way, fraud is a significant problem in the business world.

This issue of fraud in the business world may play a role in how students perceive integrity and, specifically, academic integrity. As Callahan (2004) noted, “The belief that hard work is the key to success is mocked when people see, constantly, that success comes faster to those who cut corners” (p. 24). This attitude may also be exemplified by parents of some students. Callahan noted that money, scholarships, and prestige are to be had if a student can be accepted into certain higher education institutions. Some parents may lie, bribe, or break rules to try and get their child into one of these institutions. This behavior sets an example for the student, and the pressure that is placed on him or her, not only by schoolwork but by parents’ expectations, can cause the student to feel that he or she must cheat to meet the expectations of parents (Ariely, 2013; Callahan, 2004; McCabe et al., 2012).

Academic dishonesty is shown to be prevalent in American institutions of higher education. Studies have shown that academic dishonesty among students has increased over the

past few decades and is widespread in higher education (Crittenden, Hanna, & Peterson, 2009; East, 2010; Hutton, 2006; Lambert, Hogan, & Barton, 2003; McCabe et al., 2012; Nonis & Swift, 1998; Simkin & McLeod, 2010). These studies show that the percentage of students who admit to committing dishonest acts during their college studies is well over 50%. These high rates of academic dishonesty have caused some researchers to go so far as classifying higher education as having a “cheating culture” (Crittenden et al., 2009).

Higher education plays a part in “develop[ing] an ethical and responsible citizenry” (Davis, Drinan, & Gallant, 2009, p. 11). However, if academic dishonesty is rampant at an institution, this goal will be affected. Davis, Drinan, and Gallant (2009) said:

Other important calls to action in education, such as for access, affordability, and diversity, can fall flat in the meaning they have to our schools, colleges, and universities if, once the students get there, integrity is lacking and cheating is rampant. We should not desire simply for students to get a diploma or degree, but for them to get a diploma or degree that means what it says it means. (p. x)

This statement implies that if cheating has become rampant in the culture of the institution, then the learning of students is meaningless. As Callahan (2004) stated, “The more cheating there is, the more it becomes a routine part of life. The more it’s normalized, the less it becomes a conscious choice driven by any meaningful motive at all” (p. 179). Students may become so used to cheating because of the culture that it becomes part of their moral makeup, negatively adjusting their moral compass, which they will then take with them into their future lives and careers. Callahan noted that “while more of us will do wrong in a system where cheating is normalized or necessary for survival or hugely profitable, some of us will insist on acting with integrity even if doing so runs counter to our self-interest” (p. 105). As such, educators need to

encourage honesty by supporting students who do their best without resorting to cheating and by implementing policies, procedures, and activities that will influence students to be honest.

Business schools, of which accounting departments are typically included, in particular, should have concerns about academic dishonesty. Some studies have shown that business students have a tendency to cheat more than other students (Elias, 2009; McCabe, Butterfield, & Treviño, 2006; McCabe & Treviño, 1995; Premeaux, 2005; Rettinger & Jordan, 2005; Smyth & Davis, 2004). However, other studies have not found a significant difference in the reported rates of cheating between business students and other students (McCabe et al., 2012; Nowell & Laufer, 1997; Klein, Levenburg, McKendall, & Mothersell, 2007). Even though McCabe et al. (2012) did not find business students to have a higher rate of cheating than students in some other majors, business majors were still in the group of majors on the higher end of the cheating scale, ranking third of eleven majors in self-reported cheating percentages (p. 161). Based on these findings, higher education administrators, especially in colleges of business, should be concerned about the prevalence of academic dishonesty.

In spite of all the reported cheating and the perceived benefits that could be attained from cheating, some students choose to be academically honest. Instructors need to do all they can to help students be academically honest. Administrators and faculty in higher education institutions, and specifically those teaching accounting, must do all they can to increase the levels of academic honesty and protect the reputation of the institution, the students, and the graduates. As Allen, Fuller, and Luckett (1998) stated two decades ago:

Students' ethical and moral behavior concerns both the academic and business communities. . . . Building a tolerance for cheating is unacceptable. As faculty members, staff members, and administrators, we cannot let cheating become so ubiquitous that it is

accepted by students as the norm. Business schools will be shirking their responsibility to students and society if they ignore the problem. (p. 51)

Some have argued that an increase in academic honesty could be accomplished through developing a campus culture and classroom culture that promotes and supports ethical principles and practices (Bernardi, Metzger, Bruno, Hoogkamp, Reyes, & Barnaby, 2004; Lang, 2013; McCabe et al., 2012; McCabe & Treviño, 1993; McCabe, Treviño, & Butterfield, 2001; West, Ravenscroft, & Shrader, 2004). A culture of integrity needs to surround the students because one of the primary factors in increased academic honesty, as well as academic dishonesty, is the influence of peers (Crown & Spiller, 1998; Curasi, 2013; Mattu & Weiner, 2012; McCabe et al., 2012; McCabe & Pavela, 2005; McCabe & Treviño, 1993; McCabe & Treviño, 1996; McCabe & Treviño, 1997; McCabe et al., 2001; Naghdipour & Emeagwali, 2013).

Research has focused primarily on levels of academic dishonesty or cheating in higher education and how to deter it. Numerous studies have been conducted on levels of cheating on exams, homework, and plagiarism (Crittenden et al., 2009; East, 2010; Simkin & McLeod, 2010) and on ideas to deter academic dishonesty (Cizek, 2003; Davis et al., 2009; Faucher & Caves, 2009; Happel & Jennings, 2008; Lang, 2013; Piazza et al., 2011; Simkin & McLeod, 2010). These studies contain key information for educators and give a basis for curbing the level of academic dishonesty in higher education.

One measure that is used in academia to reduce academic dishonesty is the use of deterrents, such as punishment. According to some studies, the threat of punishment, such as potentially receiving an F grade, which is one of the most common methods used by teachers when someone is caught cheating, or university reprisal or other more severe punitive measures, had some effect in deterring students from cheating (Carter, 2008; Haines, Diekhoff, LaBeff, &

Clark, 1986; McCabe, Treviño, & Butterfield, 1999; McCabe et al., 2012; Power, 2009; Smith, Davy, Rosenberg, & Haight, 2002). However, other studies found that deterrents, including punishments, do little or nothing to reduce academic dishonesty (Lang, 2013; Simkin & McLeod, 2010; Smith, Davy, & Easterling, 2004). In addition, the fear of being caught for cheating was shown to not be a significant deterrent (Lambert et al., 2003). The way peers viewed the offender was found to be the strongest deterrent to academic dishonesty but also was found to encourage academic dishonesty if many students were cheating and if, as a group, the students did not view cheating as wrong (Crown & Spiller, 1998; Curasi, 2013; Mattu & Weiner, 2012; McCabe et al., 2012; McCabe & Treviño, 1993; McCabe & Treviño, 1996; McCabe & Treviño, 1997; McCabe et al., 2001; Naghdipour & Emeagwali, 2013).

Another factor that possibly affects whether or not deterrents are effective is the possible reward that can be attained from cheating. Research has found that a large benefit or reward, such as one exam being an exorbitant part of a student's grade, can offset deterrents/punishments for cheating (Lang, 2013; Whitley, 1998). One solution may be to reduce the number of "high stakes" assessments that are given to students, such as exams that are worth a very large portion of a grade (Lang, 2013). Some form of deterrent/punishment for dishonest acts is probably needed; however, Kolb, Longest, and Singer (2015) noted that "institutions of higher education want to instill in students the belief that academic honesty is the ethically correct choice—not merely a pragmatic strategy to avoid punishment" (p. 1). Kolb et al. (2015) argued that "constructing the 'cheat proof' classroom may—inadvertently—impede students' ethical development" (p. 18). Therefore, higher education personnel need to seek ways to build the moral compass of students so they want to learn material in order to increase their own abilities and to do well on their own merits.

Some research supports the effort to emphasize religiosity among students because higher levels of religiosity and/or moral reminders have been tied to lower levels of illegal or dishonest acts (Ariely, 2013; Bloodgood, Turnley, & Mudrack, 2008; Grasmick, Kinsey, & Cochran, 1991; Rettinger & Jordan, 2005). As Ariely (2013) observed through his research, “When we become aware of the possibility of immoral behavior, we reflect on our own morality. . . . And as a consequence, we behave more honestly” (pp. 203-204). This statement implies that strengthening the moral compass of students can help increase academic honesty.

Accounting departments educate students to work in many job categories, including auditors, tax professionals, financial accountants, controllers, and internal revenue service professionals. Many graduates of accounting programs will become Certified Public Accountants (CPAs). CPAs are expected to abide by the American Institute of Certified Public Accountants (AICPA, 2014), Code of Professional Conduct. This code is designed to guide CPAs in making ethical decisions. In section 51 – Preamble, which is part of section 50 – Principles of Professional Conduct, the code specifically states:

These Principles of the Code of Professional Conduct of the American Institute of Certified Public Accountants express the profession's recognition of its responsibilities to the public, to clients, and to colleagues. They guide members in the performance of their professional responsibilities and express the basic tenets of ethical and professional conduct. The Principles call for an unswerving commitment to honorable behavior, even at the sacrifice of personal advantage. (AICPA, 2014)

As this section states, CPAs should have “an unswerving commitment” to being ethical even if the possibility of financial loss or other loss may occur. This is the same commitment that students of accounting, who could be future CPAs, should have in their study of accounting.

Employers and the public expect accountants to be ethical in their job duties, and students of accounting should practice being ethical in their studies so they will already be living these traits when they enter the workforce. As Callahan (2004) emphasized, “Accountants have solemn obligations to be honest” (p. 141). However, “life at a big accounting firm can be extremely stressful. While partners worry about their bonuses, accountants down the ladder worry about their jobs. The pressures to play ball in unseemly situations can be immense” (pp. 144-145). For this reason, it is important that individuals who plan on working in the accounting field have not only the accounting skills but the ethical fortitude to withstand those unethical pressures.

In summary, corporate crimes have been on the rise and academic dishonesty has been found to be at high levels among higher education students. Specifically, accounting students have been found to have some of the highest levels of academic dishonesty in some studies. In order to change this trend, accounting educators need to find strategies that will aid students in building more ethical attitudes, build a culture of ethics in accounting departments, and that will carry into their future job roles.

### **Problem Statement**

Very little empirical research exists that directly supports specific strategies to decrease accounting students’ levels of academic dishonesty and to increase students’ levels of academic honesty. Some studies show that building an overarching culture of academic integrity at an institution through the use of an honor code or by emphasizing academic integrity leads to less overall cheating by students at an institution (Bernardi et al., 2004; Faucher & Caves, 2009; McCabe et al., 2012; McCabe & Treviño, 1993; McCabe et al., 2001; Smith et al., 2004; West et al., 2004). However, this information does not aid an accounting department or an individual



instructor who is trying to instill the virtue of academic integrity within his or her students and reduce dishonesty within his or her specific course.

Academic dishonesty and how to eliminate dishonest actions by students are concerns for higher education institutions and specifically accounting departments. Employers also are concerned about this issue. They want to know that the grades of the students they are hiring represent the students' educational attainment. Employers need ethical employees. Higher education professionals involved in teaching accounting students, need to find ways to increase academic honesty in their students (Lawson, 2004; Premeaux, 2005; Simkin & McLeod, 2010; Smyth & Davis, 2004).

The current body of research has analyzed a number of individual variables, such as age, gender, race/ethnicity, year in school, GPA, involvement in sports, participation in fraternities or sororities, involvement in other extracurricular activities, and level of religiosity (Allen, Fuller, & Lockett, 1998; Ariely, 2013; Bloodgood et al., 2008; Burton, Talpade, & Haynes, 2011; Crown & Spiller, 1998; Curasi, 2013; Grasmick, Kinsey, & Cochran, 1991; Haines et al., 1986; Kirkland, 2009; McCabe et al., 2012; Nowell & Laufer, 1997; Olafson, Schraw, Nadelson, Nadelson, & Kehrwald, 2013; Rettinger & Jordan, 2005; Yu, Glanzer, Sriram, Johnson, & Moore, 2016). This information can be useful, but could lead to teachers attempting to profile students or to use the findings in a way that would not target accurately the students who cheat. Research has also examined contextual factors, such as peer influence (both positive or negative), campus culture (campuses with honor codes versus those without honor codes), peer behaviors or students' perception of whether or not their peers are cheating, and deterrents (Ariely, 2013; Callahan, 2004; Crown & Spiller, 1998; Curasi, 2013; Happel & Jennings, 2008; Mattu & Weiner, 2012; McCabe et al., 2012; McCabe & Treviño, 1993; McCabe & Treviño,

1996; McCabe & Treviño, 1997; McCabe et al., 1999; McCabe et al., 2001; Naghdipour & Emeagwali, 2013; Simkin & McLeod, 2010; Smith et al., 2002). As the research has shown, numerous potential factors could cause a person to feel like he/she must cheat. The research also shows that students use numerous neutralizations or rationalizations to justify cheating (Curasi, 2013; Davis, Grover, Becker, & McGregor, 1992; Haines et al., 1986; Nonis & Swift, 1998; Pulvers & Diekhoff, 1999; Smith et al., 2004; Sykes & Matza, 1957; Yu et al., 2016).

However, there are not many studies that address influencers that work to increase students' ethical behaviors or the actions that decrease opportunity for students to be dishonest. There are some anecdotal "ideas" of influencers that could encourage students to be more academically honest but nothing definitive. Deterrents are used, but the research does not conclusively find that deterrents change students' ethical compasses. In some research studies, deterrents were found to not be effective in reducing cheating.

<b>Initiative #</b>	<b>Description</b>
1	Placing an "XF" on official transcripts when student caught cheating.
2	Require an educational program for students found cheating.
3	Faculty encourage collaboration on homework assignments.
4	Penalize students who do not confront cheaters.
5	Clearly communicate College policies on academic integrity.
6	Involve administrators, students, & faculty in all aspects of alleged offenses.
7	Assign one office to coordinate academic integrity initiatives.
8	Recognize faculty who properly confront & process cases of cheating.
9	Provide training for faculty on academic integrity issues.
10	Promote effective classroom management strategies.
11	Require ½ credit course on moral/ethical behavior for all 1 <sup>st</sup> year students.
12	Provide clear definitions & examples of what constitutes cheating.
13	Provide added support for faculty during the adjudication process.
14	Create a settlement process for 1 <sup>st</sup> -time minor cheating offenses.

*Figure 1:* The 14 "Best Practice Initiatives" established by Gambill (2003).

The 14 “Best Practice Initiatives” determined by Gambill (2003) were the basis for this study. These initiatives were determined to possibly reduce cheating in academic settings. Figure 1 is a list of the initiatives that guided the current study. A descriptive list of the initiatives can be found in Appendix A.

In addition to the 14 best practice initiatives, two additional initiatives were added to this study. These initiatives are: (1) having students read and sign an honor pledge prior to taking an exam or doing a project (Ariely, 2013; Mazar, Amir, & Ariely, 2008; McCabe & Trevino, 1993; McCabe & Trevino, 1997; Shu, Gino, & Bazerman, 2011) and (2) require an integrated ethics education with key real-world case studies/works that review specific, actual accounting ethicsscenarios as part of the accounting degree program (Jennings, 2004; Martinov-Bennie & Mladenovic, 2015). These were added onto the original 14 initiatives and included as initiatives 15 & 16. These are described in more detail in Appendix A.

### **Purpose of Study**

The purpose of this research study was to assess best practice initiatives to reduce cheating from the perspective of accounting faculty members and students majoring in accounting. The research study was performed at three public post-secondary institutions and one private post-secondary institution in the Rocky Mountain Region of the United States.

### **Research Questions**

This study was guided by the following research questions:

1. Which best practice strategies to reduce academic dishonesty are perceived to be effective by accounting faculty and students majoring in accounting?
2. Which best practice strategies do accounting faculty members think would reduce academic dishonesty at their institution?

3. Which best practice strategies do students majoring in accounting think would reduce academic dishonesty at their institution?
4. What are the differences in the subgroups' responses regarding which best practice strategies would reduce academic dishonesty of students majoring in accounting at the higher education institutions included in the study?

### **Research Design**

The research study used a quantitative, descriptive design. The data collected from the faculty and students' perceptions was analyzed using descriptive statistics (Gall, Gall, & Borg, 2007; Mitchell & Jolley, 2010).

In 2003, Todd Gambill completed a dissertation that identified best practice initiatives for UVa-Wise, a small liberal arts university in Virginia. Gambill (2003) surveyed administrators, faculty, and students using the "Academic Integrity Survey." The survey asked these groups about 14 specific initiatives that could be implemented and whether the respondents believed each initiative would either reduce cheating or increase cheating if initiated. Additionally, Gambill asked about some demographic characteristics of the respondents. This study along with the Academic Integrity Survey served as the basis for this dissertation and expanded on the work started by Gambill.

Faculty who teach accounting and students majoring in accounting were surveyed. The survey instrument implemented the design of Gambill's (2003) Academic Integrity Survey and included the best practice initiatives identified by Gambill, two additional best practice initiatives, along with additional demographic information. See Appendixes A & B for examples of the survey instruments. The survey instrument used a five-point Likert scale, which asked participants to evaluate specific best practice strategies and their likelihoods for promoting

academic integrity in accounting students. Questionnaires were completed in selected accounting classes. The questionnaires were completed anonymously except for identification by campus group, i.e. university, student classification, or faculty member.

The data was analyzed to determine individual characteristics, including age, gender, and student GPA. The focus was to gain a richer understanding of what higher education institutions and specifically accounting instructors and departments within those institutions can do to motivate students toward honesty. Finally, the researcher determined if specific initiatives were viewed as negative influencers by accounting faculty and/or students majoring in accounting.

### **Assumptions, Limitations, Delimitations**

The assumptions, limitations, and delimitations of the current study are outlined in the following paragraphs.

**Assumptions.** The following assumptions were a basis for the study:

1. Faculty and students clearly understood the questions posed in the survey instrument.
2. Faculty and students clearly understood what each initiative meant and how it could be related to academic dishonesty.
3. Faculty and students honestly and accurately reported their perceptions on how each initiative, if implemented, could affect cheating.
4. Students knew and accurately reported their current overall GPAs.

**Limitations.** There are several limitations when survey research is performed. The following are some of the limitations in this study:

1. A primary limitation is that the researcher relied on the accuracy and honesty of the individual faculty and students who completed the surveys. Some respondents may have had a preconception that influenced responses.

2. The data collected, due to the survey data method, allowed for high amounts of information collected; however, the study was not able to produce detailed analysis that open-ended questions or interviewing could have produced.
3. The data collected does not directly measure actual behaviors, i.e. cheating levels if a specific initiative is present. It only asked about perceptions if a specific initiative were present.

**Delimitations.** The following are the delimitations of this study:

1. This study was limited to three public post-secondary institutions and one private post-secondary institution in the Rocky Mountain Region of the United States. As such, the findings generated may not be generalizable to other higher education institutions and other geographic regions.
2. Participants were delimited to accounting faculty members and students majoring in accounting during the fall 2017 semester. The survey was administered in November and December 2017. Therefore, as only accounting faculty and accounting students were surveyed, the findings may not be generalizable to other majors.

### **Significance of the Study**

Academic dishonesty was found to be widespread in higher education (Bernardi et al., 2004; Crittenden et al., 2009; East, 2010; McCabe et al., 2012; Simkin & McLeod, 2010). As research has shown, the cheating attitude in higher education, and specifically business schools, was shown to spread into the business world (Crittenden et al., 2009; Lawson, 2004). This study sought to determine initiatives perceived by accounting faculty and students majoring in accounting to help increase academic honesty among accounting students. The study sought to

determine influencers that professors and other higher education professionals can utilize to help students be academically honest.

Some surveys of students have noted that students cheat because they know or feel that others are cheating (Crown & Spiller, 1998; Curasi, 2013; Mattu & Weiner, 2012; McCabe et al., 2012; McCabe & Treviño, 1993; McCabe & Treviño, 1996; McCabe & Treviño, 1997; McCabe, Treviño, & Butterfield, 2001; Naghdipour & Emeagwali, 2013). Studies have also shown that perception is not always reality. Allen et al. (1998) found that students feel others will cheat at a significantly higher rate than themselves. The current study is significant to accounting faculty and accounting departments as it may help accounting faculty determine initiatives that can be implemented in their courses to prevent or deter dishonest behaviors. The findings give ideas to university accounting departments about specific activities that may help students adjust their moral compasses to being more honest.

Along with helping accounting faculty determine factors that motivate students to have greater academic honesty, the study may help influence accounting faculty in emphasizing the importance of ethics in the accounting profession. Accountants, specifically Certified Public Accountants (CPA), are supposed to be ethical and live by a Code of Ethics. Specifically, the AICPA's (2014), Code of Professional Conduct integrity principle. The integrity principle states, "To maintain and broaden public confidence, *members* should perform all professional responsibilities with the highest sense of integrity" (ET section 0.300.040.01). The code breaks down and defines integrity as it is to be applied by Certified Public Accountants. The following sections discuss integrity:

.02 Integrity is an element of character fundamental to professional recognition. It is the quality from which the public trust derives and the benchmark against which a *member*

must ultimately test all decisions. (ET section 0.300.040.02)

.03 Integrity requires a *member* to be, among other things, honest and candid within the constraints of *client* confidentiality. Service and the public trust should not be subordinated to personal gain and advantage. Integrity can accommodate the inadvertent error and honest difference of opinion; it cannot accommodate the deceit or subordination of principle. (ET section 0.300.040.03)

.04 Integrity is measured in terms of what is right and just. In the absence of specific rules, standards, or guidance or in the face of conflicting opinions, a *member* should test decisions and deeds by asking: ‘Am I doing what a person of integrity would do? Have I retained my integrity?’ Integrity requires a *member* to observe both the form and the spirit of technical and ethical standards; circumvention of those standards constitutes subordination of judgment. (ET section 0.300.040.04)

.05 Integrity also requires a *member* to observe the principles of objectivity and independence and of due care. (ET section 0.300.040.05)

The AICPA is not the only accounting organization with a Code of Professional Conduct.

Numerous other accounting organizations, such as the Institute of Management Accountants (IMA), also have guidance and specific statements on ethics in professional accounting practice.

Accounting students need to be aware of the principles of integrity defined by the professions code of ethics. If students desire to be CPAs, or hold other accounting certifications, there are ramifications for cheating not only in school but in the workplace. If a CPA commits dishonest and/or fraudulent acts, he or she may have the CPA license revoked and, in some cases, never be able to have the license reinstated. As one state statute explains, “The board may revoke, suspend, refuse to renew, administratively penalize, reprimand, restrict or place on



probation the holder of a certificate or license, or refuse to issue any certificate or any license to an applicant” (Idaho Statutes, 54-219, para. 1). This state statute outlines specific acts that would constitute a violation of this provision, which includes cheating on an examination.

Last, the study may help other members of the education community understand academic dishonesty better and develop ways to help students in other disciplines be more honest. Higher education has an obligation to educate individuals. This obligation is undermined by dishonest acts of students. This study adds to the body of knowledge started by other experts in the field. This study may help higher education professionals institute initiatives that could influence students to be more academically honest.

In summary, cheating by business students, including accounting majors, has been found to be greater than by students with other majors (Elias, 2009; McCabe et al., 2006; Premeaux, 2005; Rettinger & Jordan, 2005; Smyth & Davis, 2004). Ethics is very important for accounting faculty members involved in teaching future business professionals. Meeting high ethical standards likely will not start after a person receives a college degree and starts work. Ethical conduct while in school will help a student be prepared to act ethically as a professional. Higher education professionals, specifically those involved in teaching accounting students, need to find ways to increase academic honesty in their students (Lawson, 2004; Naghdipour & Emeagwali, 2013; Premeaux, 2005; Simkin & McLeod, 2010; Smyth & Davis, 2004). As such, the results of this study provide ideas of influencers to accounting faculty, accounting departments, and university administrators that can increase the academic integrity in their students.

The subsequent chapters present the following information: Chapter II: a literature review discussing prior research that is relevant to the current study, Chapter III: the methodology used in this study, including participants, sampling, research design, procedures, instrumentation, data

collection, and data analysis, Chapter IV: the results of the study, and Chapter V: the discussion, overall conclusions, and recommendations based on the data collected in the study.

## **CHAPTER II**

### **REVIEW OF LITERATURE**

As stated, the purpose of this research study was to assess best practice initiatives to reduce cheating from the perspective of accounting faculty members and students majoring in accounting. The research study was performed at three public post-secondary institutions and one private post-secondary institution in the Rocky Mountain Region of the United States. This understanding could help higher education professionals, specifically faculty in higher education accounting departments, implement practices to decrease the levels of academic dishonesty and increase academic honesty and ethical behaviors in their students.

Many studies have been conducted on cheating in educational institutions. These studies have covered students from preschool to graduate school. The studies have primarily focused on how much cheating is occurring, which types of students seem to cheat more, what types of cheating occur most frequently, reasons why students cheat, and, in some cases, methods to combat cheating. However, few studies have focused specifically on accounting majors and specific influencers that may affect students' attitudes and actions to reduce cheating and increase levels of academic honesty.

This literature reviews the following related content areas: (a) academic dishonesty in higher education, (b) academic dishonesty in business colleges, schools, or departments with a focus on accounting education, (c) deterring dishonesty and cheating and encouraging academic honesty, and (d) the impact of specific influencers on academic integrity. The literature has a heavy focus on what McChesney, Covey, and Huling (2012) describe as "lag measures." Lag measures report what has happened. This study sought to produce information about what types of influencers can help deter academic dishonesty with accounting majors and generate ideas for

faculty members to consider as they attempt to curb academic dishonesty and promote academic honesty.

### **Academic Dishonesty in Higher Education**

Numerous studies have analyzed cheating from the perspective of how much cheating is occurring in colleges and universities, which students are more likely to cheat, what types of cheating occur, and why students cheat. Academic dishonesty has been found to be widespread in higher education (Bernardi et al., 2004; Chapman, Davis, Toy, & Wright, 2004; Crittenden et al., 2009; Diekhoff et al., 1996; East, 2010; Haines et al., 1986; Kleiner & Lord, 1999; Lambert et al., 2003; McCabe & Treviño, 1996; McCabe et al., 2001; Novotney, 2011; Simkin & McLeod, 2010). McCabe, Treviño, & Butterfield (2001) noted that “between the 1960s and 1990 most of the research on student cheating focused on the role of individual factors related to cheating behavior” (p. 221). The following section of the literature review discusses the areas of cheating in various student populations of higher education and shows the extent of academic dishonesty reported in recent studies.

Haines, Diekhoff, LaBeff, and Clark (1986) examined student cheating on exams, quizzes, and homework to determine central or primary factors in student cheating behavior. The researchers calculated from the completed surveys that 54.1% of the students admitted to cheating on either exams, quizzes, and/or assignments. The students also reported that a mere 1.3% of them were ever caught cheating. Haines et al. (1986) found that “three primary factors were identified: student immaturity, lack of commitment to academics, and neutralization” (p. 342). As far as demographic characteristics, Haines et al. determined:

cheaters tended to be younger, to be single, to have lower grade-point averages, to be receiving financial support from parents, and to be more involved in extracurricular

activities such as intramural or varsity sports and fraternities and sororities. If they worked at all, it was generally on a part-time basis. (p. 348)

Of the demographic factors found to be related to cheaters, age had the strongest correlation with younger students cheating more and older students less. The next strongest correlations were involvement in intramural sports, lower grade-point averages, and being single. These correlations show the relationship toward the concept of immaturity as a factor in academic dishonesty. Hopefully as students mature during their time in college, academic dishonesty decreases and integrity and the commitment to the educational process increase.

Similar to what Haines et al. (1986) found; Davis, Grover, Becker, and McGregor (1992) performed a study whereby data were collected from over 6,000 students. Based on their findings, Davis et al. (1992) discussed how often cheating occurred as well as factors that influenced cheating to occur, methods students used to cheat, and common punishments when students were either suspected of or caught cheating. The study showed that over 90% of all respondents agreed that it is wrong to cheat. However, the study also showed that over 75% of respondents reported that they had cheated in high school, college, or both (p. 17). Some contributing factors for student cheating included pressure for good grades, student stress, ineffective deterrents, condoning teachers, a belief that everyone cheats, and a diminishing sense of academic integrity (p. 19). Davis et al. also determined from their study, as well as other resources, that “cheaters excuse their cheating” (p. 19). The concept of students excusing their cheating is described as “neutralization” in other studies (Curasi, 2013; Haines et al., 1986; Nonis & Swift, 1998; Pulvers & Diekhoff, 1999; Smith et al., 2004; Sykes & Matza, 1957; Yu et al., 2016). One of the final conclusions was “only when students develop a stronger commitment

to the educational process and when they possess or activate an internalized code of ethics that opposes cheating will the problem have been dealt with effectively” (p. 19).

Diekhoff et al., (1996) performed a study that was a follow-up to the Haines et al. (1986) study. The researchers in the Diekhoff et al. follow-up study surveyed 474 students from the same midsize liberal arts university in the Southwest United States. Haines et al. had surveyed 380 students from that university ten years earlier. The Diekhoff et al. research study was designed to “(1) evaluate the extent of cheating; (2) assess attitudes toward cheating; (3) identify variables that discriminate between cheaters and noncheaters; (4) assess the relative effectiveness of various deterrents to cheating; and (5) examine changes in cheating attitudes and behaviors from 1984 to 1994” (p. 487).

The primary findings were that more students (61.2% in the Diekhoff et al. (1996) study versus 54.1% in the Haines et al. (1986) study) reported cheating on exams, quizzes, and/or assignments, an ~7% increase. Those who reported cheating on exams stayed about the same from 1984 to 1994; however, reported cheating on quizzes and assignments increased by 9.2% and 10.9%, respectively. Second, fewer students rationalized their cheating. Third, 22 variables were found that discriminated between cheaters and non-cheaters. These discriminating variables in Diekhoff et al. were grouped into three clusters: (1) less mature, (2) more actively involved in nonacademic activities, and (3) more likely to neutralize their cheating and to justify cheating as necessary (p. 493). These overall findings were similar to the findings from the study done ten years earlier. These findings included that cheaters tended to be “younger, single, dependent on their parents for financial support, involved in intramurals, and were members of fraternities and sororities” (p. 498) and less likely to be married. Another unfortunate similarity is that only 1.3% of those surveyed were ever caught cheating in the 1984 survey and in the 1994 survey, only

slightly higher at 2.5%. Therefore, most cheating goes either undetected or unaddressed by teachers. One statement made by Diekhoff et al. summarizes many of the overall research findings on not only academic dishonesty but overall dishonesty: it is “widely accepted that student cheating is part of a broader societal problem where people sidestep ethics in favor of the bottom line” (p. 489).

Crown and Spiller (1998) did a literature review of empirical research done over the prior 25 years on collegiate cheating. Some, but not all, of the research findings that Crown and Spiller collected from the studies they reviewed include the following:

- The studies done prior to the 1980’s tended to show that males cheated significantly more than females; however, “the studies published after 1982 did not find significant gender differences” (p. 685). This draws a parallel with the Haines et al. (1986) study that there is no difference in cheating between the genders. More recent studies have mixed results with some studies finding that males cheat more (Allen et al., 1998; Smith et al., 2002; Yu et al., 2016) and others finding that females had higher levels of cheating (Choo & Tan, 2008). Many found no significant difference (McCabe & Bowers, 2009; McCabe et al., 2012; Nowell & Laufer, 1997).
- Age does seem to have some significance in cheating behavior overall. The problem with many of the studies that Crown and Spiller examined is that “in most studies age is restricted to a five-year span” (p. 689). Therefore, the age factor is limited in the conclusions that can be drawn. However, most studies have shown that younger students and those earlier in their college careers (i.e., freshmen) tend to cheat more while older more “mature” students and those later in their college career (i.e., seniors and graduate students) tend to cheat less, which is the finding in some of the more

current studies (Allen et al., 1998; Klein et al., 2007; Nowell & Laufer, 1997; Olafson et al., 2013).

- Grades/GPA/ability were lumped together in the review. The findings were very consistent with more recent studies (Choo & Tan, 2008; Klein et al., 2007; Nowell & Laufer, 1997; Olafson et al., 2013), showing that students with a lower grade in the specific class, lower overall grade-point averages (GPAs), and/or lower academic abilities have higher rates of cheating.
- Crown and Spiller found that studies they reviewed showed that business students cheat more than do students with other majors. This finding is consistent with some of the more recent research (Elias, 2009; Premeaux, 2005; Rettinger & Jordan, 2005; Smyth & Davis, 2004). However, not all studies generate conclusive evidence that business students do cheat more (Klein et al., 2007; Nowell & Laufer, 1997).
- Research showed “students with an external locus of control to be more likely to cheat” (p. 690). Crown and Spiller noted that this is consistent with other research showing that people with an external locus of control, or those who believe that environmental factors rather than their own free agency is what controls them, “are more likely to engage in unethical behaviors” (p. 690).
- Researchers found that students having honor codes or students at institutions with honor systems “reported significantly lower levels of cheating than students without honor codes” (p. 692). Research found that an institution’s culture must have imbedded in it the concept of academic honesty, which is shown by researchers finding that “the perceived behavior of peers was the most important factor in predicting cheating behaviors” (p. 692).



- Crown and Spiller found an interconnected finding with honor codes is that “the likelihood of being reported as well as the severity of the penalty for being caught, when coupled with honor codes” appears to be the best at reducing cheating (p. 692). Researchers found that penalties or the threat of penalties alone do not appear to reduce cheating.
- The final situational factor is surveillance. This finding was strongly correlated with prevalence of cheating. As Crown and Spiller noted, research regarding cheating/dishonesty in academics and in the workplace both support the need for surveillance. When students know they are being watched, they then must weigh the costs and benefits of trying to cheat. Greater surveillance usually has a negative correlation with the amount of cheating.
- One of the most important observations of Crown and Spiller is that all research cannot be compared directly. One must consider the methodologies of the study, the time frame, the number and type of students, and other differences. The authors cited a number of examples, but to provide one example: A study was conducted that found that 30% of students cheated and another study in which 42% of students cheated. However, “further examination shows the former to be a survey of cheating behaviors on exams in one class while the latter refers to similar cheating behaviors throughout subjects’ college career” (p. 694).

The Crown and Spiller (1998) research review is enlightening as it shows some factors that could be considered significant in determining students who may have a higher propensity to cheat. Coupled with more current research, this review helped guide the current research study as to types of data and information to gather.

Pulvers and Diekhoff (1999) studied “the relationship between college classroom environment, academic cheating, and the neutralization (justification) of academic cheating” (p. 487). The students included freshmen, sophomores, juniors, and seniors. The researchers examined classroom environment to see if the perceptions of the classroom environment is different for cheaters versus noncheaters and to determine if the classroom environment is a factor in cheaters’ tendency to neutralize cheating actions. The overall findings were that “students who admitted to having cheated described their classes as less personalized, less task oriented, and less satisfying” (p. 493). Additionally, when Pulvers and Diekhoff examined neutralization, they found that “students displayed significantly more neutralization when they perceived their classes as less personalized, less involving, less cohesive, less satisfying, less task oriented, and less individualized” (p. 494). Overall, classroom environment does appear to play some role in a student’s decision to cheat and in a student’s ability to use neutralization strategies to justify the cheating. They stated that “moving around in the classroom and mixing with students, being friendly and asking students about their welfare, using more group work and praise to reinforce student contributions, encouraging student participation” (p. 496) were basic ideas faculty could implement in the classroom environment to decrease cheating.

Lambert, Hogan, and Barton (2003) endeavored to “broaden the understanding of academic dishonesty in two ways. First, . . . this study asked students about 20 different types of academic dishonesty. Second, this study attempted to reveal which correlates were the strongest predictors of academic dishonesty with multi-variate analysis” (Abstract, para. 3). The researchers found first, the college level of the student had the greatest magnitude with more senior level students having a higher propensity to cheat. This finding contradicts findings in other academic dishonesty studies that found that younger, less mature students, and

underclassmen were found to cheat more (Diekhoff et al., 1996; Haines et al., 1986; McCabe & Treviño, 1997; Nowell & Laufer, 1997; Crown & Spiller, 1998). Second, past cheating in high school was a predictor of future cheating in college. Third, the opinion that it is acceptable to cheat to graduate correlated with actual cheating. This finding agrees with other studies that have found that students with self-enhancement or extrinsic motivations are more dishonest (Feldman, Chao, Farh, & Bardi, 2015). Fourth, cheating to get a better grade was not as strongly correlated as cheating for graduation but was still significant. The last significant correlate was membership in a fraternity or sorority.

Another interesting finding by Lambert et al. (2003) regarded the methods by which cheating data were collected. The researchers found that “if a limited range of behaviors were measured and reported as individual measures, it could be concluded that academic dishonesty is not a common problem” (Discussion, para. 2). The authors found that less than 50% of the students cheated in any one of the 20 cheating behaviors that were included in the survey. However, the authors found that when the cheating data were compiled into a “summed measure of academic dishonesty, the vast majority (83%) of students indicated that they have cheated, and done so more than once” (Discussion, para. 2).

Bernardi et al. (2004) examined the relationship of students’ views on cheating with cognitive moral development. The “study examines the associations among academic honesty/dishonesty (i.e., cheating) and students’ levels of: moral development (measured by the Defining Issues Test [DIT]), moral reasoning (measured by the Attitudes on Honesty Scale) and moral judgment (measured by the Academic Integrity Index)” (p. 398). A total of 220 students, with 70% business majors and 30% psychology majors, from three universities participated in the study. The study found that there is not a strong tie between cheating behavior and moral

development; however, business students tended to score at a lower level on measures of moral development.

The DIT used in this study was developed in the late 1970's and early 1980's. "The DIT is a reasoning test that uses general hypothetical moral dilemmas" (Delaney & Coe, 2008). The DIT was used in the Bernardi et al. (2004) study and also in a study done by West, Ravenscroft, and Shrader (2004).

The West et al. (2004) study was performed after cheating was detected in an introductory managerial accounting course at a private university in the Midwest, which included both business majors and liberal arts majors. A take-home test was given, and the instructor gave explicit instructions defining what was cheating. Among the 64 undergraduate students, numerous occurrences of cheating were detected, so the instructor asked the students to fill out a voluntary survey. The author found that 26% of students committed no cheating. Of those who did cheat, 44% worked with at least one other student, and 30% used a solution found on the Internet. The author concluded that 74% of the students had participated in some type of cheating and that higher levels of cheating were correlated with lower levels of self-reported honesty. However, the "results showed that the DIT score on the Defining Issues Test had no significant relationship to cheating or to honesty about cheating" (p. 181).

Students give many reasons for cheating. Hutton (2006) noted that the most common reasons, according to the Center for Academic Integrity (CAI), are (1) laziness, (2) to achieve higher grades, and (3) pressure to succeed. Hutton also stated that one reason found through research is that "students cheat because the benefit/cost tradeoff favors cheating" (p. 171). Hutton found when student relationships are strong and student-teacher relationships are weak, cheating appears to be more prevalent. When a culture of cheating is in the student populace,

academic dishonesty is more prevalent. Therefore, Hutton recommended that teachers try to build stronger relationships with students and to then encourage a culture of academic honesty.

Kirkland (2009) conducted a study at Midwestern State University. The study involved 1,853 participating students'. Some of the findings were that (a) when students were given the statement "in the real world, successful people do what they have to do to win, even if others consider it cheating", almost half of both undergraduates and graduates strongly agreed or agreed with this statement (p.72); (b) "15% of the undergraduate students and 12% of the graduate students admitted that they did not answer every question on this survey with complete honesty" (p. 175), which has been listed as a limitation in many self-reporting academic honesty studies; (c) both graduate and undergraduate students reported the Internet as the most frequently used resource for unauthorized material (p. 180); (d) over 60% of students reported observing another student cheat; however, only 4% of undergraduate students reported the cheating to the faculty member and only 7.9% of graduate students reported the cheating to the faculty member; (e) males were more unethical than females; and (f) older students, whether undergraduate or graduate, were more ethical than younger students; however, graduate students in general were more ethical than were undergraduate students (pp. 188 & 198). These findings seem to support the idea that a maturity factor is important, which could be partly a factor of age and partly a factor of experience as a higher education student. McCabe (2005) found similar results: that graduate students are more ethical than are undergraduate students when taking exams.

Plagiarism is a form of cheating that occurs among college students. East (2010) addressed the prevalence of plagiarism, the moral underpinnings of why students plagiarize, and thoughts on dealing with instances of plagiarism in a fair and equitable manner. Plagiarism is an ethical concern of universities. Therefore, universities need to take an active role in reducing

chances for plagiarism and establishing impartial and consistent policies in disciplining those who are caught plagiarizing.

Lang (2013) had findings that are similar to the research findings of Pulvers and Diekhoff (1999). Lang extensively reviewed the literature on academic dishonesty and cognitive theory and proposed that a lot of academic dishonesty could be curtailed by focusing on how assignments, quizzes, exams, and an overall class is structured. Lang stated that teachers need to “think not only about how to structure our learning environments in ways that will reduce cheating (and increase learning), but also about how we can best foster a campus culture that promotes academic integrity in our students” (p. 3). Lang proposed that teachers focus on specific areas to help students focus more on learning and have less pressure on grades. The four areas are (1) fostering intrinsic motivation, (2) learning for mastery, (3) lowering stakes, and (4) instilling self-efficacy. Lang gave the following ideas. He encouraged educators to focus on students’ mastery of course material instead of performance. One way to do this is by stating that quizzes and exams are “*opportunities* for students to demonstrate how well they have achieved the learning objectives for the course” (p. 92). Teachers can give students many options to earn points and not place undue emphasis on any one assessment by making it a large portion of the grade, thus limiting high stakes assessments.

Naghdipour and Emeagwali (2013) found similar reasons for academic dishonesty as those stated by Hutton (2006). Of the students they surveyed, the “majority reported that they cheat because others cheat, society is corrupt and even their teachers were cheaters when they were students” (p. 263). Some of the primary ways students cheated were sharing homework with other students, helping others during exams, and copying information directly from the Internet without citing the information (i.e., plagiarism). Naghdipour and Emeagwali found that

students did not feel good about their cheating behavior while they were cheating, but they justified the behavior through such reasoning as the lessons were overly difficult, they had scholarships and in order to maintain the scholarships their grade point averages must stay high, and students sensed that better grades tended to lead to better jobs (p. 263). The authors advised that “the type of questions and tests they [faculty] design as well as the way they assign homework can minimize or maximize students’ propensity to cheat” (p. 265).

Molnar (2015) collected data over a nine-year period from 2005 to 2013 regarding students’ perceptions of academically dishonest actions. Some of these actions included copying others’ electronic files, submitting another student’s paper as one’s own, copying others’ written homework, looking on others’ tests during the test, and purchasing a paper from the Internet. Molnar found that “current students find academic dishonesty less acceptable than their counterparts five or more years ago.... This holds true not only overall, but also when gender and type of institution were controlled” (p. 144). The one significant exception was that students were more accepting of copying others’ written homework as being acceptable.

The articles in this section summarized some of the recent findings regarding academic dishonesty, specifically extent of cheating, demographic student characteristics of cheaters, and reasons for students cheating in higher education. These articles give support for the view that a change needs to be made in how students view cheating. The research stated that honor codes that are emphasized and observed are tied to reduced rates of cheating (Bernardi et al., 2004; McCabe & Treviño, 1993; McCabe et al., 2001; West et al., 2004). Additionally, academic professionals need to be consistent in managing consequences for academic dishonesty and "applying (policy) rules is often the first step, and this would seem to be appropriate if the same treatment is to apply to all, and if decisions are not to be based on personal interests and

emotional reactions” (East, 2010, p. 81). Higher education professionals should strive to find ways to curb academic dishonesty throughout all disciplines in higher education and be consistent in doing so.

### **Academic Dishonesty in Business Schools or Departments with an Accounting Focus**

Cheating by business students has been found to be greater than by students with other majors in higher education (Elias, 2009; McCabe, 1992; McCabe et al., 2006; Premeaux, 2005; Rettinger & Jordan, 2005; Smyth & Davis, 2004). This finding is a concern for educators in business disciplines and for business leaders and professionals. Callahan (2004) addressed this concept when speaking about accountants and auditors:

Auditors are supposed to prevent fraud from occurring, not facilitate it. They are among the most important sentinels within modern capitalism, charged with keeping business numbers honest. Without reliable financial data, investors both large and small cannot have confidence that they are putting their money in a safe or profitable place. Quite apart from the havoc that bogus numbers can wreak on the economic well-being of individual stockholders, at stake is the broader functioning of the economy. Without investor confidence, money flees financial markets and growth slows. (p. 141)

Naghdipour and Emeagwali (2013) pointed out a similar thought, academic dishonesty “could undermine the quality of education, which has become integrated with the world of business and economics..., as well as undermining the vision of grooming honest, accountable and trustworthy professionals in the future” (p. 261). The following literature tends to substantiate the claim that business students, which include accounting students, do have higher rates of academic dishonesty. The literature also shows that business students do not necessarily view cheating as wrong, or at least they have a more lax view of what constitutes academic dishonesty.



Articles were written on what is termed the “cheating culture.” The premise is that a lot of people cheat because they believe everyone else is cheating and that cheating just makes the playing field fair. The cheating culture that appears to permeate higher education, and specifically business schools, has been shown to spread into the business world (Crittenden et al., 2009; Lawson, 2004; Sims, 1993). The concern is that perception can lead to reality. Sims (1993) surveyed 60 students in an MBA business course. All of these students were currently in the work force and, while working, were taking courses to attain an MBA. The students were asked about specific academically dishonest behaviors and any that they had participated in during their undergraduate studies. They were also asked about dishonest work-related actions and any that they had participated in during work. Sims found that there was a positive relationship between academic dishonesty and employee dishonesty.

Roig and Ballew (1994) analyzed students’ and professors’ attitudes concerning cheating and found that students were more tolerant of cheating than professors and that the “students with majors in business (e.g., accounting and finance) areas held the most tolerant attitudes toward cheating” (p. 3). They also stated that these tolerant attitudes may be related to actual high profile unethical practices or cases that occurred in the past few years. Note the Roig and Ballew study was done in the mid-1990s prior to Enron, WorldCom, and other more recent high profile cases, so attitudes may be exacerbated in more recent years, leading to potentially more tolerant attitudes toward cheating.

As noted, business students were found to have higher levels of academic dishonesty than students in other majors. Nowell and Laufer (1997) focused on students majoring in either business or economics. The researchers used a random response (RR) questionnaire at the end of the experiment. Nowell and Laufer found that the RR method of academic dishonesty data

collection may not be accurate as students may not be truthful. This problem appears to be one of the common limitations of self-reporting in research studies. The researchers findings were that “23 percent of the students cheated at some time during the quarter” (p. 5). However, taking out students who received perfect scores on all the quizzes and therefore had no reason to cheat, the researchers found that 27% of the remaining students cheated. Unlike some other studies, Nowell and Laufer did not find a correlation of academic dishonesty with gender, age, or grade point average or that economics or accounting students were more or less likely to cheat than were other students. The researchers did find that a student’s grade in the class (those who were failing the course were more likely to cheat than those who did well), the student’s work schedule (students employed either full-time or part-time were more likely to cheat), and “students majoring in computer information systems (CIS) were more likely to cheat than nonbusiness majors” (p. 8). There was also a difference between seniors and freshman in that seniors “were somewhat less likely to cheat than freshmen” (p. 8). A couple of other findings were that more students cheated in classes with an adjunct teacher and that the larger the class size, the more likely a student was to cheat.

Allen et al. (1998) studied business students’ moralistic attitudes toward cheating by examining the effects of perceived and admitted cheating behavior. The researchers had a sample of 1,063 individuals who were business administration students taking a marketing course. The researchers used a self-administered survey to collect the data and to develop a Perceived Cheating Index (PCI). They found that there was a cheating problem as numerous prior studies had reported and numerous subsequent studies seem to confirm. Of the students surveyed, 36% admitted to cheating; however, when students were asked about behavioral scenarios, a high of 59% to a low of 16% said they would cheat in a certain scenario. However, when students were

asked about what they thought other students would do in the same scenario, a high of 85% to a low of 41% said they thought other students would cheat in the given scenario. “The students who denied cheating and who scored high on the PCI agreed that cheating detrimentally affects the achievement of honest students, depreciates an earned degree, and affects students’ future job performance” (p. 49). Respondents also indicated that if faculty members would be actively involved, monitor students, and enforce a no-tolerance policy, dishonesty could be reduced (p. 49). However, the majority of respondents indicated that they would not report cheating that occurs. Students classified as having high PCI considered cheating a moral issue that needed to be addressed, as where those classified as having low PCI “felt that dishonesty is okay because it reflects the real world” (p. 50). The researchers also found some specific characteristics of cheaters included: “more likely to be single, young, and work part-time, and males and day students cheat more frequently than females and night students” (p. 50). Allen et al. concluded:

Building a tolerance for cheating is unacceptable. As faculty members, staff members, and administrators, we cannot let cheating become so ubiquitous that it is accepted by students as the norm. Business schools will be shirking their responsibility to students and society if they ignore the problem. (p. 51)

This study supports research that cheating is a significant problem, that students conclude that many instances of cheating are occurring among their fellow classmates, and that some students resolve they must cheat in order to keep up.

Smith, Davy, Rosenberg, and Haight (2002) focused on accounting majors. Some of the findings are somewhat typical, based on other research. Smith et al. (2002) found that males reported more cheating activity but that females tended to neutralize their cheating more than males did (p. 60). Age was not found to be a factor; however, the higher a student’s class

standing, the less cheating the student reported (pp. 60-61). Deterrents were found to lower the levels of cheating, and prior cheating was a good indicator of subsequent cheating (p. 61). Smith et al. (2002) gave the following advice to instructors of accounting students as well as other instructors: encourage students to be active in student accounting societies, such as Beta Alpha Psi; students with lower academic performance tend to cheat more, so target lower achieving students for tutoring or other mentoring to try and reduce these students' perceptions that cheating is how they can succeed; and use deterrents to reduce cheating, such as "physically separating students during exams, using different forms of the same test, walking up and down the aisles, admonishing students not to cheat, and adding essay problems to exams" (p. 62).

Lawson (2004) studied whether there is a relationship between students' beliefs concerning ethical behavior in an academic situation and their beliefs concerning ethical behavior in the work world. Lawson found that students who are more likely to cheat in school also believe that the business world is more unethical and that they will probably need to act unethically to advance in the business world. Students who are less likely to cheat feel more upset if others cheat and also view the business world as more ethical and that they will probably not have to act unethically to advance in their careers.

There was a study done by Chapman, Davis, Toy, and Wright (2004) that specifically researched marketing students as compared to other business students. The study found that marketing students did have higher rates of dishonesty in their academic work than other business majors, such as accounting, finance, management, and management information systems. Most important, this study also found that friends can play a significant role in student cheating behaviors. Students were more likely to commit acts of academic dishonesty if their friend(s) was involved as opposed to an acquaintance being involved. They also found, as with

other studies, that students perceived that more cheating was going on by other students than was actually occurring. Therefore, the authors promoted designing a “social norm campaign to help combat academic dishonesty” (p. 246). They also found that instructors can play a significant role in promoting academic integrity by creating positive relationships with students, promoting an environment in the classroom that is cooperative rather than combative, respecting students and expecting respect in return, and clearly defining policies for academic integrity and then enforcing those policies if students are found breaking those policies.

Smyth and Davis (2004) performed their research at a two-year college. They found that “business majors report (at 59%) a statistically higher incidence of cheating than do non-business majors (at 41%)” (p. 66). In addition, “business majors (54%) are statistically more likely to consider cheating to be socially acceptable than are non-business majors (41%)” (p. 66).

Rettinger and Jordan (2005) surveyed students in a dual religious and college curriculum. The authors studied how religion and motivation factor into college cheating. As part of the study, Rettinger and Jordan found that “business students report more cheating than their liberal arts counterparts, even when taking the same course” (p. 107).

McCabe, Butterfield, and Treviño (2006) surveyed 5,000 graduate students, including business students, who were primarily earning MBAs, and nonbusiness students. They found that “cheating among graduate business students is higher than cheating among nonbusiness graduate students” (p. 299) with 56% of business students and 47% of nonbusiness students admitting to cheating. This finding is consistent with undergraduate research. They also found that students’ perceptions that others are cheating has the greatest effect on students choosing to cheat (p. 299). They emphasized that instructors need to do what they can to create a perception and, if possible, a culture of academic integrity within a classroom and the overall degree program. This change

may take extra effort, such as creating multiple exams; however, “although creating multiple versions of exams represents significantly more work for the faculty member, it sends a message that the professor cares about integrity in the classroom . . . , thus contributing to a perception that students are not cheating” (p. 301).

A related concept is if business professionals, academic faculty, and students share similar views on ethics and other professional situations. Hall and Berardino (2006) developed a survey that was administered to business school faculty, human resource managers, undergraduate business students, and MBA students. They found that all four groups had similar beliefs about the ethical situations of (1) if a student looks at another student’s paper, the professor can give the student an “F” and (2) if a professor discovers a student has committed plagiarism, the student should be reported to the school’s disciplinary committee/council. This study appears to suggest that students understand that consequences will happen and expect them to happen if a student is caught cheating.

Klein, Levenburg, McKendall, and Mothersell (2007) created a study meant to answer five questions: (1) How do business school students define cheating? (2) Do business students’ perceptions about the behaviors that constitute cheating match the perceptions of students in other professional schools? (3) How much do business students cheat? (4) Do business school students cheat more than students in other professional disciplines? (5) Beyond major, are there other significant ways in which cheaters differ from non-cheaters? (p. 198). The critical findings were that “no significant differences were found in overall reported cheating rates between business students and other students” (p. 201); yet business students’ definitions of cheating were more lax than those of other students.

Other studies have found that business students' perceptions of cheating actions and overall cheating are more lax than nonbusiness students (Elias, 2009; Premeaux, 2005; Rettinger & Jordan, 2005; Smyth & Davis, 2004). In a related study comparing not only types of students but also types of institutions, Premeaux (2005) studied all the Tier 1 and Tier 2 Association to Advance Collegiate Schools of Business (AACSB) accredited business schools in the United States. The study found that cheating occurs more at Tier 2 schools and that "Tier 2 students who are Business Administration majors, . . . are more likely to cheat" (p. 407).

A current trend in many higher education accounting programs is to teach a course on ethics. However, does teaching a course on ethics make a difference? McCabe and Treviño (1993) emphasized that only teaching a course on ethics will not change levels of dishonesty; it must be incorporated with other practices to build a culture of honesty. To specifically explore the question of *Does Ethics Instruction Make a Difference?* Delaney and Coe (2008) performed a study. Delaney and Coe used a modified version of the Defining Issues Test (DIT) discussed earlier, which they described as the Accounting Moral Reasoning Test (AMRT). This instrument was used to determine a student's moral reasoning ability (MRA). In this study, ethics instruction was given over a three-week period during regular class time. "The ethics instruction used a combination of lecture and active methods such as case study, small group discussion, small group project, and role-playing" (p. 243). Within the curriculum, students had required readings, lectures, and discussions about virtue, utilitarianism, and other moral theory along with cases in which students, both individually and in groups, resolved dilemmas. Much of the material used in the ethics instruction came from Jennings (2004), which "offers a suggested list and discussion of the key works all accounting students should study as part of a degree program in order to inculcate in them a strong sense of ethics as a professional" (p. 7). Delaney and Coe

found that students who received the ethics instruction scored higher on MRA based on the AMRT than did the students who did not receive the instruction; however, the increase was not as high as what might be expected. They concluded that this finding could be due to the short three-week duration of the ethics intervention. They also found that females scored higher on MRA based on AMRT scores than the males did and that increases in the AMRT scores were significant for upper level students (juniors and seniors) with no increase occurring for lower level students (sophomores). Delaney and Coe concluded that “it appears that the effectiveness of ethics instruction may be a function of student level” (p. 246). Delaney and Coe supported ethics instruction in the accounting curriculum and “as accounting educators continue to refine methods and techniques for teaching ethics, our students will benefit. In turn, ethics instruction will benefit the firms that employ our students” (p.248).

Business ethics instruction is supported by other researchers (Bloodgood et al., 2008; Caldwell, 2010); however, even if courses in business ethics are taught, probably not all students will increase in ethical behaviors (Bloodgood, Turnley, & Mudrack, 2010). The courses need to be structured properly to focus on doing what is ethically correct, based on rules and principles or what is termed “virtue ethics”, not on a misguided concept of social justice (Jennings, 2004).

Crittenden, Hanna, and Peterson (2009) surveyed 6,226 undergraduate business students. The students were from 115 four-year universities located in 36 different countries. The researchers selected a random sample of 1,000 students from the 6,226 respondents. The study concluded that cheating is very prevalent across countries and appears to be commonplace among the majority of business students.

In another article related to McCabe et al. (2006), Elias (2009) discussed the views of business students regarding cheating both inside and outside the classroom. Elias examined the



correlation between business students' "anti-intellectualism" and/or academic "self-efficacy" and cheating behaviors. "Anti-intellectualism refers to a student's negative view of the value and importance of intellectual pursuits and critical thinking. Academic self-efficacy refers to a student's belief in one's ability to accomplish an academic task" (p. 199). Elias found that students viewed cheating out of class as more unethical than in-class cheating (p. 204). Elias also found that male students tended to view cheating inside the class as less dishonest than did females and that cheaters tended to be younger, traditional students in their freshman or sophomore years. Business students viewed cheating in and out of the classroom as less unethical than did students with other majors; however, accounting and marketing majors viewed cheating in and out of the classroom as more unethical than did other business majors, such as economics majors (p. 207). Elias showed, as was hypothesized, that higher levels of anti-intellectualism and/or lower levels of self-efficacy led to a greater belief that cheating was acceptable.

Christensen, Cote, and Latham (2010) did a study of students utilizing information technology (IT). The key finding is that "almost all of the students in this study not only accessed unauthorized solutions on the Internet but also lied about accessing those materials" (pp. 256-257). The biggest factor in this study of why almost all the students were academically dishonest is the influence of peers (p. 257), which is noted as a significant factor in cheating behavior by other researchers (Crown & Spiller, 1998; Curasi, 2013; Mattu & Weiner, 2012; McCabe et al., 2012; McCabe & Treviño, 1993; McCabe & Treviño, 1996; McCabe & Treviño, 1997; McCabe et al., 2001; Naghdipour & Emeagwali, 2013).

Research tends to support the idea that business students commit acts of academic dishonesty more often than non-business students although not all studies found this to be the

case. Accounting students do not fare much better, even though accounting students have been shown to be somewhat more ethical than the overall group of business majors. The authors expressed concern that business students are future business professionals and, as such, need to be honest. The findings in the research, as well as recent cases of fraud and other dishonest acts in business, should cause faculty who teach business and accounting courses to have concern and recognize the need to increase current student awareness about the importance of honesty. Research indicated that business and accounting students' attitudes on cheating and plagiarism need to change. The students need to understand the importance of ethical decision making and how their actions could affect not only themselves, but many others. Higher education professionals, specifically those involved in teaching business and accounting students, need to find ways to increase academic honesty in their students.

### **Detering Dishonesty and Cheating and Encouraging Academic Honesty**

Studies have been conducted to determine how institutions might combat academic dishonesty. Educators are interested in what students can do and what students know. When students are dishonest, educators are not able to assess accurately what students know and can do. The following studies analyze some reasons for academic dishonesty but primarily focus on ways to deter academic dishonesty. The first section will discuss studies performed by Donald McCabe and fellow researchers. The second section will discuss studies done by other researchers. One study focused on young children; however, the concepts in the article may be applicable to older students as well.

### **Research by Donald McCabe and Fellow Researchers**

Donald L. McCabe is one of the founding members of the International Center for Academic Integrity (ICAI) and was the first president of the ICAI. Since the early 1990s, he has

conducted extensive research on college student cheating. In some of his research, he and fellow researchers have compared academic dishonesty at colleges that have honor codes and colleges that do not have honor codes. The purpose of the studies was to determine if honor codes make a difference in overall rates of academic dishonesty and in students' perceptions of academic honesty. The studies also analyzed "the degree to which academic integrity policies are understood and accepted, the enforcement of these policies and the perceived behavior of peers" (McCabe & Treviño, 1993, p. 524).

Two of the studies are McCabe and Trevino (1993) and McCabe, Trevino, and Butterfield (1999). The 1993 and 1999 studies included over 6,000 and over 4,000 students, respectively, in samples from 31 United States colleges and universities. In the 1993 study, almost 90% of the respondents were seniors. McCabe and Treviño (1993) developed five hypotheses. First, "honor codes are associated with decreased academic dishonesty" (p. 525). Second, "academic dishonesty will be inversely related to understanding and acceptance of academic integrity policies" (p. 526). Third, "academic dishonesty will be inversely related to the perceived certainty of being reported by a peer" (p. 527). Fourth, "academic dishonesty will be inversely related to the perceived severity of penalties" (p. 527). Fifth, "academic dishonesty will be positively related to perceptions of peers' academic dishonesty" (p. 528).

One finding was that self-reported cheating was higher at institutions that did not have an honor code. Other findings were that "academic dishonesty was significantly correlated with (1) the understanding/acceptance of academic integrity policies...; (2) the perceived certainty of being reported...; (3) the perceived severity of penalties...; and (4) the perceptions of peers' behavior..." (McCabe & Treviño, 1993, p. 531). This study showed that honor codes, education on policies, punishment, and positive peer pressure can promote academic honesty.

McCabe and Treviño (1993) highlighted that one important caveat to having an honor code is that it must be communicated and be part of the campus culture in order to be effective. The researchers found that “one of the lowest rates of self-reported academic dishonesty was found at a non-honor code institution” (p. 534). However, this non-honor code institution focused heavily on academic honesty. “This institution is strongly committed to the concept of academic honor, making it a major topic of discussion in its student handbook and at orientation sessions for incoming students” (p. 534). Therefore, all the students are educated on academic honesty, and it is engrained in the culture even though there is not a formal honor code. On the other hand, the researchers found one honor code institution had one of the higher levels of academic dishonesty. This institution had a long-standing honor code; however, over the years, the school had gone away from emphasizing the honor code. As such, “students reported a low level of understanding and acceptance of the school’s policy” (p. 534). The conclusion that can be drawn is that just having an honor code does not lead to lower levels of academic dishonesty. The key element is the culture that an honor code can help develop or creating an environment in which academic honesty is accepted as the standard.

The McCabe et al. (1999) study also looked at institutions with honor codes versus those without honor codes. The researchers found that responses from honor code students regarding academic integrity were profoundly different than those from students without an honor code. In general, it appeared that the culture of the honor code institutions seemed to affect students to be more academically honest, even though the researchers did note that not all students viewed their honor code positively. The researchers stated that “although honor code students feel the same pressures from the larger society as their non-code colleagues, they are significantly less likely to use such pressures to rationalize or justify their own cheating” (p. 230).

McCabe and Treviño followed up their 1993 study in 1996 and in 1997. In 1996 McCabe and Treviño reviewed some of the recent findings regarding cheating in college. They compared a study done by Bill Bowers in 1964, a study done by McCabe and Treviño in 1993, and a study done by McCabe and Bowers in 1993, which was reprinted in 2009. The reprinted version of the McCabe and Bowers study is referenced here but the data comes from surveys done in 1993. The McCabe and Bowers study surveyed almost 1,800 students from nine different universities, all of which were part of the original Bowers study in 1964. McCabe and Treviño (1996) found that even though there were 30 years between the studies, the main findings/conclusions from the studies were “highly consistent” (p. 30). Bowers in 1964 noted that “the most important determinant of changes in cheating between high school and college is the level of disapproval of cheating among a student’s college peers” (as cited in McCabe & Treviño, 1996, p. 30). McCabe and Treviño concluded that institutions need to find ways to build an “environment where academic dishonesty is socially unacceptable” (p.30).

McCabe and Bowers (2009) found similar levels of cheating on tests as found in the Bowers study of 1964, though the level of cheating did increase (70% compared to 63%, respectively). However, “the most serious test cheating behaviors—copying from another student during a test or examination, helping another to cheat, and using crib notes—have all increased substantially” (McCabe & Treviño, 1996, p. 31). McCabe and Treviño stated, “one of the most significant changes revealed by McCabe and Bowers was a dramatic increase in student collaboration on such assignments where the professor had explicitly asked for individual work” (p. 31). They noted that the percentage went from 11%, as noted in the Bowers 1964 report, to 49% in 1993. The authors claimed that collaboration was being encouraged as a learning/teaching tool and, therefore, some students may have been getting confused between

assignments that allowed collaboration and those that did not. In the survey most students did not view collaboration as a serious cheating issue and almost 25% of those surveyed did not consider collaboration was cheating at all (p. 31). Additionally, many employers are perceived as wanting employees who have good teamwork skills. As Cole and McCabe (1996) stated,

Students have learned that the job market increasingly expects and rewards teamwork in many fields. Employers express clear dissatisfaction when college graduates arrive with little or no experience as effective team members and many students see this as a justification to work together even when a professor asks for individual work. (p. 70)

Cole and McCabe (1996) go on to say that faculty members and students “need to recognize that there is a legitimate place in the academy for individual accomplishment and assessment as well as for collaborative learning” (p. 71).

Gender used to be viewed as a differentiator in that a much higher percentage of males admitted to cheating (59% females compared to 69% males) in the Bowers (1964) study. However, McCabe and Bowers (2009) found that 70% of both men and women reported cheating; however, they found that “men in our sample who cheat on tests do so significantly more often than the women who cheat” (p. 578). Overall, McCabe and Treviño (1996) found that (a) instances of academic dishonesty, especially more egregious ones, were on the rise; (b) female cheating had increased, perhaps due to more pressure to achieve; and (c) if an institution’s personnel wanted to have more students with academic integrity, the personnel needed to do the following: (1) educate their students on strong integrity policies, (2) build a robust campus community, (3) encourage faculty to be actively engaged with the courses taught and the students, and (4) build in deterrents, such as not using the same exams regularly.

McCabe and Treviño (1997) and McCabe & Bowers (2009) examined both individual factors, such as age, GPA, and gender, and contextual factors, such as peer views of cheating and alleged severity of penalties. They found that peer disapproval of cheating was the strongest influencing factor to increase academic honesty among all the factors researched. Additional significant factors were that males showed higher rates of academic dishonesty, membership in a fraternity or sorority had higher incidences of academic dishonesty, and when students supposed that their peers were cheating, there were higher levels of academic dishonesty. Other individual and contextual factors had some correlation to academic dishonesty; however, the levels were not as significant.

McCabe et al. (2001) did a follow-up report to the work performed in the early and mid-1990's. The researchers reviewed a decade of research. They reiterated that cheating is prevalent in higher education and that "contextual factors, such as students' perceptions of peers' behavior, are the most powerful influence" (p. 219). This same finding (that peer behavior is one of the most powerful influences on students' academic honesty) is supported by more recent writings and research (Mattu & Weiner, 2012; McCabe et al., 2006; McCabe et al., 2012; McCabe & Pavela, 2005). They also found that academic integrity programs, including honor codes, can influence students' academic integrity. Their overall conclusion was "that cheating can be most effectively addressed at the institutional level" (p. 228).

Universities need to develop ethical cultures. Additional findings from McCabe et al. (2001) are that individual instructors can implement strategies in their courses to reduce cheating behavior. Strategies from a student perspective included the following:

- (1) Clearly communicate expectations (e.g., regarding behavior that constitutes appropriate conduct and behavior that constitutes cheating).

- (2) Establish and communicate cheating policies and encourage students to abide by those policies.
- (3) Consider establishing a classroom honor code—one that places appropriate responsibilities and obligations on the student, not just the faculty member, to prevent cheating.
- (4) Be supportive when dealing with students; this promotes respect, which students will reciprocate by not cheating.
- (5) Be fair—develop fair and consistent grading policies and procedures; punish transgressions in a strict but fair and timely manner.
- (6) When possible, reduce pressure by not grading students on a strict curve.
- (7) Focus on learning, not on grades.
- (8) Encourage the development of good character.
- (9) Provide deterrents to cheating (e.g., harsh penalties).
- (10) Remove opportunities to cheat (e.g., monitor tests, be sure there is ample space between test takers).
- (11) Assign interesting and nontrivial assignments.
- (12) Replace incompetent or apathetic teaching assistants. (p. 229)

Strategies from a teacher perspective included the following:

- (1) Affirm the importance of academic integrity.
- (2) Foster a love of learning.
- (3) Treat students as an end in themselves.
- (4) Foster an environment of trust in the classroom.
- (5) Encourage student responsibility for academic integrity.



- (6) Clarify expectations for students.
- (7) Develop fair and relevant forms of assessment.
- (8) Reduce opportunities to engage in academic dishonesty.
- (9) Challenge academic dishonesty when it occurs.
- (10) Help define and support campus-wide academic integrity standards. (p. 230)

Many of these ideas are general in nature, requiring faculty members to do additional research for ideas to implement these strategies.

McCabe and Pavela (2004) listed ten principles of academic integrity for faculty designed to guide faculty in engaging in and promoting academic integrity on college campuses. The principles were developed based on research, which included surveying faculty and students at numerous universities. The universities varied based on whether or not the university had an honor code, a modified honor code, or no honor code. These principles emphasized the following main points: faculty need to promote academic integrity, support students in adhering to academic integrity, uphold principles of academic integrity through punishing students when they are caught breaking the rules, and modeling academic integrity in their own practices, to name a few.

In the ten (updated) principles of academic integrity, the authors stated that “the first job of a teacher is to demonstrate that learning can be a captivating and joyful experience” (p. 12). A teacher needs to guide students and mentor them in becoming learners, and an integral part of learning is having integrity. Students need to take responsibility for academic integrity, not only for themselves, but also in their classrooms and campuses. Teachers can help students develop these attitudes by making sure that there are not “ambiguous policies, undefined or unrealistic standards for collaboration, inadequate classroom management, or poor examination security”

(p. 14). Additionally, faculty need to enforce academic integrity policies by holding students responsible for breaking the policies and by applying consequences that have an educational emphasis.

Donald McCabe and Daniel Katz collaborated in 2009 to write a short article on ways to curb cheating in higher education. They noted that students appear to have a “new moral flexibility” when it comes to cheating. Research conducted by McCabe and others showed that students comment that they cheat because they see others cheating or perceive that others are cheating. Therefore, students say they would be honest, but because others are cheating, they determine they need to cheat to keep up. The authors stated that institutions must get students involved in creating cultures in which cheating is not acceptable and academic integrity is desired. They also stated that if the institution will not work to promote a culture of academic integrity, then individual teachers can do so within their classrooms. The teachers can do this by implementing the following:

- (1) encouraging students to accept responsibility for academic integrity; (2) responding to academic integrity if it occurs in their classroom; (3) clarifying expectations for students to help avoid unintentional instances of academic dishonesty; (4) reducing student opportunities to engage in academic dishonesty, especially involving the Internet; (5) helping to establish academic integrity as a core value in their classroom. (pp. 17-18)

They noted that based on their research students appear to want to have academic integrity and educators need to help this happen in the classroom and at the campus level.

McCabe et al. (2012) authored a book that includes a compilation of studies done by many researchers, including themselves. The authors determined that overall cheating had increased, but may not have increased dramatically over the past 40-50 years. They found that

one of the most significant changes appeared to be in the perception of what constitutes academic dishonesty. McCabe et al. (2012) reserved one chapter for discussing “Academic Integrity in Business and Professional Schools” (Chapter 8) because business students have been found to be more academically dishonest. In Chapter 9 they also shared ideas on how to help students be more academically honest with a focus on building a culture of integrity, such as making sure students understand the honor policy, faculty being role models, developing rituals that promote integrity, and speaking often about ethics and integrity.

### **Studies by Other Researchers**

At the time that Donald McCabe was beginning his work in studying academic dishonesty, Alschuler and Blimling (1995) wrote an article that supported the premises proposed by Donald McCabe. They discussed cheating as being at levels that could be described as an epidemic. They gave ideas that could help curb the epidemic of cheating, which focused on an institution taking collaborative action to change or transform the system to one of high ethical values. Alschuler and Blimling shared five ideas that could create “a campus culture that truly values academic integrity...” (p. 124). These ideas were having: (1) Vocal support and an overall tone set from the Chief Executive Officer, (2) An academic integrity code, (3) Faculty members who act together to change norms and break the silence that cultivates dishonesty, (4) Norms of support for faculty with backing from university legal counsel, and (5) Students involved in setting codes, standards, and punishments for violations of academic honesty codes (p. 124). The authors presumed that if these ideas were implemented on campuses, the culture would change to have more academic honesty. However, as research was done over the past two decades, the levels of academic honesty do not appear to have risen and cheating continues to become more prevalent.

Cizek (2003) focused on what defined cheating, the ways students cheated, responding to cheating, and how cheating might be deterred. The author provided various lists including “Points to Remember When Responding to Cheating” (p. 80). A few of these items included taking the matter seriously every time, gathering and maintaining evidence, maintaining confidentiality, and making the punishment fit the crime (p. 80). Lists were also shared on preventing cheating, including plagiarism. One conclusion of Cizek was that “the most effective approach may be our ability to perceive and reject fundamentally unsound approaches to dealing with cheating and our willingness to actually commit ourselves to classroom environments where integrity rules” (p. 108).

Callahan (2004) described what he termed the “cheating culture”. He referenced patterns of dishonesty and cheating in academia; however, he also discussed cheating on a much broader scale in society through stories and examples. He stated:

These stories are not isolated instances. They are part of a pattern of widespread cheating throughout U.S. society. By its nature cheating is intended to go undetected, and trends in unethical behavior are hard to document. Still, available evidence strongly suggests that Americans are not only cheating more in many areas but are also feeling less guilt about it. When ‘everybody does it,’ or imagines that everybody does it, a cheating culture has emerged. (pp. 12-13)

Callahan gave primary reasons why society has developed a cheating culture: (1) new pressures, (2) bigger rewards for winning, (3) temptation, and (4) trickle-down corruption (pp. 20-24). The primary factor he noted is that everyone thinks everyone else is cheating, thus “personal qualms about cheating easily get buried because ‘everybody’s doing it’” (p. 42).

Callahan (2004) emphasized what must be done to stem the tide of a cheating culture.

Callahan noted prevailing forces that have led to the rise in the cheating culture:

Still, there has been a clear shift in our dominant values over recent decades,.... I see three changes as especially connected to the rise in cheating: individualism has morphed into a harder-edged selfishness; money has become more important to people; and harsher norms of competition have spread, while compassion for the weaker or less capable has waned. (p. 107)

He shared that he understands that there is pressure to achieve at all costs, including cheating. Society has created this pressure, and it will take communities to turn this trend around. “Parents and students understand that the stakes of education have shot up in recent years. A growing obsession with college admission has been paralleled by increased cheating among high school students across the United States” (p. 203). He gave advice to parents on what they could do to help their children/students resist the pressure to cheat:

A special word to parents. If you’re a parent, don’t wait for the educational system to adopt character-education programs or serious honor codes. Make a commitment to integrity in your own home. Talk to your kids about why they should play by the rule—and honestly challenge rules they think are wrong. Teach them how to work through the tough ethical dilemmas in life. Create an environment where money and status do not loom in your children’s lives as the greatest good. (pp. 294-295)

Jennings (2004) gave a negative view of accounting education ethics when she posed the question of why large financial malfeasance went on for so long without anyone raising an objection. She stated that “the answer is that those who were engaged in the creative and, often, not-so-creative but fraudulent accounting were trained in schools of business in which the

curriculum (including ethics courses) is misguided in terms of training ethical leaders” (p. 12).

She stated that business ethics has gone the way of social responsibility:

Many of these officers and, to a large extent, the cultures of these companies, felt comfortable with deception in the name of shareholder value because they were accomplishing what they were trained to do in business school and they had ethics derived from their dedication to philanthropy, diversity, and environmentalism.... The split, in their minds, between right and wrong did not lie along the lines of virtue ethics, but, rather, along the lines of social responsibility. (pp. 14-15)

Jennings noted that most business ethics instruction at the time emphasized a social responsibility model, a code model, or a stakeholder/normative model. As such, these students and future business leaders were taught that it was important to focus on helping society, the environment, or some form of philanthropy over focusing on doing what was best and most ethical for the business, not only in the short term but also the long term. These concepts were primarily carried into the business curriculum from other campus teachings that focused on moral relativism and other such theories that allowed students to justify or rationalize any decision as long as the student could give a reason for making the decision, even if the overarching decision was unethical from a business perspective. Jennings emphasized that business ethics needs to focus on virtue ethics along with how an individual can deal with business pressures.

Jennings (2004) shared some advice on what accounting teachers and departments can do to help educate higher education students about ethics. She recommended five specific cases and six influential writings that would help students gain a greater understanding of the importance of ethics. The five cases outlined the failures of five companies, which “are used as examples of

corporate failures in which individuals failed to act in a morally correct manner” (p. 9). Students would hopefully learn from these actual cases that they must already be prepared to act ethically before the pressure is on them to act unethically. The six writings span the decades and “should be required components of an ethics curriculum for business and accounting students” (p. 18). This method of teaching focuses almost exclusively on virtue ethics and takes relativism out of the curriculum.

Smith, Davy, and Easterling (2004) performed research “to examine cheating behavior among marketing and management majors” (p. 65). They used eight measures that applied to a cheating model. The eight measures included demographic data, academic performance, perceived academic performance, in-class cheating deterrents, alienation, neutralization, prior cheating, and likelihood of cheating. They found “that for marketing/management majors In-Class Deterrents do little or nothing to give students pause in engaging in cheating or justifying the behavior” (p. 77). The Smith et al. (2004) study also found:

Alienation is a key antecedent to prior cheating, future cheating, and justifications for cheating. These results may argue for early efforts to solicit student participation in activities such as student AMA and SAM chapters, as well as other student and professional organizations. (p. 77)

Student involvement on campus and with other students could play a factor in deterring dishonesty.

Carter (2008) prepared a dissertation that focused on faculty beliefs about academic dishonesty, student and faculty levels of understanding regarding academic dishonesty, and what actions faculty took regarding cheating. Carter found that many incidents of academic integrity violations were not reported, that teachers took care of academic integrity violations on their

own, and that “faculty commonly reported that students who were observed cheating, in most cases, received a failing grade anyway, so there was no need to report the violation” (p. 127).

The author provided a list of the most common actions that were taken by faculty members if the faculty members were certain the student cheated on an assignment or exam: giving the student an “F” on the assignment or exam; following the institution’s Academic Integrity policy; pursuing action through the Academic Integrity system; reporting to the Chair, Director, or Dean; and reprimanding or warning the student (p. 129). These policies can be effective; however, faculty must be convinced of cheating before doing anything. Studies have shown that many incidents of academic integrity violations go undetected or unreported and therefore unpunished (Burke, Polimeni, & Slavin, 2007; Happel & Jennings, 2008; Kirkland, 2009; LaBeff, Clark, Haines, & Diekhoff, 1990; McCabe et al., 2012; Vandehey, Diekhoff, & LaBeff, 2007).

Carter (2008) also reported that faculty members were employing various measures to deter academic integrity violations from occurring. The most common were: providing information on the course outline or the specific assignment sheet, making changes to exams regularly, discussing academic integrity with students in the classroom, closely monitoring students while they were taking exams, and reminding students periodically about the institution’s academic integrity policy.

Research has shown that the structure of courses, the structure and purpose of assessments, and focusing on learning and helping rather than on the final grade and competition can reduce academic dishonesty (Gallant, 2008; Pulfrey & Butera, 2013; Stiggins, 2002). Gallant (2008) supported what is termed “The Teaching and Learning Strategy” for higher education instruction. This method is all inclusive on a campus with a focus on “a new organizational



strategy for addressing academic misconduct, one that transfers the focus from student conduct and character to teaching and learning” (p. 87). The emphasis of this strategy focuses on whether or not students are learning rather than whether or not students are cheating. This strategy does not mean that faculty turn a blind eye to cheating, but the focus should be on developing a curriculum that deters cheating based on structure and form. Gallant emphasized that institutions should focus on “pedagogy, curriculum, methods, and institutional structures that will facilitate learning,” rather than spending too much time on punishment and deterrents (p. 89).

The strategy that Gallant (2008) proposed must have institutional support; focus on student learning by implementing changes to assignments and assessments rather than trying to control student conduct; ensure that students have clear and salient instructions and guidelines; provide assessments that are relevant to students’ learning and that help build the students’ knowledge and skills with the focus on “assessment for learning” rather than on assessment of learning; and have policies of review that determine, when students do commit acts that are considered academically dishonest, whether the act was unethical or if the offence was committed due to a failure to teach or a failure to learn. Finally, Gallant summarized the teaching and learning strategy theory by stating that “educators who clearly and consistently articulate the accepted ways of doing academic work in a particular discipline as well as struggle with accepting and incorporating new ways will keep learning, rather than cheating, at the forefront” (p. 100). These were some ideas that could help curb academic dishonesty and help students focus on learning.

“How do individual students and institutions as a whole deal with the negative signal of academic dishonesty?” (Happel & Jennings, 2008, p. 186). Happel and Jennings (2008) noted that cheating had economic effects on employers, current and future non-cheating students, and

the university as a whole due to decreased academic reputation. They found, based on other studies, about 75% of students cheat (p. 187). Happel and Jennings included some ideas to deter cheating: using multiple forms of exams, having many proctors during exams, giving ample administrative time to prosecute offenders, and strongly promoting an attitude of academic honesty on campus (p. 192).

Another important factor in building a culture of academic honesty is gaining an understanding of both faculty and student perceptions of what is “right” and what is “wrong.” Braun and Stallworth (2009) examined what was perceived as an “expectations gap” between accounting faculty and accounting students. The authors stated that “there may exist a difference between (1) what the student believes his or her responsibilities are with regard to academic honesty and (2) what instructors believe students’ responsibilities are with respect to academic honesty” (p. 128). The authors defined this difference as the “academic honesty expectation gap” relative to faculty and students. The study analyzed specific academic scenarios that ranged from obviously dishonest acts to obviously honest acts. A number of scenarios were in what the authors termed as “the gray area.”

Braun and Stallworth (2009) found that there was an academic honesty expectations gap; however, faculty and students conveyed the impression that they perceived this gap and understood it was there. Faculty viewed certain actions as more dishonest than students perceived them. In addition, faculty perceived that the penalties for dishonest acts should be harsher than students did. This gap between faculty and students can be a starting point to have discussions about academic honesty and what is defined as a dishonest act, as well as determining appropriate ramifications for those who commit dishonest acts.

Davis et al. (2009) provided factors regarding the importance of academic honesty. One involved other “calls to action” that are pressed upon higher education.

Other important calls to action in education, such as for access, affordability, and diversity, can fall flat in the meaning they have to our schools, colleges, and universities if, once the students get there, integrity is lacking and cheating is rampant. We should not desire simply for students to get a diploma or degree, but for them to get a diploma or degree that means what it says it means. (p. x)

They shared numerous ideas on how one might deter cheating. Their most preferred deterrents for test taking included:

1. Teachers should use different forms of a test.
2. Teachers should inform the students why they should not cheat.
3. Teachers should arrange the classroom seating so that the students are separated by an empty desk during tests.
4. Teachers should walk up and down the rows during a test.
5. Teachers should constantly watch the students during a test. (p. 118)

This list is similar to ideas given by other authors. Davis et al. stated that an important point to remember is that “academic dishonesty is not a victimless crime where no one is hurt – grade point and class standing are important criteria that admissions committees use to determine college admissions and the distribution of scholarships” (p. 87). Ultimately, the authors advocated building cultures of integrity and encouraged institutions to build “brand equity” around academic integrity. This could be done by rewarding teachers for developing moral reasoning abilities and behaviors in their students, having institutional honor codes, and articulating expectations of academic honesty to both faculty and students.

Twomey, White, and Sagendorf (2009) compiled articles that discussed ways that educators could try to eliminate academic dishonesty through education rather than through “policing.” The book focused on ways that professionals could use pedagogy to encourage academic honesty and deter academic dishonesty “to create an environment that promotes honesty, trust, and respect.” (p. 2). The text was divided into four sections that covered topics from what academic integrity was to strategies that professors and teaching assistants (TAs) could use to encourage academic integrity in students. The text gave some quality ideas for instructors such as (a) doing a better job of explaining and showing what academic honesty is and is not, (b) making students feel safe in making mistakes and taking risks, (c) having and emphasizing an honor code, and (d) taking primary responsibility for developing courses, assignments, and exams that deter academic dishonesty and promote academic honesty. The overarching concept was that all educators should know they have a responsibility to create a “community of honesty, trust, fairness, respect, and responsibility: to be excellent teachers, mentors, and colleagues who care more about learning than policing” (p. 65).

Bloodgood, Turnley, and Mudrack (2010) analyzed students who took an ethics course. They studied the students’ levels of Machiavellianism and the students’ academic honesty. They found that students high in Machiavellianism did not increase their honesty after taking a business ethics course; however, those low in Machiavellianism did increase their honesty after taking a business ethics course. The authors’ noted that some students appeared to be more focused on getting a good grade rather than on learning. Additionally, some students seemed to only worry about themselves and not how their cheating could negatively affect their peers and society.

Similar to Happel and Jennings (2008), Simkin and McLeod (2010) shared the concern that schools' reputations are tarnished by former students who cheat in the work world. Even with these concerns, some professors seemed to be reluctant to hold students responsible for dishonest acts (Burke et al., 2007; Happel & Jennings, 2008; Simkin & McLeod, 2010). They also found that in-class deterrents did little to change cheating levels and wondered if the policies regarding dishonesty and penalties for dishonesty were not tough enough at the institution they researched. Deterrence starts with understanding why students are dishonest. Simkin and McLeod found that "getting ahead" was a major factor for academic dishonesty. They also found "only one statistically significant deterrent: 'moral beliefs'" (p. 447) and that having a "moral anchor," such as a respected professor, helped students not cheat.

A problem with deterring academic dishonesty is that it must be viewed as a problem in order for time and effort to be allocated to solving the problem. Brown, Weible, and Olmosk (2010) surveyed 177 business school deans about their perceptions of student academic dishonesty. They found that "only about 5 percent of deans believed dishonesty was a serious problem in their school" (p. 300). They also found that over 75% of deans believed that fewer than 40% of their students were involved in dishonest acts, with almost 45% believing the rate was fewer than 20% of their students were involved in dishonest acts. These figures contradicted much of the literature that reported well over 50% of students admitted to some form of dishonesty, with business students having higher rates than other majors.

Piazza, Bering, and Ingram (2011) analyzed children between the ages of 5-6 and 8-9 years of age. The children were given a task and were either (a) told that an invisible person was watching them, (b) watched by an actual person, or (c) left unsupervised. The researchers found that children who were told an invisible person was watching them, and stated that they believed

in the invisible person, cheated equally as those children who actually had a person watching them. The children who were left unsupervised and were not told there was an invisible person watching, cheated more often than the other two groups. This study was done on children; however, there may be application for college students, as the authors noted there have been studies done on adults that elicited similar results.

Bing et al. (2012) studied possible ways to increase academic integrity. They examined “how specific situational . . . and individual . . . factors may influence the prevalence of actual academic cheating among business students” (p. 29). Supporting what McCabe and others have found, Bing et al. found that just having an honor code or documented punishments does not necessarily lead to reduced cheating. They found that those who were not given any specific discussion of honor codes or a realistic course warning cheated 50% of the time. However, if either the honor code was reviewed or a realistic course warning was given, the percentage of cheating reduced to 26%-29%. The greatest effect was reminding students of both the honor code and giving a realistic course warning, which reduced student cheating to 12.5% (p. 42). Therefore, having an honor code or having course punishments for cheating is not good enough. These must be communicated and emphasized for them to be effective in changing students’ attitudes and actions of academic integrity.

Bing et al. (2012) also investigated how students’ perceived cognitive abilities affected academic integrity. They found that “students who perceive their cognitive ability to be higher cheat less, presumably because they do not feel the need to cheat in order to receive a good grade in a course” (p. 43). The authors surmised that if educators can build up a student’s perceived cognitive ability, or increase a student’s confidence, that student may be less prone to cheat. This might be accomplished through interventions that allow a student to have small wins at the

beginning of a semester, which might show the student that he or she is capable of succeeding in the course.

Student cheating is on the rise, according to Mattu and Weiner (2012). These authors focused on four questions; the first was, “Who cheats?” They identified three general types of individuals who cheat: (1) students who are unprepared, (2) students who do not see the relevance of assignments, and (3) students who exhibit high self-confidence, cynicism, and lack of emotional expression. Second, “Why do students cheat?” Mattu and Weiner stated that pressure, motivation, lowering ethical standards, peer behavior, perceptions of teachers as unfair or uncaring, viewing schoolwork as arbitrary, and having a grade-focused environment are reasons students cheated. Third, “What can be done to address cheating in schools?” The focus needed to be on prevention. Faculty could address cheating by: creating a campus culture and policies regarding academic honesty, having teachers explain assignments thoroughly, having and emphasizing honor codes, reducing or eliminating competition between students, and assigning collaborative work. Last, “What can parents do to help prevent cheating?” Parents should be open with their children, set examples of integrity, reduce pressure by not focusing on grades, and focus on learning for understanding. These recommendations correlated with similar findings and recommendations of other researchers (Ariely, 2013; Lang, 2013; McCabe et al., 2012; West et al., 2004).

A “self-enhancement value system” in education is based on the concept that students are focused on the prestige, social approval, and personal success that a good grade or degree will bring them. “Self-transcendence,” on the other hand, focuses on the well-being of a group or society. These concepts were discussed by Pulfrey and Butera (2013) in relation to academic honesty. In their study, the researchers found that students who have a self-enhancement value

system are more apt to condone and take part in cheating. These students appear to be more focused on getting a good grade than on learning. They worry about themselves, without considering how their cheating could negatively affect their peers and society. In other words, for these students, “the focus can end up being less on the game than on the outcome” (Pulfrey & Butera, 2013, p. 2159). Pulfrey and Butera found that if self-transcendence values can be emphasized in education through what is written, spoken, discussed, and exemplified, then cheating could be curtailed (p. 2160).

David Callahan was included in a documentary, *Faking the Grade*, by Blicq (2015). In this documentary, Callahan reiterated the concept that people think others are cheating when he said, “the more people cheat, the more it seems normal to cheat, and the more it seems normal to cheat, the more other people feel like they should cheat just to keep up with the cheaters.” This same thought was reiterated by a number of people in the Blicq documentary who shared numerous thoughts about people, business, the economy, and the government. One person went so far as to say, “The government’s not honest, and neither is anybody else.” Callahan in the Blicq documentary stated:

People who should be enforcing the rules aren’t enforcing the rules, whether its colleges who aren’t cracking down on cheating, the government that let all the cheating on Wall Street go on. Here’s the thing: when the heat is on, or when the price is right, or when people just aren’t thinking things through, they’ll compromise that integrity, and lately the heat has been on for a lot of people, or the price has been right. Either they feel like there’s that gun to their head, or they feel like, boy, that carrot is so big it makes sense to cut corners to try to get it.



Menk and Malone (2015) supported the idea of having multiple exams. They demonstrated a way to efficiently produce unique exams for all students in a course by using Microsoft Excel. The examples specifically focused on building unique assignments for accounting courses; however, the concept could be used for other disciplines that have problem based material such as mathematics, engineering, and chemistry. The authors stated that “the use of unique tests and projects for each student in the class limits the opportunity for cheating, provides an environment in which students can work together without violating ethical practices, and maximizes the opportunities for learning” (p. 135). The authors showed how to use a “coded testing process” to generate not only unique exams, but unique assignments, individual projects, and group projects. Through their study, the authors found that “students in classes using the unique testing methods scored approximately four percent higher on overall course grades” (p. 153).

The literature reviewed in this section highlighted the negative association that academic dishonesty can have for institutions, thoughts on why students cheat, and ideas on ways to deter academic dishonesty. Some ideas that were shared with educators are: striving to be a moral anchor for students by getting to know them and supporting them through the education process, being clear about consequences for cheating and punishing students strictly when they are caught cheating, using pedagogy to deter cheating, and getting students involved in the process to build a culture of honesty. Higher education leaders and administrators cannot overlook the issue of academic dishonesty and deny the research that has been done. They must understand the problem of academic dishonesty and work to find ways to address and solve the problem. Educators should look for pedagogical ways to limit opportunities for academic dishonesty, such as using multiple exams or unique forms of exams, and to encourage academic honesty.

Educators need to be willing to prosecute offenders and the penalties must be harsh enough to act as deterrents.

### **Impact of Influencers on Academic Integrity**

Students can be involved with and influenced by many groups, individuals, and factors. Researchers have analyzed numerous activities and people who play roles in influencing individuals. The studies cited in this section do not focus on specifically students, but help create a picture of what may influence students to be either academically honest or dishonest.

Studies used various words or concepts, such as “motivation” and “neutralizing attitudes,” rather than rationalization; however, these words have similar meanings in the context of the studies. The concept of neutralization has been discussed for decades. Sykes and Matza (1957) wrote about the concept of neutralization. The authors focused on the concept of delinquency, and mainly juvenile delinquency. The authors stated that:

Much delinquency is based on what is essentially an unrecognized extension of defenses to crimes, in the form of justifications for deviance that are seen as valid by the delinquent but not by the legal system or society at large. These justifications are commonly described as rationalizations. (p. 666)

The authors listed five major types of neutralization:

- The Denial of Responsibility: “the delinquent approaches a ‘billiard ball’ conception of himself in which he sees himself as helplessly propelled into new situations” (p. 667).
- The Denial of Injury: “wrongfulness may turn on the question of whether or not anyone has clearly been hurt by his deviance.... feels that his behavior does not really cause any great harm despite the fact that it runs counter to law” (pp. 667-668).

- The Denial of the Victim: “a form of rightful retaliation or punishment.... delinquent moves himself into the position of an avenger and the victim is transformed into a wrong-doer” (p. 668).
- The Condemnation of the Condemners: “His condemners, he may claim, are hypocrites, deviants in disguise, or impelled by personal spite.... The delinquent, in effect, has changed the subject of the conversation in the dialogue between his own deviant impulses and the reactions of others; and by attacking others, the wrongfulness of his own behavior is more easily repressed or lost to view” (p. 668).
- The Appeal to Higher Loyalties: “sacrificing the demands of the larger society for the demands of the smaller social groups to which the delinquent belongs.... deviation from certain norms may occur not because the norms are rejected but because other norms, held to be more pressing or involving a higher loyalty, are accorded precedence” (p. 669).

The authors argued that the use of neutralization is in large measure why individuals are able to justify committing dishonest acts.

Haines et al. (1986) discussed student neutralization. The authors found that neutralization is common among cheaters and is central to cheaters justifying their actions. Along with this, Haines et al. found that students “are most deterred by the formal, institutional consequences of being caught cheating” (p. 346). Though, “evidence suggests that under certain circumstances, cheaters neutralize so effectively that they really do not think cheating is wrong, either for themselves or for others” (p. 353).

Religiosity, the extent that a person is religious or believes in a religion, is central to some people’s lives. One aspect of some religions is the belief in being honest or moral.

Research has shown ties between religious values and following customary rules. Studies do not support a specific religion but examine the underlying theme of religion as a moral compass to guide some people's actions, which educators may be able to tap into to encourage academic honesty.

Grasmick, Kinsey, and Cochran (1991) examined "the role of religion . . . in generating compliance with the law among adults" (p. 99). Three illegal offenses were used for the study, which included theft, cheating on income taxes, and littering. They found that the "research support[ed] the growing consensus that at least some aspects of religion promote compliance with at least some laws" (105). The authors noted that the findings are not generalizable by themselves; however, combined with other research, the findings support research that found religion does play a role in increased compliance with laws and less illegal behavior.

Nonis and Swift (1998), found that cheating on exams is reduced via in-class deterrents. However, they also found that "more students who are male, have a low GPA and have high levels of neutralization would cheat, even if the in-class deterrents are high" (p. 196). The authors determined that attitudinal and behavioral factors; neutralization, perceived academic performance, and if the student had cheated in the past; played a significant role in cheating behavior. Therefore, deterrents could play an important role in reducing cheating; however, deterrents will not eliminate all cheating if students use neutralization and other justifications to rationalize cheating.

Rettinger and Jordan (2005) studied students at a U.S. university. They compared undergraduate business and liberal arts students within their respective undergraduate major courses and in a Jewish Studies course that was intermixed with business and liberal arts students. They found that "motivation (learning and grade orientation)" had a significant role in

determining cheating (p. 122). Students motivated by grades, an extrinsic motivator, are more apt to cheat, whereas those motivated by learning, an intrinsic motivator, are less apt to cheat.

Therefore, the researchers found that religiosity played a role in cheating behavior, but primarily by reducing cheating in the religion course, as they stated, “Neutralizing attitudes were strongly correlated with cheating in college courses and not in Jewish studies” (p. 123).

There are numerous religions and social beliefs throughout the world. Students from all over the world attend U.S. colleges and universities. The article by Rawwas, Swaidan, and Al-Khatib (2006) is based on a study done in Japan. Only marketing students were surveyed. Religion was found to not be a predictor for academic dishonesty and did not act as a deterrent to academic dishonesty. “Opportunism was found to be one of the most important determinants in explaining misconduct” (p. 69). Therefore, having a significant level of religiosity did not appear to affect academic dishonesty levels with the Japanese students. This finding opposes other research but this difference could be due to cultural influencers, as well as differences in the religions of the students.

Bloodgood, Turnley, and Mudrack (2008) defined “religiosity as understanding, committing to, and following a set of religious doctrines or principles” (p. 559). They found that religiosity did play a role in increasing academic honesty. One finding was that students reporting higher levels of religiosity had lower levels of dishonesty. A correlated finding was that “ethics instruction by itself had no apparent effect on the extent of cheating” (p. 566). However, “we were able to discover that classroom ethics training worked better for some individuals (those relatively low in religiosity or relatively high in intelligence)” (p. 566). Unlike some studies, this study showed that it may be worth implementing an ethics course to try and affect students who are high in intelligence, but with minimal religious foundation. Caldwell

(2010) supported the idea that ethics curriculum and training could be effective, is important, and could increase “moral awareness” and “ethical decision making” of students (p. 7).

Choo and Tan (2008) completed a study analyzing accounting students’ attitudes about cheating using the fraud triangle concept. The fraud triangle consists of three factors that have been shown to exist to some level in each person who commits fraud or a dishonest accounting action. These three factors are: (1) pressure, (2) opportunity, and (3) rationalization (Cressey, 1973). “The fraud triangle concept originated from Donald R. Cressey’s work about the psychology of embezzlers” (Choo & Tan, 2008, p. 206). Choo and Tan hypothesized that (1) “The presence of pressure will significantly increase the students’ propensity to cheat” (p. 208), (2) “The presence of opportunities will significantly increase the students’ propensity to cheat” (p. 208), and (3) “The presence of rationalization will significantly increase the students’ propensity to cheat” (p. 208). The authors also developed an interactive hypothesis that, “The presence of a three-way interactive effect (i.e., pressure x opportunities x rationalization) will significantly increase the students’ propensity to cheat” (p. 209).

Choo and Tan found that “students’ overall propensity to cheat was 19.8 percent” (p. 212). The authors noted that this was much lower than the studies they researched. This percentage is much lower than many of the studies noted in this literature review, as well. The authors suggested the difference was due to the structure of the study asking about propensity to cheat and not looking at whether a student actually cheated (p. 212). A significant finding was when all three fraud triangle factors were present, the propensity to cheat was at 33 percent, which was much higher than the average of 19.8 percent. The authors also found that females, lower GPA students, and students taking more credits were more likely to cheat than the other associated students (p. 215). Based on the findings, the authors concluded that the fraud triangle

concepts were influencers to students' academic honesty and "suggest that preventing cheating may be more effective than detection" in encouraging academic honesty (p. 217).

Christensen et al. (2010) performed a study of ethics in which they analyzed students' propensity to access unauthorized materials in an online setting. They observed that almost every student in the study accessed unauthorized solutions on the Internet and then lied about accessing the materials. They surveyed the students and found that students provided specific categories of influencers that supposedly inclined them to cheat. The biggest influencer identified was everyone was cheating, i.e. peer influencer.

The students in the Christensen et al. (2010) study submitted answers identifying their personal ethical influencers. "Their responses indicated four main categories of influence: people..., beliefs..., life experiences, and school" (p. 256). These influencers were common to other studies, with many of the studies finding that peers, or what are classified here as people, were the main influencer when it came to a student's decision to cheat or not to cheat.

Christensen et al. (2010) gave suggestions on how to develop more academic honesty within students, and specifically those doing work online. These influencers included: (1) Develop schemas or design activities that put students in ethical dilemmas and allow the students to discuss what course of action can be taken to maintain ethical principles (p. 259), (2) Cultivate virtue in students by giving cases and examples of real world individuals in accounting and business who exemplify ethical behaviors (p. 259), (3) Use a comprehensive approach such as having a general ethics course early in a student's college career, emphasizing ethical reasoning throughout the college program through the use of self-reflection and awareness exercises, and using a Capstone course to finalize and reinforce ethical training (p. 259), and (4) Use countermeasures for online instruction by implementing a specific online code of ethics, clearly

and completely defining what constitutes cheating online, and not using the same assignments and exams each semester (p. 259).

Ideas of how to reduce academic dishonesty were offered by Kelly and Earley (2011). They stated, “We hope that by providing examples of leaders who have had a positive impact on the public accounting profession, accounting students can gain some insights into proper ethical leadership and what can be done to make the profession stronger” (p. 73). Kelly and Earley shared examples of nine leaders in accounting. They focused on the areas of moral sensitivity, moral judgment, moral motivation, and moral character and described how each of these leaders had to deal with specific and difficult moral issues in their accounting careers. The authors related that they have used the information described in the paper in their own courses. The authors pointed out specific influencers, such as former teachers, former employers, coworkers, other companies, and religion that influenced the nine leaders’ ethical beliefs and decisions. They did not have specific data on how this had affected academic honesty, but the information and the teaching had been accepted positively by the students.

Burton, Talpade, and Haynes (2011) “examined the relationship between overall value systems as reflected in religiosity or participation in religious activities and academic dishonesty in test taking among business school students” (p. 1). Similar to Bloodgood et al. (2008), the researchers found that of those surveyed, there was a significantly reduced rate of unethical test-taking behavior among those participants who had greater attendance levels at religious events. The individuals that said they never engaged in unethical behaviors regarding test-taking were significantly more likely to attend more religious events than the individuals who had engaged in unethical behaviors. The authors stated that the religious activities tended to emphasize and reinforce ethical values, so higher education may be able to use this information to help reinforce



ethical values outside of religion. This could be done through honor codes or other ethical training and activities done in classes, seminars or extracurricular events.

Curasi (2013) analyzed the concept of neutralizing in her article. In this study Curasi sampled 327 business majors who she described as ethnically diverse. The sample included African Americans (22.9%), Asians (11.6%), Hispanic/Latinos (6.1%), Caucasians (44.3%), Multiracial (5.8%), and the remainder who did not identify their race. There was a broad array of business majors with Accountancy making up 14.1% of the students surveyed. Curasi used the 5 major types of neutralization as her basis for the study. She adapted the questions from the Haines et al. (1986) study. The Curasi findings included the following:

- “Academic dishonesty is significantly correlated with neutralization techniques” (p. 171).
- “Condemning the condemners is the most highly correlated neutralization technique.... Instructors should communicate that they want their students to learn the course material, and that they care whether students seem able to grasp the information” (pp. 171-172).
- “As the subcultural group is more (less) supportive of the values and behaviors underlying academic dishonesty, both will tend to increase (decrease) together” (p. 172).
- “Those individuals who believe that cheating is common in the business world, are more likely to be dishonest themselves, and are more likely to use neutralization techniques to rationalize their own behavior” (p. 172).

The data from the study showed that Asians were highest in neutralization, Asians and African Americans were highest in academic dishonesty behavior, and there were no statistically

significant differences between the various business majors. The data also showed that over half the students admitted to working with other students on individual homework assignments, over one-third of the students worked with others when completing individual take home exams, yet only about 6% of the students said they cheated on in class exams. The author asserted that,

The data from this investigation provides evidence that individuals are able to live a double standard when it comes to their own ethicality.... They appear to believe their rationalizations, and seem to truly believe that they can and should break the rules in some circumstances. p. 174

The author suggested that one way to combat students using neutralization is to clearly communicate with students the behavior standards for an assignment, quiz, or exam.

Grades appear to be a strong motivator for academic dishonesty (Rawwas et al, 2006; Rettinger & Jordan 2005; Simkin & McLeod 2010). Educators need to find ways to encourage academic honesty. One way could be connecting to students' moral value systems, which are often guided by religion. However, studies were not conclusive on the link between religiosity and honesty. Another suggestion is to be clear regarding what constitutes honest behavior when giving an assignment or assessment. Teachers can strive to overcome students' justifications and neutralizations by encouraging students and striving to make the learning and assessment "fair."

### **Summary of Literature Review**

The literature is rich with research regarding academic dishonesty in higher education. The research supports the concept that academic dishonesty has increased over the years and is considered "rampant" by many (Bernardi et al., 2004; Crittenden et al., 2009; East, 2010; Novotney, 2011; Simkin & McLeod, 2010). Dishonest acts by business students have also been found to exceed those of many other students (Elias, 2009; Premeaux, 2005; Rettinger & Jordan,

2005; Smyth & Davis, 2004). This is a concern for business professionals. If students are being dishonest in their education, they more than likely will have a higher propensity to be dishonest when they enter the world of work.

Studies have shown that professors can act as moral anchors by promoting ethical interaction in their classrooms (Gillet, Vallerand, & Lafrenière, 2012; Power, 2009; Simkin & McLeod, 2010). Additionally, the research showed that pedagogical structures can be used to deter academic dishonesty (Gallant, 2008; Twomey et al., 2009). Educators need to use pedagogy as much as possible to encourage academic honesty and deter cheating and other dishonest acts. However, there must be adequate punishment affixed for academically dishonest acts if a student is caught.

There is not abundant literature correlating explicit acts/initiatives that accounting teachers implement in a classroom and in course structure to levels of academic dishonesty. This study was designed to fill that void by researching accounting faculty and accounting students' views about particular initiatives to find those that are perceived to influence students to be more honest. This identified perceived influencers that can reduce students' acts of academic dishonesty. The study helps higher education professionals determine pedagogical ways to deter academic dishonesty by students.

## **CHAPTER III**

### **METHODOLOGY**

As stated, the purpose of this research study was to assess best practice initiatives to reduce cheating from the perspective of accounting faculty members and students majoring in accounting. The research study was performed at three public post-secondary institutions and one private post-secondary institution in the Rocky Mountain Region of the United States. The research study was guided by the following questions:

1. Which best practice strategies to reduce academic dishonesty are perceived to be effective by accounting faculty and students majoring in accounting?
2. Which best practice strategies do accounting faculty members think would reduce academic dishonesty at their institution?
3. Which best practice strategies do students majoring in accounting think would reduce academic dishonesty at their institution?
4. What are the differences in the subgroups' responses regarding which best practice strategies would reduce academic dishonesty of students majoring in accounting at the higher education institutions included in the study?

This study could help higher education professionals, specifically higher education accounting department personnel, implement practices to decrease the levels of academic dishonesty and increase academic honesty and ethical behaviors in their students. The methodology section describes the study participants, sampling process, research design, procedures, instrumentation, data collection, and data analysis.

## **Population and Sample**

The study was conducted at three public post-secondary institutions and one private post-secondary institution in the Rocky Mountain Region of the United States. Accounting faculty and students majoring in accounting were selected to participate in this study. All fulltime accounting faculty members from the four institutions were sent a survey. Students majoring in accounting were at varying levels of their accounting education, including both undergraduate education and postgraduate levels. Age, gender, and other individual characteristics did not preclude an individual from being included in the study; however, some of these individual characteristics were included in the survey questions.

The universities combined had over 2,000 total students majoring in accounting at the undergraduate and graduate levels. The study used a form of convenience sampling, “a group of cases that are selected simply because they are available and easy to access” (Gall et al., 2007, p. 636), with some attributes of cluster sampling, “a group of research participants that is formed by selecting naturally occurring groups (i.e., clusters) in the population” (Gall et al., 2007, p. 634), as participants were accounting students currently enrolled in an accounting course at the institutions in the sample (Gall et al., 2007; Mitchell & Jolley, 2010). The students selected came from the entire population of students majoring in accounting at the universities. As such, the entire population of accounting students at the institutions are included as possible participants.

## **Research Design**

The study assessed best practice initiatives to reduce cheating from the perspective of accounting faculty and students majoring in accounting. The research study used a quantitative, descriptive design. The data collected from the faculty and students’ perceptions was analyzed using descriptive statistics (Gall, Gall, & Borg, 2007; Mitchell & Jolley, 2010).

Faculty who teach accounting and students majoring in accounting were surveyed. The survey instrument implemented the design of Gambill's (2003) Academic Integrity Survey and included the best practice initiatives identified by Gambill. In addition to the original Academic Integrity Survey, two additional best practice initiatives, along with additional demographic information, was included in the survey instrument. The survey instrument used a five-point Likert scale, which asked participants to evaluate specific best practice strategies and their likelihoods for promoting academic integrity in accounting students. Questionnaires were completed in selected accounting classes at the four universities. The questionnaires were completed anonymously except for identification by campus group, i.e. university, student classification, or faculty member.

The data was analyzed to determine specific individual characteristics, including age, gender, and student GPA. The focus was to gain a richer understanding of what higher education institutions and specifically accounting instructors and departments within those institutions can do to motivate students toward honesty. Finally, the researcher determined if there are specific initiatives that are viewed as negative influencers as perceived by accounting faculty and/or students majoring in accounting.

## **Procedures**

Preceding the study, permission was obtained from the Human Subjects Committee at Idaho State University (ISU). Permission to survey faculty and students at the institutions in the study was obtained from each of the institutions in the study. The institutions that agreed to participate in the survey had the survey administered during the fall 2017 semester, specifically during the months of November and/or December 2017. Accounting faculty and students majoring in accounting completed the Academic Integrity Survey asking about perceptions of

proposed academic initiatives. Questions for the study are included in Appendixes (A) and (B). Faculty members had the survey distributed to them directly. Accounting students had the survey administered in accounting classes. Faculty members and students had the chance to opt out if they choose; however, emphasis was given that anonymity and confidentiality of the data would be maintained.

Demographic data was obtained from faculty members and the students. Faculty member data includes: gender, how long he/she has been at the current institution, how many years he/she has been teaching, and tenure status, along with any credentials held (i.e. CPA, CFA, etc....) and any accounting jobs held prior to teaching. Student demographic data includes: gender, residential/commuter status, current age, level in school (freshman-graduate student), grade point average (GPA), and any credentials the student holds or plans to earn someday (i.e. CPA, CFA, etc....). The demographic questions were asked at the beginning of the survey instrument.

### **Instrumentation**

The nature of the study inherently has some limitations to reliability and validity. Participants were asked to self-report perceived beliefs about the initiatives. The self-reporting nature of the data raises issues regarding reliability since faculty and/or students could intentionally misreport their perceptions, which would cause the data to be invalid. However, Cizek (2003) notes that “fortunately, in terms of accuracy, survey techniques have a fairly good track record when it comes to studying cheating” (p. 7). Social desirability bias could have occurred since faculty and/or students were being asked their perceptions about academic honesty concepts (Mitchell & Jolley, 2010, pp. 141-142). To mitigate the social desirability risk, participant anonymity and the importance of being honest about their true perceptions when answering the questions was emphasized to the participants (Mitchell & Jolley, 2010).

The overall survey question instrument included the following question groups:

**Demographics.** The initial questions were the demographic questions. The following demographics were collected for this study: (1) Faculty: gender, time at institution, and tenure status and (2) Students: gender, residential status, current age, current level of schooling (freshman – graduate), and grade point average. The questions for this section of the survey are included in Appendixes (A) and (B).

**Institutional Perceptions.** The second set of questions asked about the faculties' and students' perceptions about the institution where they worked or were going to school. These questions included: (1) what is the perceived level of cheating at the institution, (2) how much cheating they have personally witnessed, and (3) their perception of the honor system at their institution. The questions for this section of the survey are included in Appendixes (A) and (B).

**Proposed Initiatives.** The final set of questions asked about faculty and student perceptions of the 16 proposed initiatives. A five point Likert scale was used for the 16 initiatives. Faculty and students rated each initiative from one extreme that "I think this initiative would GREATLY REDUCE cheating at my current institution" to the other extreme that "I think this initiative would GREATLY INCREASE cheating at my current institution." The questions for this section of the survey are included in Appendixes (A) and (B).

### **Data Collection**

The data came from accounting faculty and students majoring in accounting self-reporting demographic information, opinions about institutional cheating, and perceived effects of proposed initiatives to reduce cheating. Faculty and students were asked to complete a survey during the fall 2017 semester.



At the time the survey was administered, faculty and students were informed of the nature of the survey. Faculty and students had the opportunity to opt-out of the survey. Emphasis of confidentiality and anonymity was given to encourage participants to contribute. For students, having the survey administered during class time probably increased the number of respondents.

### **Data Analysis**

The research study used a quantitative, descriptive design. The data collected from the accounting faculty and accounting students was analyzed using descriptive statistics (Gall, Gall, & Borg, 2007; Mitchell & Jolley, 2010).

The proposed initiative questions were analyzed using the Likert scale responses. Numerical values of 1-5 were used and were associated with the response number included in the Likert scale. The response frequencies were calculated for each of the 16 proposed initiatives. The researcher was primarily looking for initiatives that are perceived to either greatly increase academic honest or greatly increase academic dishonesty as perceived by accounting faculty and students majoring in accounting.

The demographic questions and the institutional perception questions were used to categorize respondents into subgroups and analyze if there are differences in the frequencies between the groups. The demographic data and the proposed initiatives for accounting faculty and students were analyzed using Categorical Principal Components Analysis (CATPCA) to identify meaningful constructs/components.

The overall methodology of the study was designed to glean data needed to analyze if the proposed initiatives are perceived to increase academic integrity. This information could be used by higher education professionals to implement pedagogical methods or other activities to encourage academic integrity.

## **CHAPTER IV**

### **RESULTS**

As stated, the purpose of this research study was to assess best practice initiatives to reduce cheating from the perspective of accounting faculty members and students majoring in accounting. The following information describes the quantity of the survey instruments returned with usable survey rates along with breakdowns of demographic data. This chapter includes accounting faculty and accounting student perceptions of the levels of cheating at their institutions at the time of the survey, amounts of cheating personally witnessed, and how effective the faculty and students perceived the Honor System was at their institutions at the time of the survey. There is an analysis of how accounting faculty and students perceived each of the sixteen best practice initiatives would affect academic integrity both in total and in various subgroups. Differences in subgroups perceptions were analyzed.

A total of 33 faculty and 681 students completed surveys in mid-November to early-December 2017. All faculty surveys were useable and 676 student surveys were usable. Faculty were given surveys, which an example can be found in Appendix A, either directly by the principal investigator or by their respective Accounting Department Chair. There were 50 total surveys distributed to accounting faculty members and 33 (66%) were completed. Students were surveyed by going directly to classes. The classes were selected from all accounting major courses. Therefore, these classes had accounting majors taking the courses. The principal investigator, an assistant to the investigator, or one of the accounting faculty members at the institutions surveyed administered the surveys to the students. Students in the classes were given a survey with a scantron sheet. The students were read the cover letter, which is found in Appendix B, by the individual administering the survey. The cover letter notes that students were

not required to complete the survey, no part of their grade was contingent on completing the survey, there was no reward for completing the survey, and the students should not put any identifying information on the survey. It was emphasized that students should only answer the 25 questions in the survey and put nothing on the survey form or any other information on the scantron/answer sheet.

Out of an estimated population of 2,000 accounting majors at the undergraduate and graduate levels, 681 (~34%) students completed surveys. An exact count of students who did not complete a survey when given the opportunity in class was not kept, but it was observed that very few students did not complete the survey when given the opportunity in class. There were five surveys deemed unusable. Additionally, there were four students who did not complete questions 21-25. These five questions were on the backside of the last page of the survey. It is presumed that these five students did not turn the survey over and see that there were five more questions. These surveys were deemed usable as all other information was completed. There were a few surveys where a student did not answer one of the questions. It is presumed that the student accidentally skipped a question. These surveys were also deemed useable as all other information was completed. Due to the relatively large response rate, there is reason to believe that the participants in the survey are representative of the population of the accounting majors at the four universities included in the survey and could be representative of accounting students overall.

The faculty information is included in Table 1. Out of the 33 faculty respondents 75.8% of them were male. This percentage is somewhat higher than the 2016 national average. The Association to Advance Collegiate Schools of Business (2016) reported 61% of accounting faculty in the United States were male and 39% female (p. 21). The faculty overall had not been

Table 1

*Return rate and breakdown by Faculty Demographic Categories*

Demographic Category and Subcategories	Number of Surveys Completed	Percentage
Faculty	33 of 50	66.0%
Gender:		
Females	8	24.2%
Males	25	75.8%
Years at current school:		
Less than 5 Years	18	54.5%
5-10 Years	6	18.2%
More than 10 Years	9	27.3%
Number of years teaching:		
Less than 5 Years	10	30.3%
5-10 Years	8	24.2%
10-15 Years	5	15.2%
15-20 Years	3	9.1%
More than 20 Years	7	21.2%
Status at current institution:		
Tenured	17	51.5%
Non-tenured	16	48.5%

at their institutions a long time with 54.5% responding that they had been at their current institution for less than five years. Correlated with that statistic is that 54.5% of the faculty responded that they have been teaching for 10 years or less and only about half (51.5%) are tenured with 48.5% who are non-tenured.

The overall student responses included 310 females (46%) and 366 males (54%), as can be seen in Table 2. This distribution is reflective of national averages in business schools, of which accounting is included. The Association to Advance Collegiate Schools of Business (2016) report presented that in 2014-2015, business schools reported 45% of undergraduate business students were female and 55% were male (p. 15). The respondents reported that less than half live in residence halls or close to campus with the majority (56%) reporting that they commute to school. The majority of students (67%) responded that they are in the traditional

Table 2

*Return rate and breakdown by Student Demographic Categories*

Demographic Category and Subcategories	Number of Surveys Completed/Usable	Percentage
Students	676 of ~2,000	34%
Gender:		
Females	310	45.9%
Males	366	54.1%
Residential or Commuter:		
Residential (live in a residence hall)	34	5.0%
Adjacent (live in a residence within walking distance of campus)	265	39.2%
Commuter	377	55.8%
Current age:		
Younger than 21	51	7.5%
21-25	403	59.6%
26-30	106	15.7%
31-35	53	7.8%
36-40	31	4.6%
41-45	12	1.8%
46-50	10	1.5%
Older than 50	10	1.5%
Grade level in college:		
Freshman (0-30 credits completed in an undergraduate program)	1	0.1%
Sophomore (31-60 credits completed in an undergraduate program)	14	2.1%
Junior (61-90 credits completed in an undergraduate program)	190	28.1%
Senior (91 or more credits completed in an undergraduate program)	354	52.4%
Graduate student (working on Master's or Doctorate)	117	17.3%
Current overall GPA:		
3.5-4.0	341	50.4%
3.0-3.49	229	33.9%
2.5-2.99	97	14.4%
2.0-2.49	8	1.2%
Less than 2.0	1	0.1%

student ages of 25 years of age and younger and only about 5% were older than 40 years of age.

Since the classes surveyed were courses taken by accounting majors, nearly 98% of the

respondents were either juniors, seniors, or graduate students. As such, the respondents were students who had been in college for a few semesters and should have an understanding of higher education more than a traditional freshman or sophomore. Over 84% of respondents reported that their GPA was a 3.0 or better with only 9 respondents having a GPA below 2.5.

### **Faculty and Student Perceptions of Cheating Levels**

Faculty and students were asked about their perceptions of cheating levels at their current institution. Question seven of the survey, included in Appendixes A & B, asked, “7. I believe that the current amount of cheating at my current institution is:” with the three options for answers being (A) High, (B) Moderate, of (C) Low. As presented in Table 3, both faculty and students had a majority of responses between Moderate and Low for their perceptions of cheating levels. The high level was only ~3% for each group, which is encouraging that a small amount of students and faculty felt that cheating was high. Faculty did feel that there are higher levels of cheating than students with over half of faculty responding that they perceived cheating as moderate. In comparison almost 60% of students responded that they perceived the levels of cheating as low.

Table 3

#### *Faculty & Student Perceptions of Cheating Levels at their Current Institution*

	Faculty (N=33)		Students (N=676)	
	Frequency	Percent	Frequency	Percent
High (1)	1	3.0	22	3.3
Moderate (2)	17	51.5	251	37.1
Low (3)	15	45.5	403	59.6

### **Faculty and Student Actual Witnessing of Cheating**

Question eight of the survey (see Appendixes A and B) asked faculty and students about cheating that they had actually observed at their current institutions. The question asked, “8. I

have personally witnessed cheating at my current institution:” with options of (A) Frequently, (B) Often, (C) Seldom, (D) Rarely, or (E) Never. The faculty and student data are shown in Table 4. There was not a significant difference between the faculty and students on witnessed cheating; however, there were no faculty members who responded seeing six or more incidences of cheating each semester compared to 27 (4%) students. It was encouraging that over 20% of both faculty and students responded that they had never witnessed cheating at their current institution and another 30%-32% stating they witness cheating less than 1 time each semester.

Table 4

*Faculty & Student Witnessing of Cheating Levels at their Current Institution*

	Faculty (N=33)		Students (N=676)	
	Frequency	Percent	Frequency	Percent
Frequently (6+ times each semester) (1)	0	0.0	27	4.0
Often (3-5 times each semester) (2)	3	9.1	71	10.5
Seldom (1-2 times each semester) (3)	13	39.4	196	29.0
Rarely (less than 1 time each semester) (4)	10	30.3	217	32.1
Never (5)	7	21.2	165	24.4

**Faculty and Student Perceptions of Honor System Effectiveness**

Each of the institutions has an honor system, honor code, or code of conduct that can be reviewed on the institution website. How well these honor systems are shared and understood appears to vary. Question 9 of the survey in Appendixes A and B asked, “9. I believe the Honor System at my current institution, designed to reduce cheating, is:” with six answer options of (A) Very Effective, (B) Effective, (C) Neither effective or ineffective, (D) Ineffective, (E) Very Ineffective, or (F) N/A (not aware that there is an Honor System). Almost 40% of the faculty responded that they feel the honor system is either very effective or effective and almost 61% of the students responded this way, as shown in Table 5. It is interesting that the students found the honor system or code of conduct to be more effective than the faculty. This may be partially

explained from the fact that almost one out of four faculty respondents selected N/A. In comparison only 6% of faculty and 7.5% of students perceived the honor system to be ineffective or very ineffective.

Table 5

*Faculty & Student Perceptions of Honor System Effectiveness at their Current Institution*

	Faculty (N=33)		Students (N=676)	
	Frequency	Percent	Frequency	Percent
Very Effective	2	6.1	84	12.4
Effective	11	33.3	328	48.5
Neither effective or ineffective	10	30.3	168	24.9
Ineffective	1	3.0	38	5.6
Very Ineffective	1	3.0	13	1.9
N/A (not aware that there is an Honor System)	8	24.2	45	6.7

A somewhat disturbing finding was that over 24% of the faculty compared to only 6.7% of the students were not aware that there was an honor system. The faculty may understand that there are rules against cheating, but may not understand that there is an honor system or code of conduct or do not fully understand the honor system or code of conduct. One of the initiatives is “9) Provide training for faculty on academic integrity issues.” As will be discussed later, this was found to be one of the top perceived initiatives by both faculty and students that would reduce cheating.

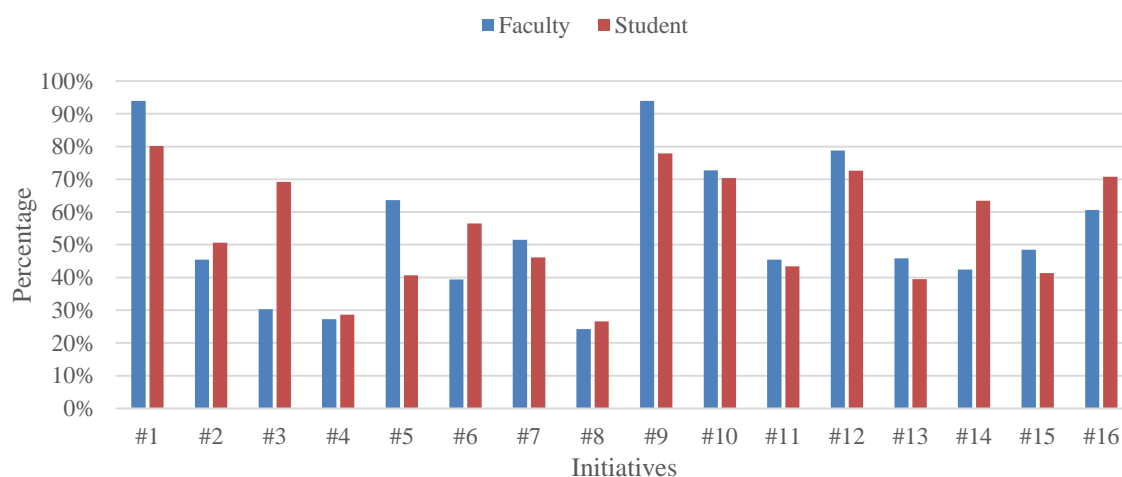
**Faculty and Student Perceptions of Academic Integrity Initiative Effect on Cheating**

One of the primary efforts of the study was to determine how faculty and students perceived the 16 academic integrity initiatives effects on cheating. Responses of faculty and students, independent of each other, regarding their perceptions of the academic integrity initiatives are given in Appendix D. As shown in Appendixes A and B, respondents had five answer choices, A. I think this initiative would GREATLY REDUCE cheating at my current institution, B. I think this initiative would MODERATELY REDUCE cheating at my current



institution, C. I think this initiative would have NO IMPACT on reducing cheating at my current institution, D. I think this initiative would MODERATELY INCREASE cheating at my current institution, and E. I think this initiative would GREATLY INCREASE cheating at my current institution.

For all initiatives over 25% of students perceived the initiative would moderately or greatly reduce cheating (see Figure 2). In contrast, for all initiatives less than 12.5% of students perceived the initiative would moderately or greatly increase cheating (see Figure 4). Overall the students perceived that all of the initiatives would have a moderate to great effect on reducing cheating. Faculty members had similar results except for initiatives three, four, eight, and thirteen. For initiative three, four, and thirteen respectively, 15.2%, 18.2%, and 33.3% of faculty perceived that the initiative would moderately or greatly increase cheating, as shown in Figure 4. For initiative eight only 24.2% of faculty perceived that the initiative would greatly or moderately reduce cheating. The majority of faculty members perceived that initiatives two, three, four, six, eight, eleven, and fifteen would have no impact on student cheating at their



*Figure 2.* Percentage of Faculty and Students that Selected that the Initiative would Moderately (2) or Greatly (1) Reduce Cheating at their Current Institution

current institution (see Figure 3). Students; however, perceived that initiatives four, five, seven, eight, thirteen, and fifteen would have no impact on cheating at their current institution.

Figure 2 and the data in Appendix D shows there are two initiatives with overall perceptions for both faculty and students with substantial percentages selecting greatly or moderately reduce cheating, initiatives number one: “Placing an “XF” on official transcripts of cheaters” and number nine: “Provide training for faculty on academic integrity issues”. Initiative number one had 93.9% of faculty and 80.1% of students select greatly or moderately reduce cheating and initiative number nine had 93.9% and 77.9% of faculty and students, respectively, select these options. Overall and as independent groups, faculty and students perceived that these two initiatives would moderately or greatly reduce cheating at their current institutions.

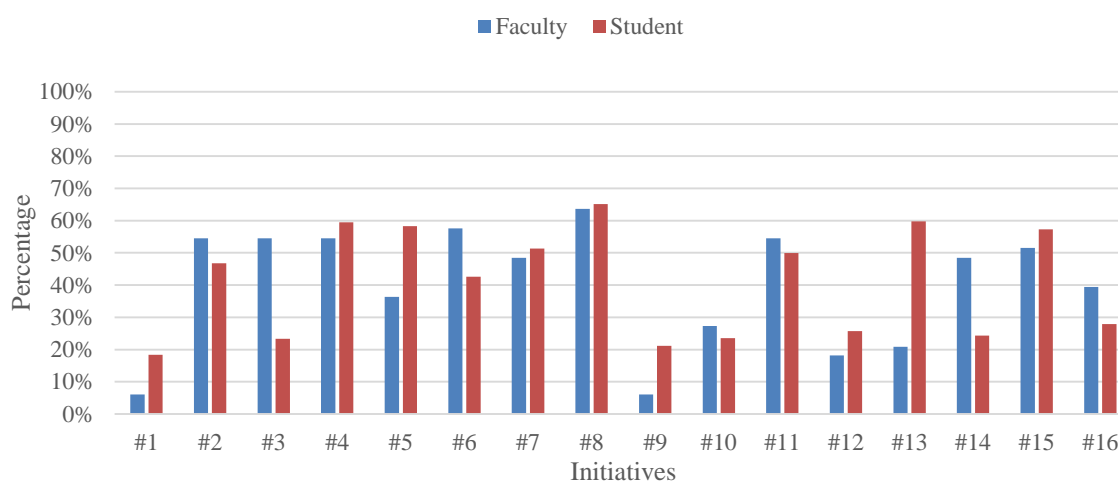


Figure 3. Percentage of Faculty and Students that Selected that the Initiative would have No Impact (3) on Reducing Cheating at their Current Institution

There are three additional initiatives that had significant percentages of faculty and students who selected greatly or moderately reduce cheating. The initiatives are numbers ten: “promote effective classroom management strategies”, twelve: “offer clear definitions of cheating based on the honor code”, and sixteen: “require accounting majors to read/discuss real-world ethics cases.” These three initiatives had percentages of Initiative 10: 72.7% and 70.4%,

Initiative 12: 78.8% and 72.6%, and Initiative 16: 60.6% and 70.8% for faculty and students, respectively. These five initiatives indicate that accounting students and faculty agree that students and faculty need to be educated on the honor system policies, students need to learn about how this applies to their current education and future careers, and that faculty need to hold students accountable for following the honor system.

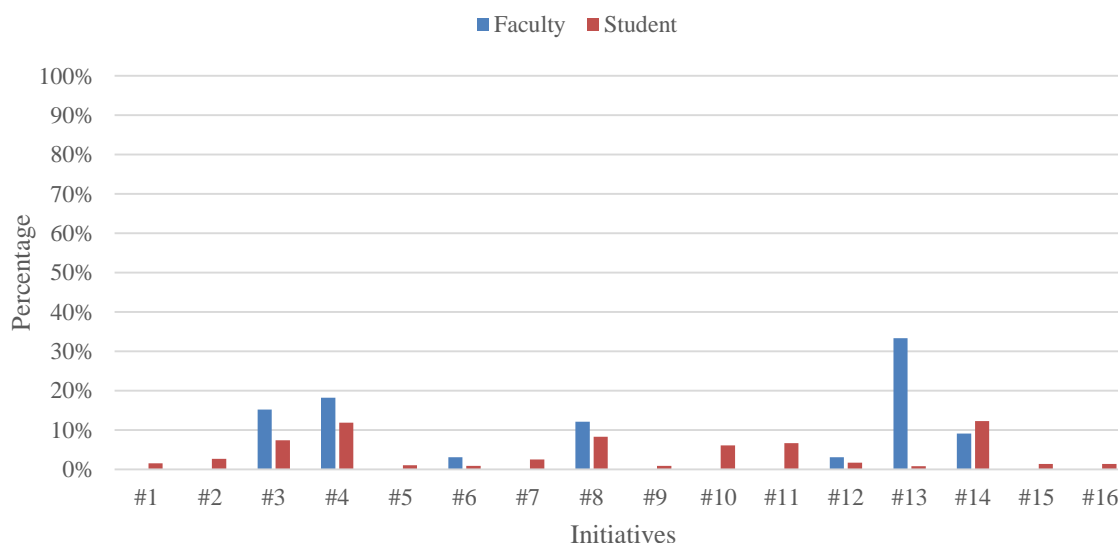


Figure 4. Percentage of Faculty and Students that Selected that the Initiative would Moderately (4) or Greatly (5) Increase Cheating at their Current Institution

Initiative number three: “Encouragement of more collaboration on homework assignments” had 69.2% of students view this as an initiative that could significantly reduce cheating, with 33.1% and 36.1% of students selecting greatly reduce and moderately reduce cheating, respectively. Only 7.4% of students perceived this initiative as one that would moderately or greatly increase cheating. However, faculty scored this initiative with the third highest percentage of faculty (15.2%) perceiving this as an initiative that would increase cheating. Only 30.3% of faculty perceived this as an initiative that would reduce cheating. The faculty, as noted above, did not view initiative three of, “Faculty encouragement of more collaboration on homework assignments in an attempt to better prepare students for today’s work

force and to reduce the temptation of inappropriate collaboration on assignments previously expected to be completed independently” as one that would reduce cheating. Faculty did not feel that this would either reduce or increase cheating. In comparison, students perceived that this initiative would reduce cheating if initiated.

Initiative 13, “Provide additional support for faculty during the formal adjudication process,” was noteworthy that faculty were split on the impact that this initiative would have on cheating. One-third of the faculty perceived that this initiative would increase cheating and 46% perceived it would reduce cheating, with only 21% saying it would have no impact. The students primarily perceived this initiative would have no impact on cheating. All other initiatives did not show noteworthy differences in the frequencies for or between faculty and students.

### **Faculty and Student Subgroup Frequency Differences in Perceptions of Academic Integrity**

#### **Initiative Effect on Cheating**

The faculty subgroups of (a) demographics, (b) cheating perceptions at current institution, and (c) initiatives were analyzed for faculty to determine any significant differences. The following findings for each of the subgroups were:

- Gender: (a) There were 8 female faculty members who completed surveys of which 75% had been at their current institution for less than five years. Additionally, 100% of the female faculty had been teaching for 10 years or less and were not tenured. Overall there were not substantial differences in the witness of cheating. There were 75% or more of the female faculty who perceived that initiatives 1, 9, 10, 12, 14, and 16 would reduce cheating either greatly or moderately with 100% of them perceiving that initiatives 1 and 10 would reduce cheating greatly or moderately. (b) There were 25 male faculty members who completed the survey. Overall the male faculty member had been

teaching longer, over 50% had been with their current institution for 5 or more years, and 68% were tenured. The male faculty were not as positive about the initiatives reduce cheating. There were three initiatives that a large majority (75% or more) of male faculty perceived would reduce cheating greatly or moderately, which were initiatives 1, 9, and 12. These correspond with initiatives that female faculty also perceived would reduce cheating.

- **Years at Current Institution:** There were 18 faculty who had been at their current institution for less than five years. These faculty witnessed cheating less than faculty who had been at their current institution five years or more. Faculty less than five years reported witnessing cheating Never 33% of the time. Out of the faculty with five or more years at their current institution only one of fifteen reported witnessing cheating Never. The faculty had some similar perceptions of which initiatives would reduce cheating. Over 75% of all of the faculty, regardless of years at their current institution, perceived that initiatives 1, 9, and 12 would reduce cheating. Of the faculty with years at their current institution of 10 years or less, about 80% perceived that initiative 10 would also reduce cheating.
- **Years Teaching:** Overall, the years teaching is similar to the years at current institution. All faculty surveyed, regardless of years teaching perceived that initiatives 1, 9, and 12 could be effective in reducing cheating. Over 75% of faculty in at least one of the years teaching subgroups perceived that initiative 7, 10, 14, 15, or 16 could reduce cheating.
- **Tenure:** As mentioned 100% of the tenured faculty in the survey were male. Over half of the tenured faculty have been at their current institution for 10 or more years and

59% have been teaching for 15 or more years. Those who are tenured compared to those who are not tenured did not show significant differences in the initiatives that could be effective.

- **Cheating:** The faculty who believed that the current amount of cheating at their current institution was Moderate also witnessed cheating at higher levels. There was 65% who witnessed cheating 1-2 times each semester. Only 24% of these faculty members perceived the Honor System as effective. At least 70% of these faculty perceive that initiatives 1, 9, and 12 could reduce cheating. In comparison, faculty who perceived cheating at their current institution was Low reported witnessing cheating Rarely or Never 87% of the time and perceived the Honor System as effective or very effective 60% of the time. At least 70% of these faculty perceive that initiatives 1, 9, 10, and 16 could reduce cheating. Additionally, 20% of those who perceive cheating is Low at their current institution reported that initiatives 3 and 4 could increase the amount of cheating at their current institution.

Overall, the faculty surveyed perceived that the initiatives could have a positive influence on cheating levels by reducing cheating. As shown in Figure 2, the initiatives that faculty perceived would have the greatest influence on reducing cheating are initiatives 1, 9, 10, and 12. These initiatives have some common themes, which include being clear with students on what constitutes cheating and then holding students accountable if they cheat, encouraging students to be honest through good classroom management, and making sure faculty are trained on academic integrity issues so they can implement classroom management that discourages cheating. There were four initiatives that showed some higher levels of faculty who perceived the initiatives could increase cheating, as shown in Figure 4. These were initiatives 3, 4, 8, and 13. These

initiatives focused on faculty recognition and support when cheaters are caught and increasing collaboration among students along with penalizing students who do not confront cheaters. Faculty perceive that these measures could be counterproductive and encourage students to increase cheating.

Student subgroups of (a) demographics, (b) cheating perceptions at current institution, and (c) initiatives were analyzed for students. The following findings for each of the groups were:

- Gender: No significant differences.
- Commuter Status: No significant differences.
- Age: (1) There were 51 students under 21. They reported higher GPAs, perceived that cheating at their current institution was higher than other groups perceived, and witnessed cheating at higher levels. These students reported that 63% had witnessed cheating at least 1-2 times each semester compared to only 43% of all students surveyed. Students under 21 also perceived that for the majority of initiatives implementing them will not have as great an effect on reducing cheating as other groups of students. (2) The majority of students were 21-25 years old. This group was the majority of students surveyed. There were no significant differences from the overall student population surveyed. (3) There were 106 students aged 26-30 years old. These students also did not have significant differences. (4) There were 116 students 31 and older. These students are predominately seniors and graduate students (85%). Over 80% of students 31 and older reported they had witnessed cheating Rarely or Never compared to 57% of all students. These students also perceived that the cheating at their current institution was Low compared to the entire student population surveyed.

- Grade Level in College: There were five grade levels. Overall the grade levels did not show any significant differences other than age levels, which showed that younger students were earlier in college and older students tended to have more seniors and graduate students.
- Overall GPA: No significant differences.
- Cheating: Perceptions of the amount of cheating at a student's current institution corresponded with the amount of cheating personally witnessed. Students who had witnessed more cheating also perceived that the levels of cheating at higher levels. The 27 students who reported witnessing cheating Frequently also selected either High or Moderate for the amount of cheating at the institution and most considered the honor system at the institution to be Neither ineffective or effective or Ineffective. Also, out of the 16 initiatives these students perceived that 15 of them would have less effect on student cheating than the overall students surveyed. The one exception was initiative three, which 78% of these students perceived would reduce cheating compared to 69% of the overall students surveyed.

Overall, the students surveyed perceived that the initiatives could have a positive influence on cheating levels by reducing cheating. As shown in Figure 2, the initiatives that students perceived would have the greatest influence are initiatives 1, 3, 9, 10, 12, and 16. These initiatives have some common themes, which include being clear with students on what constitutes cheating and holding students accountable if they cheat; encouraging students to be honest through good classroom management, which could include allowing students to collaborate and educating students on real-world scenarios on the topic of ethics; and making sure faculty are trained on academic integrity issues and ways to discourage cheating. There



were two initiatives, numbers 4 and 14, that a higher level of students perceived could increase cheating. Slightly more than 10% of students perceived these could increase cheating.

### **Faculty and Student Associations between Variables Using CATPCA**

To complement the frequency analysis Categorical Principal Components Analysis (CATPCA) was used to analyze the data in the study. This was chosen because the data was categorical or ordinal rather than numerical in nature. The data was analyzed on two dimensions to determine themes from the responses. The following sections look at faculty and students independently and then as a combined group.

#### **Faculty:**

There were 33 faculty respondents to the survey. Table 1 shows that 24% were female and 76% male, slightly over half (54.5%) have been at the current institution less than 5 years, and about half (51.5%) are tenured. Analysis was done to find associations among variables in the perceptions of the faculty, see Appendix E for the Variance Accounted For (VAF) data tables. Figure 5 shows the VAF dimension 1 for the faculty members. Figure 8 shows the component loadings for the two dimensions and Appendix F gives the associated component loading data.

As shown, Initiatives 2, 5, 6, 7, 8, and 13 along with personal witness of cheating were significant variables in dimension 1 – Procedures. These initiatives all have a common theme of Procedures, which are strategies centered on enforcement of honor code policies for all members of an institution to reduce cheating. The initiatives include: require an educational program for students caught cheating; strengthen efforts to clearly communicate academic integrity policies; involve administration, faculty, and students in policy development, educational efforts, and adjudication; assign one office to oversee all training, education, and information efforts; award

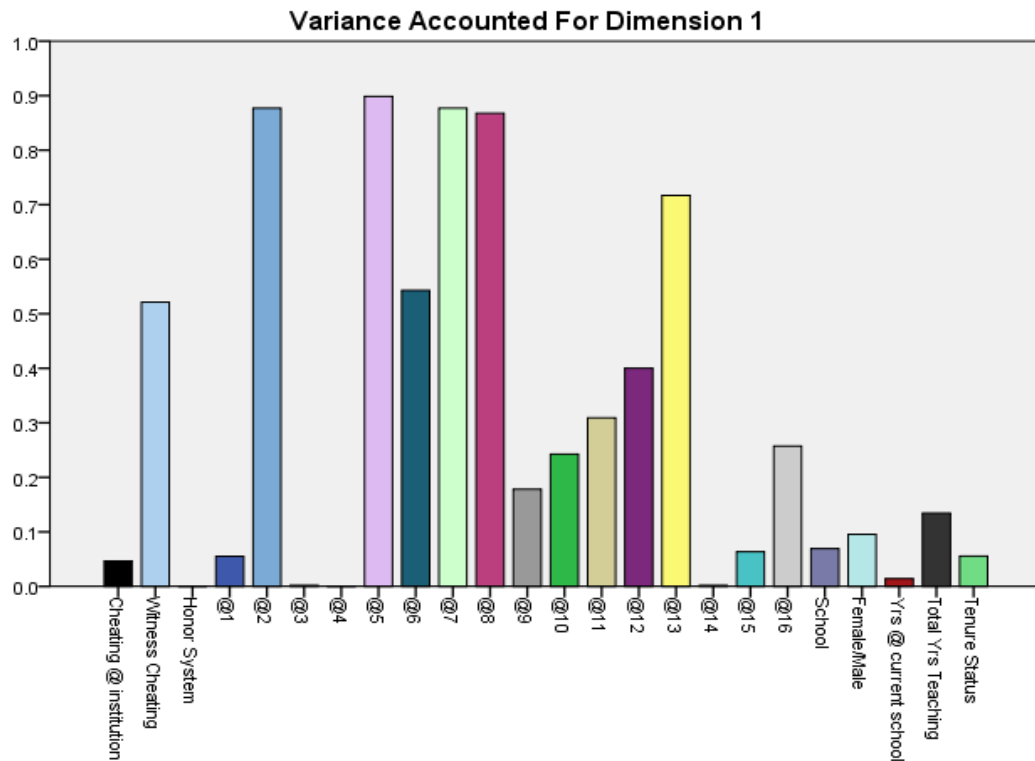


Figure 5. VAF: Dimension 1 for Accounting Faculty. The common theme among the most significant variables, which includes Initiatives 2, 5, 6, 7, 8, & 13 and Witness Cheating, is Procedures. These are strategies centered on enforcement of honor code policies for all members of an institution to reduce cheating.

and publicly recognizing faculty who confront cheaters and enforce policies on cheating; and provide faculty support during adjudication. These were found to be strongly associated for faculty members in the study. These initiatives, viewed together, tend to show that accounting faculty support the implementation of administrative procedures and strategies to enforce the honor code policies focused on the entire campus community. The accounting faculty surveyed view education and support for administration, faculty, and students as a key component to reducing academic dishonesty on campus.

The component loadings in Figure 8 and Appendix F show that all of the initiatives that show importance in dimension 1 - Procedures are positively associated. This shows that faculty perceptions are strongly associated for these initiatives as a group.

Figure 6 shows the VAF dimension 2 for the faculty members. The associated numerical results can be viewed in Appendix E. Dimension 2 had three items that showed relative importance. These were Initiatives 4 and 14 and faculty's view of the honor system. The two initiatives were (4) to penalize students who do not confront cheaters and (14) creation of a user-friendly settlement process for first-time offenders. The common theme among these items is Consequences, which are repercussions for students who do not support the honor code/system either directly or indirectly.

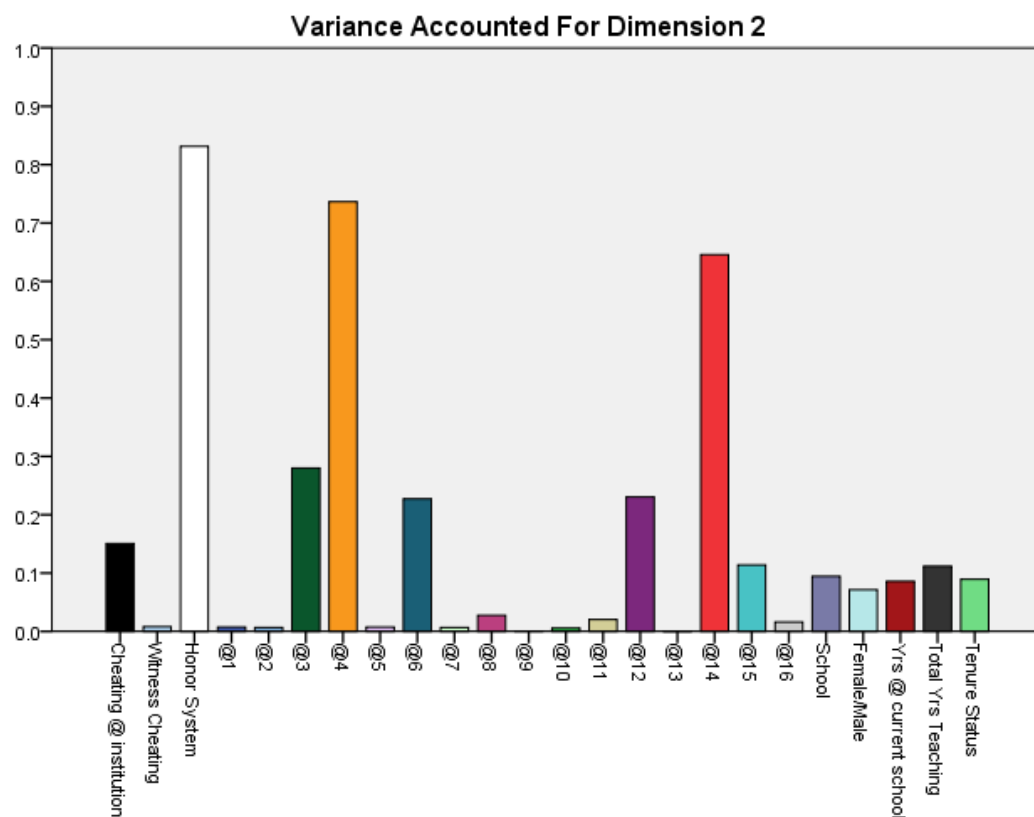


Figure 6. VAF: Dimension 2 for Accounting Faculty. The common theme among the most significant variables, which includes Initiatives 4 & 14 and honor system effectiveness, is Consequences. There are repercussions for students who do not support the honor code/system either directly or indirectly.

The component loadings in Figure 8 show that initiative 14 and honor system effectiveness are positively associated with each other. Figure 8 likewise shows that initiative 4 has a strong negative association with the other two important items. Accounting faculty who

view the honor system as effective tend to feel that creating a user-friendly settlement process for first-time offenders will help reduce cheating; however, they also tend to not support penalizing students who do not confront cheaters.

Figure 7 shows the accounting faculty VAF combined for both dimensions. When faculty dimension 1 and 2, Procedures and Consequences, are grouped together initiatives 2, 4, 5, 6, 7, 8, 12, 13, and 14 along with personal witness of cheating and perception of honor system effectiveness have relevant importance. However, the items associated with dimension 1 appear to be chiefly unrelated to those in dimension 2 as can be seen in the component loadings in Figure 8. Initiative 12 did not have relevant importance for dimension 1 or dimension 2; however, when combined this item does have an overall relevant importance showing moderate importance to both of the dimensions.

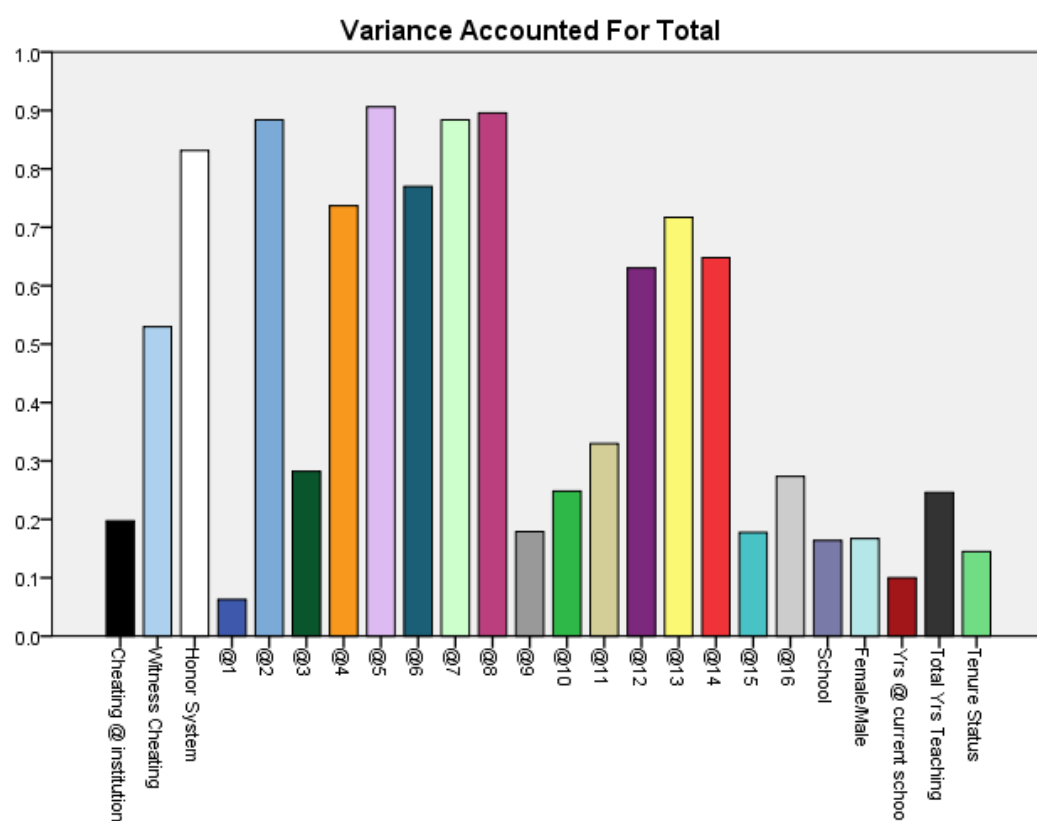


Figure 7. VAF: Dimensions 1 & 2 for Accounting Faculty. The accounting faculty VAF combined for both dimensions.

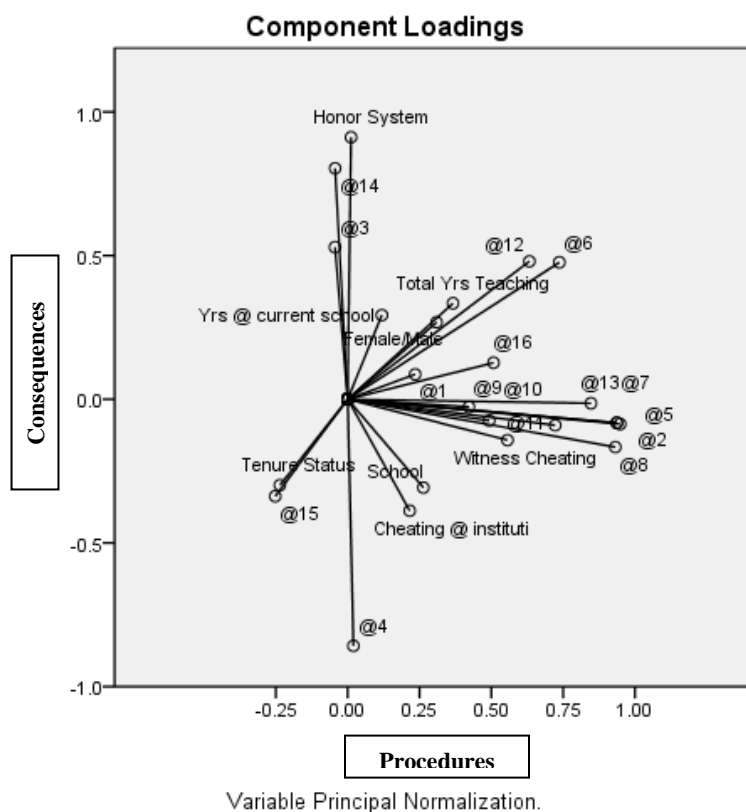


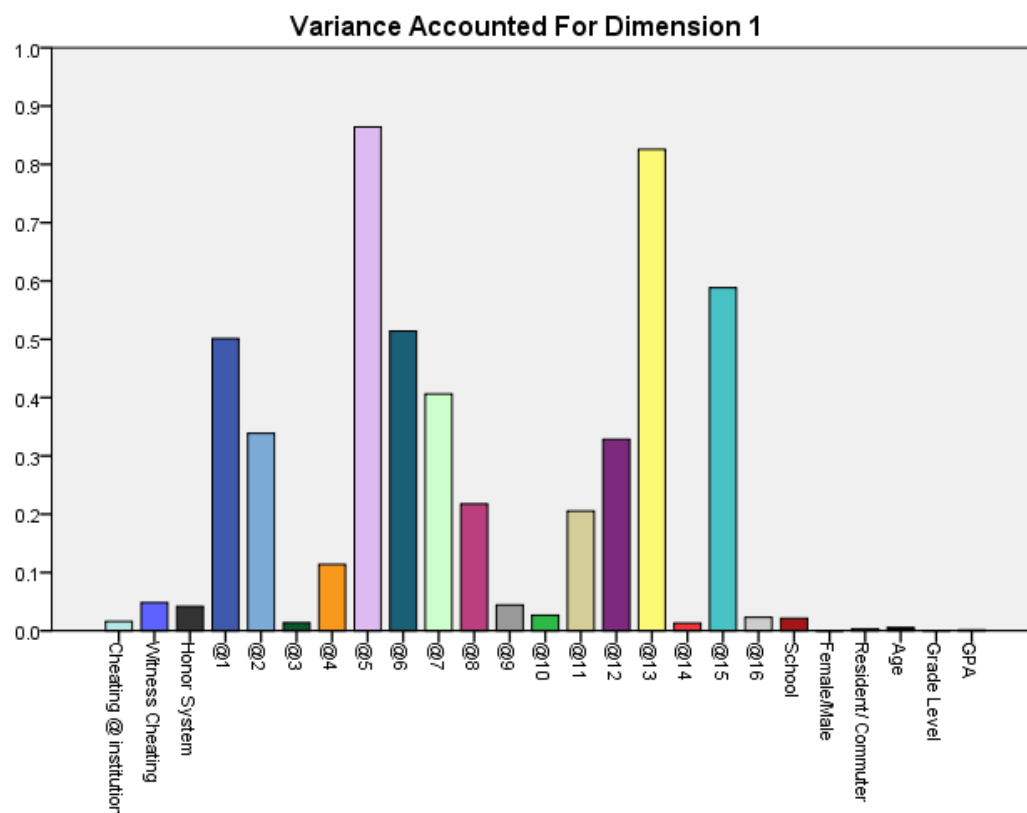
Figure 8. Component Loadings for Accounting Faculty. Shows the association of the items in the study to one another. Items that are farther from the center point in the same direction have a strong association. Items farther from the center in opposite directions have a strong negative association. Items at relatively right angles to each other are virtually unrelated.

### Students:

There were 676 total usable student respondents to the survey. Table 2 shows that 46% were female and 54% were male, over half (55.8%) are commuters, about two-thirds (67.1%) are 25 or younger, and over 84% have GPAs of 3.0 or higher. Analysis was done to determine associations among variables in the perceptions of the students, see Appendix E for data. Figure 9 shows the VAF dimension 1 for the students.

As shown in Figure 9, Initiatives 1, 5, 6, 13, and 15 are significant variables in dimension 1. These initiatives appear to have a common theme of Accountability. They show that students want clear communication of academic integrity policies and to be held accountable for

following those policies. The initiatives include placing an XF on transcripts for students caught cheating; clearly communicating academic integrity policies through publication and discussion; involving administration, faculty, and students in policy development, educational efforts, and adjudication; providing faculty support during adjudication; and including an honor pledge at the beginning of exams and projects. These were found to be strongly associated for the accounting students in the study. These initiatives, viewed together, tend to show that accounting students support policies that will hold them accountable for having academic integrity.



*Figure 9.* VAF: Dimension 1 for Accounting Students. The common theme among the most significant variables, which includes Initiatives 1, 5, 6, 13, & 15, is Accountability. These significant variables show that students want clear communication of academic integrity policies and to be held accountable for following those policies.

The VAF dimension 2 for students is in Figure 10. The associated numerical results can be viewed in Appendix E. Dimension 2 had three items that showed relative importance. These were student perception of the amount of cheating at the current institution, personal witness of

cheating at the current institution, and student's view of the current institution's honor system. The common theme among these items is Perception. A student's personal experiences has an effect on how the student perceives the effectiveness of the honor system.

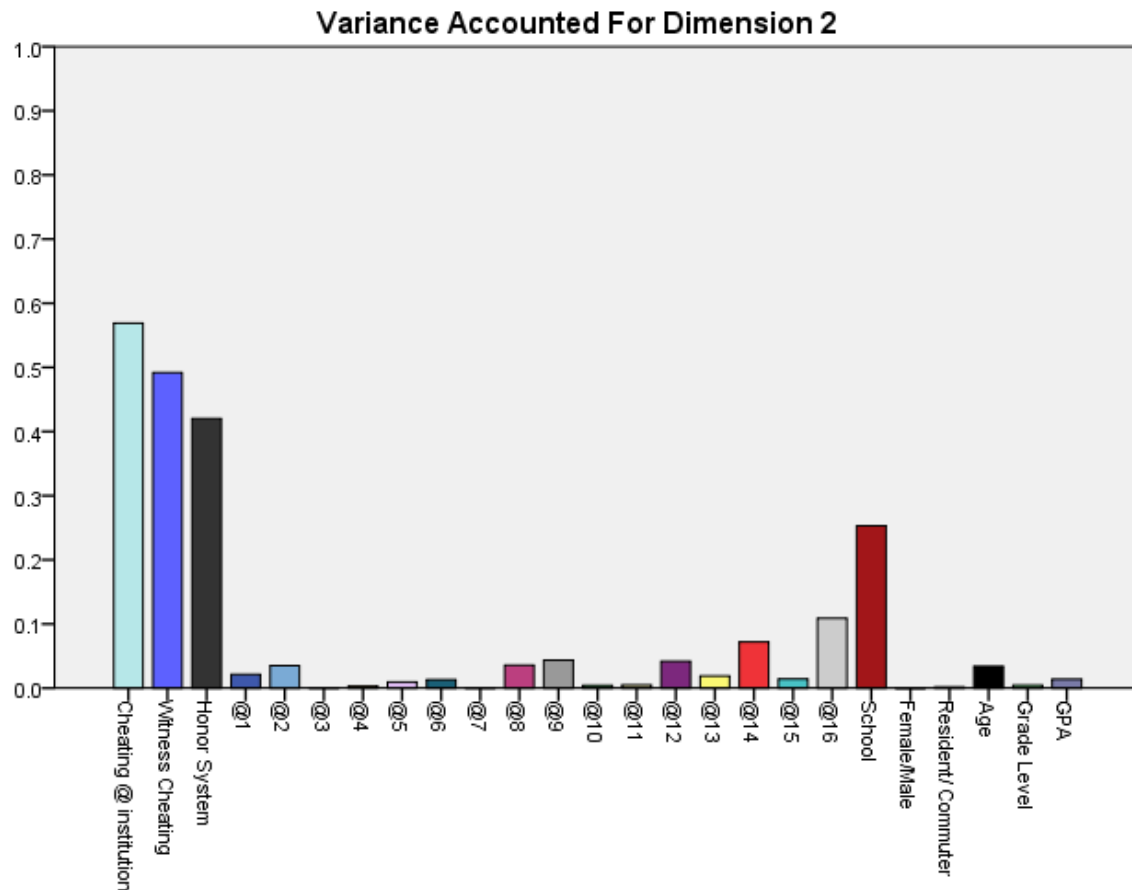


Figure 10. VAF: Dimension 2 for Accounting Students. The common theme among the most significant variables, which includes perception of the amount of cheating at the institution, personal witness of cheating, and perception of honor system effectiveness, is Perception. These show that a student's personal experiences are tied to the student's perception of honor system effectiveness.

The component loadings in Figure 12 show that perception of the amount of cheating at the institution and personal witness of cheating are associated with each other. Figure 12 also shows that perception of honor system effectiveness has a strong negative association with the other two important items. Accounting students who believe and have experienced that the amount of cheating at the current institution is low tend to feel that the honor system designed to reduce cheating at the institution is more effective. In contrast, those students who have

witnessed higher levels of cheating perceive that the amount of cheating is higher and that the honor system is not as effective at reducing cheating.

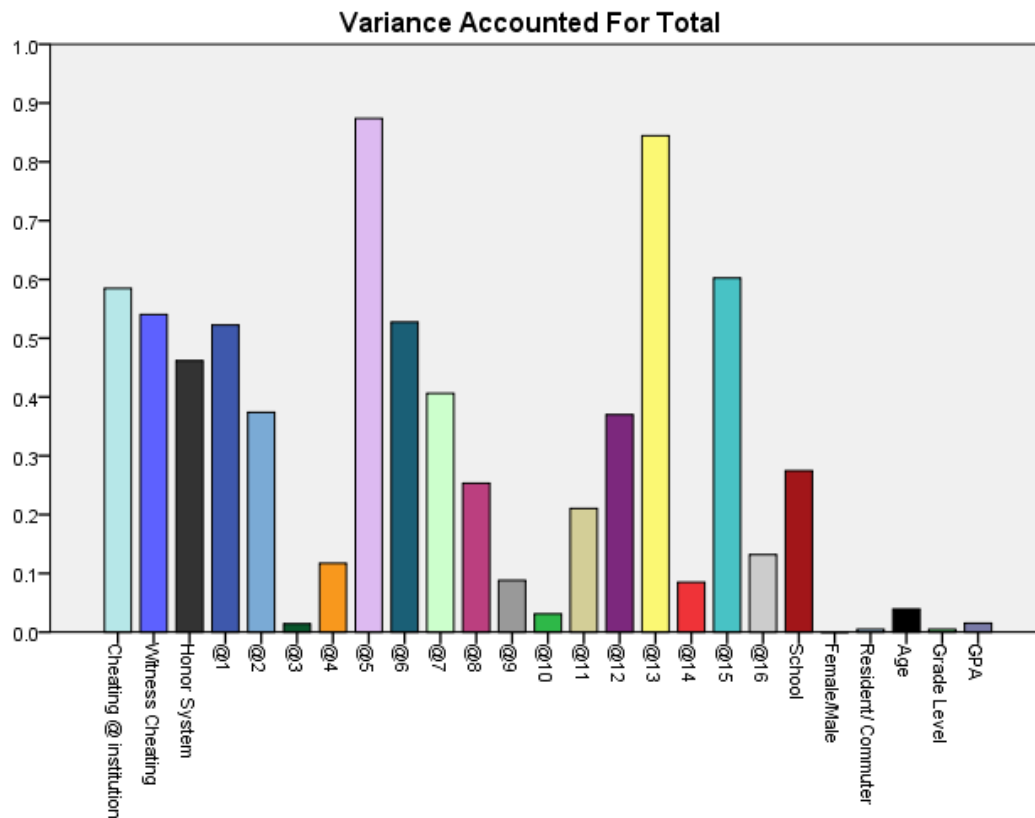


Figure 11. VAF: Dimensions 1 & 2 for Accounting Students. The accounting student VAF combined both dimensions.

Figure 11 shows the accounting student VAF combined for both dimensions. When student dimensions 1 and 2 are grouped together initiatives 1, 5, 6, 13, and 15 along with perception of the amount of cheating at the institution, personal witness of cheating, and perception of honor system effectiveness have relevant importance. However, the items associated with dimension 1 appear to be chiefly unrelated to those in dimension 2 as can be seen in the component loadings in Figure 12.



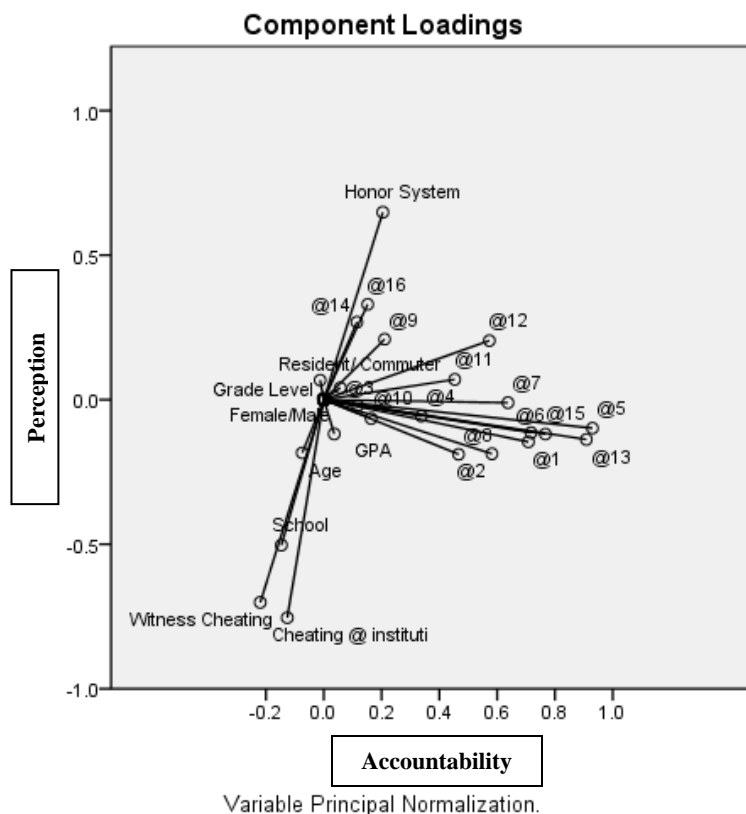


Figure 12. Component Loadings for Accounting Students. Shows the association of the items in the study to one another. Items that are farther from the center point in the same direction have a strong association. Items farther from the center in opposite directions have a strong negative association. Items at relatively right angles to each other are virtually unrelated.

## Overall Results

Students and faculty both perceive that the initiatives could reduce cheating at their current institutions. However, the opinions are not consistent across all faculty and student subgroups. The faculty perceive that initiatives that focus on being clear with students on what constitutes cheating and then holding students accountable if they cheat, encouraging students to be honest through good classroom management, and making sure faculty are trained on academic integrity issues so they can implement classroom management that discourages cheating are primary themes that could reduce cheating.

Neither faculty nor students perceive the cheating levels at their current institutions to be high; however, faculty perceive cheating levels to be more moderate compared to students who

perceive cheating levels are lower. A positive result is that over 50% of both faculty and students reported that they witness cheating either Rarely (less than one time each semester) or Never.

The views of faculty and students on what initiatives could reduce cheating either greatly or moderately were similar. Some notable items are that both faculty and students perceived initiatives 1 and 9 as the initiatives that would most greatly reduce cheating. There was also a fairly strong consensus regarding initiatives 10 and 12. Over 70% of faculty and students perceived these two initiatives would reduce cheating either greatly or moderately. The initiatives 4, 8, 11, and 15 were perceived by over 50% of both faculty and students to have no impact on cheating.

The primary differences came with initiatives 3, 5, 13, and 14. Students perceived that initiative 3 would reduce cheating with almost 70% of students selecting greatly or moderately reduce cheating. Faculty only selected that this initiative would reduce cheating 30% of the time and over 15% of faculty selected that by implementing this initiative cheating would increase. More than 60% of faculty perceived that initiative 5 would reduce cheating compared to only 40% of students. The majority of students perceived there would be no impact. Faculty perception of initiative 14 was lower than students. About 40% of faculty perceived initiative 14 would reduce cheating but almost 50% reported it would have no impact. More than 60% of students perceived 14 would reduce cheating. Faculty and students both reported in the 40% range that initiative 13 would reduce cheating; however, 60% of students perceived it would have no impact whereas over 33% of faculty perceived it would increase cheating.

These findings, along with the relationships discussed in the CATPCA analysis, give an understanding of accounting faculty and student perceptions on what initiatives could be implemented to reduce cheating. Overall it appears that implementation of procedures and

strategies to enforce honor code policies; use of classroom management and education strategies to educate and support administration, faculty, and students; developing a culture and perception that honor is highly valued; and having consequences that hold students accountable for knowing and following the honor system are key components to reducing academic dishonesty on campus.

## **CHAPTER V**

### **CONCLUSIONS**

As stated, the purpose of this research study was to assess best practice initiatives to reduce cheating from the perspective of accounting faculty members and students majoring in accounting. The study was guided by the primary research question, which best practice strategies to reduce academic dishonesty are perceived to be effective by accounting faculty and students majoring in accounting. The additional underlying questions focused on determining the best practice strategies that accounting faculty members perceive would reduce academic dishonesty at their institution, the best practice strategies that students majoring in accounting perceive would reduce academic dishonesty at their institution, and any differences in subgroups' perceptions of which best practice strategies would reduce academic dishonesty of students majoring in accounting. The study was administered at three public post-secondary institutions and one private post-secondary institution in the Rocky Mountain Region of the United States.

#### **Discussion of Research Findings**

The researcher in the study surveyed accounting faculty and students to determine their perceptions on, not only their perceptions of how the 16 academic integrity initiatives could affect student academic honesty, but also on faculty and students current perceptions of the academic honesty on their campuses. In addition, selected subgroups are analyzed to determine if there are differences in their perceptions.

The demographics of the accounting faculty show that the majority of those surveyed are male (75.8%), have been teaching for 10 or fewer years (54.5%), have been at their current institution for less than 5 years (54.5%), and are tenured (51.5%). The student demographics

show the majority of students are male (54.1%), commute to school (55.8%), are between the ages of 21-25 (59.6%), are seniors (52.4%), and have GPAs of 3.5 or higher (50.4%). See tables 1 and 2 for demographic data.

Overall, accounting faculty and students perceive the current cheating levels at their institutions as moderate to low. Only 1 faculty and only 22 students surveyed indicate they perceive the levels of cheating as high, which is only 3.2% of those surveyed. There is a difference between faculty and students in that over 51% of faculty feel that the current cheating levels are moderate compared to only about 37% of students. In contrast, almost 60% of students perceive current cheating levels as low compared to only 45.5% of faculty. Additionally, over 50% of accounting faculty and students surveyed report that they witnessed cheating less than one time each semester or not at all. These results appear to suggest that cheating levels and perceptions, at least at these four universities, may be lower than what some other studies have found. This may be in conjunction with the effectiveness of the honor systems at the four universities. The accounting students at these universities report over 60% perceive that their honor systems are effective or very effective.

The primary initiatives that are perceived to moderately or greatly reduce cheating are initiatives 1 and 9. Initiative 1 is, Placing an “XF” on official transcripts when a student has been found responsible for cheating. “XF” would be defined as “failed class due to academic dishonesty” and could be changed to an “F” upon completion of an educational program and the successful petition of the Honor Court. Initiative 9 is, Provide training for faculty on academic integrity issues such as how to discourage cheating via effective classroom management, how to properly confront infractions, and what current research offers as to why students cheat. These

initiatives focus on educating faculty and holding students accountable while also allowing students an opportunity for reparation and education.

Initiatives 10, 12, and 16 also have strong perceptions from both faculty and students that they would promote reductions in cheating. Initiative 10 is, Promote effective classroom management strategies - Examples include the utilization of multiple exams, maintaining small class sizes, and prohibiting calculators and other electronic devices. Initiative 12 is, Provide clear definitions and specific examples of what constitutes cheating under the College's honor code. Initiative 16 is, Require accounting majors during the accounting program (not just one class) to read and discuss real-world case studies/works that review specific accounting scenarios dealing with business ethics. These works could include, books, articles, and ethics case studies. These initiatives focus on the education of the students and making a concerted effort as an accounting department to build a culture of ethics.

### **Recommendations for Accounting Departments and Universities in General**

The overall research supports implementing some of the 16 initiatives for reducing cheating. The primary focus should be on building a culture of ethics within the accounting department. This should start with educating the accounting faculty on the university honor system and classroom management strategies that help deter cheating. Accounting departments could then focus on implementing specific initiatives into the classroom management and curriculum to educate the accounting students. As noted by Bing et al. (2012) that just having an honor code or documented punishments does not necessarily lead to reduced cheating. They found that the greatest effect was reminding students of both the honor code and giving a realistic course warning, which reduced student cheating to 12.5% compared to 50% when

neither was implemented (p. 42). This recommendation is supported by the following findings from this study.

Accounting departments could start by making sure all of their faculty are properly trained as defined in Initiative 9. Both faculty and students ranked this initiative in the top two initiatives to reduce cheating. The data shows that 94% of faculty and almost 78% of students perceive that this initiative would either greatly or moderately reduce cheating, with almost 79% of faculty and about 55% of students reporting that it would moderately reduce cheating. This is a fairly easy initiative to implement at a department and/or college level. If possible, it is an initiative that if university administrators would get behind, could be implemented campus wide.

A second initiative that could be implemented directly into an accounting program; however, it would take some time and effort is initiative 16. The works discussed in classes could include, books, articles, and ethics case studies. Over 60% of faculty and over 70% of students perceived this would moderately or greatly reduce cheating. Additionally, 0% of faculty and 1.3% of students perceived this would increase cheating. The perception is that if students understand what has occurred in the real world they will understand better why it is important to be ethical in school.

A third initiative that could be applied by accounting programs is initiative 10. With the advent of technology it has become easier to create multiple exams and to assign homework that is algorithmic, thus students can do the same problem, but have different values in the problem. Additionally, quizzes and exams can be structured to be algorithmic if the question is quantifiable and exam questions can be reordered so students can have the same questions, but not in the same order, thus making it more difficult to directly cheat off someone else's exam.

A fourth initiative that could be applied at the departmental level, but would probably have more impact if applied at the university level, is initiative 12. This would allow students to better understand the specifics of the various forms of cheating. It would also make it easier for faculty to hold students accountable since the faculty would know that the students have learned what constitutes cheating and would not be able to plead ignorance.

The highest selected initiative to reduce cheating is initiative 1. This is one that an accounting department cannot implement alone. It would need to be implemented at the university level. Universities should discuss implementing the policy of: Placing an “XF” on official transcripts when a student has been found responsible for cheating. “XF” would be defined as “failed class due to academic dishonesty” and could be changed to an “F” upon completion of an educational program and the successful petition of the Honor Court. This initiative is found to be perceived by both faculty and students to overwhelmingly reduce cheating, even when analyzing subsets such as gender. The study exhibits that 94% of faculty and over 80% of students designated that this initiative would either greatly reduce or moderately reduce cheating, with over 42% of faculty and over 37% of students perceiving that it would greatly reduce cheating. Therefore, this could be a good policy to implement university wide, but there would need to be follow through by the administration to make sure the policy was executed for it to have a positive effect.

The one initiative that has a great disparity between faculty and students is initiative 3: Faculty encouragement of more collaboration on homework assignments in an attempt to better prepare students for today’s work force and to reduce the temptation of inappropriate collaboration on assignments previously expected to be completed independently. Students overwhelmingly perceive that this initiative would reduce cheating with 33% selecting it would



greatly reduce cheating and another 36% selecting it would moderately reduce cheating. A little over 7% of students feel this initiative would increase cheating. Only 30% of faculty perceive this initiative would reduce cheating and over 15% feel it would moderately increase cheating. If implemented properly this initiative might help reduce cheating if combined with other initiatives. However, the CATPCA analysis did not show any strong connection of initiative 3 with other initiatives or demographics.

It is recommended that accounting department faculty work together to build a culture of ethics within the accounting department. First, accounting faculty need to be educated on the university honor system. Additionally, accounting faculty need to learn quality classroom management strategies that help deter cheating. Finally, accounting departments could focus on implementing specific initiatives noted above to educate accounting students on the honor system and use classroom management strategies to reduce cheating. If a department does implement an initiative or some initiatives, these will need to be maintained to truly work. A concern that accounting departments will have upon implementation is developing a strategy to maintain the initiative(s) effectiveness over the long term.

### **Recommendations for Future Research**

There has been some research on the actual implementation of best practices in the last 10-15 years. Prior to that time most of the research focused on levels of cheating and the demographics of those individuals who cheat. The research that has been done on implementing academic policies to reduce cheating has primarily focused on honor codes/systems and comparing schools who have an active honor system compared to schools that either do not have an honor system or the honor system is not actively discussed and/or implemented. Additionally,

there has not been a lot of research that focuses specifically on accounting students cheating levels or implementation of policies to reduce the levels of cheating among accounting students.

This research study focuses on perceptions of accounting faculty and students regarding cheating and policies that could reduce cheating. This study focuses on 16 initiatives that could reduce cheating. These initiatives may not be the only ones that could be implemented to reduce cheating and increase academic honesty. Therefore, there could be more research done to determine if there are additional initiatives that could reduce cheating that could be studied.

Due to the limited scope of those surveyed the findings are not generalizable to other college or student populations. Other faculty and student populations may perceive other initiatives to be more effective in reducing cheating than the accounting faculty and students surveyed for this study.

Future researchers could focus on expanding on this study by adding a qualitative component. This would allow for more in-depth understanding of how faculty and students perceive the initiatives. Research could also extend into other specific faculty and student populations. Researchers could see if there are differences in the perceptions of faculty and/or students in other majors in what is perceived as effective in reducing cheating.

Making a connection with those working in accounting professions who have already completed an accounting degree could also be made. Accounting professionals could be surveyed about the initiatives to see if professionals with accounting degrees show similar perceptions of what would be effective in reducing cheating.

Ultimately research needs to move on from what people think will work to determine what does work to reduce cheating. Does implementing some, any, or all of the best practice strategies reduce cheating? Therefore, research could be done on a small, possibly departmental

level, or larger scale if feasible to see if implementing specific initiatives are effective in reducing cheating.

Finally, research could be done on how this translates into actual practice. How does the educational experience of accounting professionals or other professionals convert to integrity in actual practice? Is there a relationship between practice strategies during a person's time being educated in accounting or other majors and the level of dishonesty in a person's professional career?

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## APPENDIX A

### ACADEMIC INTEGRITY SURVEY: FOR FACULTY

#### Faculty Consent Form for *Perceptions of Academic Honesty* Survey

Dear Faculty:

We are **inviting** you to complete a survey. (***Note: completing the survey is strictly voluntary.***) Those being invited to participate are individuals who currently teach courses in higher education accounting programs on a fulltime basis. The principal investigator is Gordon Lee Saathoff an accounting faculty member at BYU-Idaho, in Rexburg, Idaho.

The purpose of this survey is to gain insight into individual's **perceptions** of academic honesty on their campuses and specific initiatives that could affect academic honesty. The survey asks questions about participants' **perceptions** of academic honesty in their accounting programs and how specific initiatives would affect cheating levels. It is our hope that information from this survey will contribute to a better understanding of initiatives that could be employed to reduce cheating levels.

Do NOT put your name or any other distinguishing information on the survey or on the scantron. Your responses to the survey will be anonymous. Your name will not be collected or appear anywhere on the survey and complete privacy will be guaranteed.

Participation is completely voluntary and you may withdraw at any time. There is no reward for participating or consequence for not participating.

<p>The estimated time to complete the survey is 10-15 minutes.</p>
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<p>Once you have completed the survey, return the survey to the designated person who will collect them and put all surveys into an envelope for delivery.</p>
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For further information regarding this research please contact:  
Gordon Lee Saathoff, Principal Investigator and Accounting Faculty @ BYU-Idaho in Rexburg, Idaho, @ (208) 496-3853, email: saathoffl@byui.edu.

If you have any questions about your rights as a research participant you may contact:  
Idaho State University Human Subjects Committee @ (208)282-2179, email: humsubj@isu.edu.

Thank you in advance for your cooperation and support.

**DIRECTIONS:** Please do not write on this survey. Included is a Scantron sheet where you will mark your responses to each question. DO NOT include any of your personal information on the Scantron (i.e. Name, ID, Class, Teacher, etc....). Fill in the appropriate bubble on the Scantron that correlates with the Survey initiative question.

*Part 1: Please select the most appropriate answer(s) and mark the answer(s) on the Scantron.*

**As a member of the teaching Faculty:**

1. Your gender:
  - (A) Female
  - (B) Male
2. You have been at your current institution for:
  - (A) Less than 5 years
  - (B) 5 – 10 years
  - (C) More than 10 years
3. The number of total years you have been teaching (current institution plus any prior institutions):
  - (A) Less than 5 years
  - (B) 5 – 10 years
  - (C) 10 – 15 years
  - (D) 15 – 20 years
  - (E) More than 20 years
4. Your status at your current institution is:
  - (A) Tenured
  - (B) Non-tenured
5. Credentials that you hold:
  - (A) Certified Public Accountant (CPA)
  - (B) Certified Financial Analyst (CFA)
  - (C) Certified Management Accountant (CMA)
  - (D) Certified Fraud Examiner (CFE)
  - (E) Certified Internal Auditor (CIA)
  - (F) Certified Information Systems Auditor (CISA)
6. Accounting jobs that you held other than teaching accounting:
  - (A) Tax accountant
  - (B) Public, external auditor
  - (C) Internal auditor
  - (D) Managerial accountant
  - (E) CFO and/or Controller
  - (F) Governmental accountant
  - (G) Other accounting job
  - (H) The only accounting job has been teaching accounting

**Part 2:** For each item in this section, please select the single answer that reflects your opinion

7. I **believe** that the current amount of cheating at my current institution is:

- (A) High
- (B) Moderate
- (C) Low

8. I have personally witnessed cheating at my current institution:

- (A) Frequently (6+ times each semester)
- (B) Often (3-5 times each semester)
- (C) Seldom (1-2 times each semester)
- (D) Rarely (less than 1 time each semester)
- (E) Never

9. I **believe** the Honor System at my current institution, designed to reduce cheating, is:

- (A) Very Effective
- (B) Effective
- (C) Neither effective or ineffective
- (D) Ineffective
- (E) Very Ineffective
- (F) N/A (not aware that there is an Honor System)

**Part 3:** Please use the following scale to rate each proposed initiative. Mark the scantron with your selection.

- A. I think this initiative would GREATLY REDUCE cheating at my current institution**
- B. I think this initiative would MODERATELY REDUCE cheating at my current institution**
- C. I think this initiative would have NO IMPACT on reducing cheating at my current institution**
- D. I think this initiative would MODERATELY INCREASE cheating at my current institution**
- E. I think this initiative would GREATLY INCREASE cheating at my current institution**

**10. Initiative Number 1**

Placing an “XF” on official transcripts when a student has been found responsible for cheating. “XF” would be defined as “failed class due to academic dishonesty” and could be changed to an “F” upon completion of an educational program and the successful petition of the Honor Court.

**11. Initiative Number 2**

Require an educational program for all students found responsible for cheating. This program would include discussion on moral and ethical development as well as academic skills training.

**12. Initiative Number 3**

Faculty encouragement of more collaboration on homework assignments in an attempt to better prepare students for today’s work force and to reduce the temptation of inappropriate collaboration on assignments previously expected to be completed independently.

**13. Initiative Number 4**

Penalize those students who do not confront cheaters. If students are to assist in the promotion of integrity, then students must be held accountable for not confronting incidences of cheating.

**14. Initiative Number 5**

Strengthen efforts to clearly communicate the College's policy on academic integrity by publishing it in all appropriate publications (handbooks, applications, web pages, syllabi) and discussing it at college functions (orientations, opening convocations, campus forums).

**15. Initiative Number 6**

Involve administrators, students and faculty in policy development, educational efforts, and adjudication of alleged offenses. Examples for involvement could include policy review committees, design and implementation of educational forums and composition of the Honor Court.

**16. Initiative Number 7**

Assign one office the responsibility of coordinating academic integrity initiatives. This office could house records, train Honor Court members, educate faculty on academic integrity issues, and coordinate educational and informational efforts.

**17. Initiative Number 8**

Recognize those faculty members who properly confront and process instances of cheating. Student newspaper announcements, annual awards, campus mailings and appreciation luncheons could be used to demonstrate appreciation.

**18. Initiative Number 9**

Provide training for faculty on academic integrity issues such as how to discourage cheating via effective classroom management, how to properly confront infractions, and what current research offers as to why students cheat.

**19. Initiative Number 10**

Promote effective classroom management strategies - Examples include the utilization of multiple exams, maintaining small class sizes, and prohibiting calculators and other electronic devices.

**20. Initiative Number 11**

Require a ½ hour credit course on moral and ethical behavior for all first year students. This class would be team-taught by administrators, faculty and student honor court representatives and would focus on the importance of integrity of all community or society members and would combat the normalizing of deviant behaviors.

**21. Initiative Number 12**

Provide clear definitions and specific examples of what constitutes cheating under the College's honor code.

**22. Initiative Number 13**

Provide additional support for faculty during the formal adjudication process (available legal counsel, informal hearings, and clear communication from the Honor Court regarding the process after a charge has been filed).

**23. Initiative Number 14**

Creation of a user-friendly settlement process in which faculty can resolve first-time minor cheating offenses directly with the student through a mutually endorsed settlement that carries a maximum sanction of an “F” for the course.

**24. Initiative Number 15**

Include an honor pledge at the beginning of all exams and projects. Students read the pledge and either sign their name, if the exam/project is paper/pencil, or select an “agree” box, if the exam/project is electronic.

**25. Initiative Number 16**

Require accounting majors during the accounting program (not just one class) to read and discuss real-world case studies/works that review specific accounting scenarios dealing with business ethics. These works could include, books, articles, and ethics case studies.

*Thank you for your participation*

## APPENDIX B

### ACADEMIC INTEGRITY SURVEY: FOR STUDENTS

#### Student Consent Form for *Perceptions of Academic Honesty* Survey

Dear Student:

We are **inviting** you to complete a survey. (*Note: completing the survey is not required for any accounting course you are currently taking or that you will take, not required by your accounting program, and will have no effect on your grades or class standing.*) Those being invited to participate are individuals who currently take courses in higher education accounting programs and are declared accounting majors. The principal investigator is Gordon Lee Saathoff an accounting faculty member at BYU-Idaho, in Rexburg, Idaho.

The purpose of this survey is to gain insight into individual's **perceptions** of academic honesty on their campuses and specific initiatives that could affect academic honesty. The survey asks questions about participants' **perceptions** of academic honesty in their accounting programs and how specific initiatives would affect cheating levels. It is our hope that information from this survey will contribute to a better understanding of initiatives that could be employed to reduce cheating levels.

Do **NOT** put your name or any other distinguishing information on the survey or on the scantron. Your responses to the survey will be anonymous. Your name will not be collected or appear anywhere on the survey and complete privacy will be guaranteed.

Participation is completely voluntary and you may withdraw at any time. There is no reward for participating or consequence for not participating.

The estimated time to complete the survey is 10-15 minutes.

Once you have completed the survey, return the survey to the designated person who will collect them and put all surveys into an envelope for delivery.

For further information regarding this research please contact:  
Gordon Lee Saathoff, Principal Investigator and Accounting Faculty @ BYU-Idaho  
in Rexburg, Idaho, @ (208) 496-3853, email: saathoffl@byui.edu.

If you have any questions about your rights as a research participant you may contact:  
Idaho State University Human Subjects Committee @ (208)282-2179, email:  
humsubj@isu.edu.



Note: You must be 18 years or older and have read and understood this cover letter to participate.

Thank you in advance for your cooperation and support.

**DIRECTIONS:** Please do not write on this survey. Included is a Scantron sheet where you will mark your responses to each question. DO NOT include any of your personal information on the Scantron (i.e. Name, ID, Class, Teacher, etc....). Fill in the appropriate bubble on the Scantron that correlates with the Survey initiative question.

***Part 1:*** Please select the most appropriate answer(s) and mark the answer(s) on the Scantron.

**As a higher education student:**

1. Your Gender:
  - (A) Female
  - (B) Male
2. Residential or commuter:
  - (A) Residential (live in a residence hall)
  - (B) Adjacent (live in a residence within walking distance of campus)
  - (C) Commuter
3. Current Age:
  - (A) Younger than 21
  - (B) 21-25
  - (C) 26-30
  - (D) 31-35
  - (E) 36-40
  - (F) 41-45
  - (G) 46-50
  - (H) Older than 50
4. Grade level in college:
  - (A) Freshman (0-30 credits completed in an undergraduate program)
  - (B) Sophomore (31-60 credits completed in an undergraduate program)
  - (C) Junior (61-90 credits completed in an undergraduate program)
  - (D) Senior (91 or more credits completed in an undergraduate program)
  - (E) Graduate student (working on Master's or Doctorate)
5. Current Overall GPA:
  - (A) 3.5-4.0
  - (B) 3.0-3.49
  - (C) 2.5-2.99
  - (D) 2.0-2.49
  - (E) Less than 2.0
6. Credentials that you currently hold or plan to earn someday:
  - (A) Certified Public Accountant (CPA)
  - (B) Certified Financial Analyst (CFA)
  - (C) Certified Management Accountant (CMA)
  - (D) Certified Fraud Examiner (CFE)
  - (E) Certified Internal Auditor (CIA)
  - (F) Certified Information Systems Auditor (CISA)

**Part 2:** For each item in this section, please check the single answer that reflects your opinion

7. I **believe** that the current amount of cheating at my current institution is:

- (A) High
- (B) Moderate
- (C) Low

8. I have personally witnessed cheating at my current institution:

- (A) Frequently (6+ times each semester)
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9. I **believe** the Honor System at my current institution, designed to reduce cheating, is:

- (A) Very Effective
- (B) Effective
- (C) Neither effective or ineffective
- (D) Ineffective
- (E) Very Ineffective
- (F) N/A (not aware that there is an Honor System)

**Part 3:** Please use the following scale to rate each proposed initiative. Mark the scantron with your selection.

- A. I think this initiative would GREATLY REDUCE cheating at my current institution**
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- C. I think this initiative would have NO IMPACT on reducing cheating at my current institution**
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- E. I think this initiative would GREATLY INCREASE cheating at my current institution**

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Placing an “XF” on official transcripts when a student has been found responsible for cheating. “XF” would be defined as “failed class due to academic dishonesty” and could be changed to an “F” upon completion of an educational program and the successful petition of the Honor Court.

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**12. Initiative Number 3**

Faculty encouragement of more collaboration on homework assignments in an attempt to better prepare students for today’s work force and to reduce the temptation of inappropriate collaboration on assignments previously expected to be completed independently.

**13. Initiative Number 4**

Penalize those students who do not confront cheaters. If students are to assist in the promotion of integrity, then students must be held accountable for not confronting incidences of cheating.

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Strengthen efforts to clearly communicate the College's policy on academic integrity by publishing it in all appropriate publications (handbooks, applications, web pages, syllabi) and discussing it at college functions (orientations, opening convocations, campus forums).

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Promote effective classroom management strategies - Examples include the utilization of multiple exams, maintaining small class sizes, and prohibiting calculators and other electronic devices.

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Provide clear definitions and specific examples of what constitutes cheating under the College's honor code.

**22. Initiative Number 13**

Provide additional support for faculty during the formal adjudication process (available legal counsel, informal hearings, and clear communication from the Honor Court regarding the process after a charge has been filed).

**23. Initiative Number 14**

Creation of a user-friendly settlement process in which faculty can resolve first-time minor cheating offenses directly with the student through a mutually endorsed settlement that carries a maximum sanction of an “F” for the course.

**24. Initiative Number 15**

Include an honor pledge at the beginning of all exams and projects. Students read the pledge and either sign their name, if the exam/project is paper/pencil, or select an “agree” box, if the exam/project is electronic.

**25. Initiative Number 16**

Require accounting majors during the accounting program (not just one class) to read and discuss real-world case studies/works that review specific accounting scenarios dealing with business ethics. These works could include, books, articles, and ethics case studies.

*Thank you for your participation*

## **APPENDIX C**

### **SUPPORTING LITERATURE FOR IDENTIFIED BEST PRACTICES NOT INCLUDED IN THE ORIGINAL GAMBILL (2003) STUDY**

Initiative #15 Include an honor pledge at the beginning of all exams and projects

- Ariely (2013)
- Mazar, Amir, & Ariely (2008)
- McCabe & Trevino (1993)
- McCabe & Trevino (1997)
- Shu, Gino, & Bazerman (2011)

Initiative #16 Require reading and discussion of real-world case studies/works

- Jennings (2004)
- Martinov-Bennie & Mladenovic (2015)

## APPENDIX D

### FACULTY AND STUDENT: FREQUENCIES OF PERCEPTIONS OF ACADEMIC INTEGRITY INITIATIVES TO AFFECT/REDUCE CHEATING

Initiative number - description	Faculty		Student	
	#	%	#	%
1) Placing an "XF" on official transcripts of cheaters				
A) Greatly Reduce Cheating	14	42.4%	254	37.6%
B) Moderately Reduce Cheating	17	51.5%	287	42.5%
C) No Impact on Cheating	2	6.1%	124	18.4%
D) Moderately Increase Cheating	0	0.0%	8	1.2%
E) Greatly Increase Cheating	0	0.0%	2	0.3%
2) Require an educational program for cheaters				
A) Greatly Reduce Cheating	1	3.0%	81	12.0%
B) Moderately Reduce Cheating	14	42.4%	261	38.6%
C) No Impact on Cheating	18	54.5%	316	46.7%
D) Moderately Increase Cheating	0	0.0%	13	1.9%
E) Greatly Increase Cheating	0	0.0%	5	0.7%
3) Encouragement of more collaboration on homework assignments				
A) Greatly Reduce Cheating	2	6.1%	224	33.1%
B) Moderately Reduce Cheating	8	24.2%	244	36.1%
C) No Impact on Cheating	18	54.5%	158	23.4%
D) Moderately Increase Cheating	5	15.2%	38	5.6%
E) Greatly Increase Cheating	0	0.0%	12	1.8%
4) Penalize students who do not confront cheaters				
A) Greatly Reduce Cheating	0	0.0%	45	6.7%
B) Moderately Reduce Cheating	9	27.3%	148	22.0%
C) No Impact on Cheating	18	54.5%	401	59.5%
D) Moderately Increase Cheating	5	15.2%	57	8.5%
E) Greatly Increase Cheating	1	3.0%	23	3.4%
5) Clearly communicate the policies on academic integrity				
A) Greatly Reduce Cheating	1	3.0%	52	7.7%
B) Moderately Reduce Cheating	20	60.6%	223	33.0%
C) No Impact on Cheating	12	36.4%	394	58.3%
D) Moderately Increase Cheating	0	0.0%	6	0.9%
E) Greatly Increase Cheating	0	0.0%	1	0.1%
6) Involve students and faculty in cheating policy issues				
A) Greatly Reduce Cheating	3	9.1%	61	9.0%
B) Moderately Reduce Cheating	10	30.3%	321	47.5%
C) No Impact on Cheating	19	57.6%	288	42.6%
D) Moderately Increase Cheating	1	3.0%	4	0.6%
E) Greatly Increase Cheating	0	0.0%	2	0.3%
7) Assign one office the duty for academic integrity initiatives				
A) Greatly Reduce Cheating	1	3.0%	47	7.0%
B) Moderately Reduce Cheating	16	48.5%	265	39.2%
C) No Impact on Cheating	16	48.5%	347	51.3%
D) Moderately Increase Cheating	0	0.0%	14	2.1%
E) Greatly Increase Cheating	0	0.0%	3	0.4%
8) Recognize faculty who properly deal with cheating cases				
A) Greatly Reduce Cheating	1	3.0%	35	5.2%
B) Moderately Reduce Cheating	7	21.2%	145	21.4%
C) No Impact on Cheating	21	63.6%	440	65.1%
D) Moderately Increase Cheating	3	9.1%	48	7.1%
E) Greatly Increase Cheating	1	3.0%	8	1.2%

Initiative number - description	Faculty		Student	
	#	%	#	%
9) Provide training for faculty on academic integrity issues				
A) Greatly Reduce Cheating	5	15.2%	154	22.8%
B) Moderately Reduce Cheating	26	78.8%	372	55.1%
C) No Impact on Cheating	2	6.1%	143	21.2%
D) Moderately Increase Cheating	0	0.0%	6	0.9%
E) Greatly Increase Cheating	0	0.0%	0	0.0%
10) Promote effective classroom management strategies				
A) Greatly Reduce Cheating	6	18.2%	159	23.5%
B) Moderately Reduce Cheating	18	54.5%	317	46.9%
C) No Impact on Cheating	9	27.3%	159	23.5%
D) Moderately Increase Cheating	0	0.0%	30	4.4%
E) Greatly Increase Cheating	0	0.0%	11	1.6%
11) Require a course on moral and ethical behavior				
A) Greatly Reduce Cheating	4	12.1%	69	10.2%
B) Moderately Reduce Cheating	11	33.3%	224	33.2%
C) No Impact on Cheating	18	54.5%	337	49.9%
D) Moderately Increase Cheating	0	0.0%	29	4.3%
E) Greatly Increase Cheating	0	0.0%	16	2.4%
12) Offer clear definitions of cheating based on the honor code				
A) Greatly Reduce Cheating	3	9.1%	167	24.9%
B) Moderately Reduce Cheating	23	69.7%	321	47.8%
C) No Impact on Cheating	6	18.2%	173	25.7%
D) Moderately Increase Cheating	1	3.0%	7	1.0%
E) Greatly Increase Cheating	0	0.0%	4	0.6%
13) Increase faculty support during the adjudication process				
A) Greatly Reduce Cheating	2	8.3%	45	6.7%
B) Moderately Reduce Cheating	9	37.5%	220	32.8%
C) No Impact on Cheating	5	20.8%	401	59.8%
D) Moderately Increase Cheating	8	33.3%	4	0.6%
E) Greatly Increase Cheating	0	0.0%	1	0.1%
14) Creation of a user-friendly settlement process				
A) Greatly Reduce Cheating	3	9.1%	134	20.0%
B) Moderately Reduce Cheating	11	33.3%	292	43.5%
C) No Impact on Cheating	16	48.5%	163	24.3%
D) Moderately Increase Cheating	3	9.1%	70	10.4%
E) Greatly Increase Cheating	0	0.0%	12	1.8%
15) Include an honor pledge on all exams and projects				
A) Greatly Reduce Cheating	1	3.0%	67	10.0%
B) Moderately Reduce Cheating	15	45.5%	211	31.4%
C) No Impact on Cheating	17	51.5%	385	57.3%
D) Moderately Increase Cheating	0	0.0%	7	1.0%
E) Greatly Increase Cheating	0	0.0%	2	0.3%
16) Require accounting majors to read/discuss real-world ethics cases				
A) Greatly Reduce Cheating	6	18.2%	159	23.7%
B) Moderately Reduce Cheating	14	42.4%	316	47.1%
C) No Impact on Cheating	13	39.4%	187	27.9%
D) Moderately Increase Cheating	0	0.0%	6	0.9%
E) Greatly Increase Cheating	0	0.0%	3	0.4%



## APPENDIX E

### FACULTY AND STUDENT: VARIANCE ACCOUNTED FOR

#### Faculty: Variance Accounted For

	Centroid Coordinates			Total (Vector Coordinates)		
	Dimension		Mean	Dimension		Total
	1	2		1	2	
Initiative 5	.899	.008	.453	.899	.007	.906
Initiative 2	.879	.018	.448	.877	.007	.884
Initiative 7	.883	.013	.448	.877	.007	.884
Initiative 8	.883	.371	.627	.868	.028	.896
Initiative 13	.732	.000	.366	.717	.000	.717
Initiative 6	.551	.235	.393	.543	.227	.770
Witness Cheating	.524	.156	.340	.521	.008	.530
Initiative 12	.402	.440	.421	.400	.230	.630
Initiative 11	.310	.025	.167	.309	.020	.330
Initiative 16	.259	.038	.148	.257	.016	.274
Initiative 10	.244	.059	.151	.243	.006	.248
Initiative 9	.178	.004	.091	.178	.001	.179
Total Yrs Teaching	.140	.119	.130	.134	.112	.246
Female/Male	.096	.072	.084	.096	.072	.167
Initiative 1	.055	.009	.032	.055	.007	.063
Honor System	.091	.831	.461	.000	.831	.831
Initiative 4	.068	.741	.404	.000	.736	.737
Initiative 14	.079	.670	.375	.002	.646	.648
Initiative 3	.050	.316	.183	.002	.280	.282
Cheating @ institution	.053	.152	.103	.047	.151	.197
Initiative 15	.064	.115	.089	.064	.114	.178
School	.109	.123	.116	.069	.094	.164
Tenure Status	.056	.089	.072	.056	.089	.145
Yrs @ current school	.027	.088	.057	.014	.086	.100
Active Total	7.310	4.324	5.817	6.929	3.417	10.346
% of Variance	36.550	21.618	29.084	34.643	17.087	51.730

**Student: Variance Accounted For**

	Centroid Coordinates			Total (Vector Coordinates)		
	Dimension		Mean	Dimension		Total
	1	2		1	2	
Initiative 5	.865	.102	.484	.864	.010	.874
Initiative 13	.827	.059	.443	.826	.019	.845
Initiative 15	.589	.048	.318	.588	.014	.602
Initiative 6	.516	.068	.292	.514	.013	.527
Initiative 1	.503	.062	.282	.501	.021	.522
Initiative 7	.406	.057	.231	.406	.000	.406
Initiative 2	.341	.061	.201	.339	.035	.374
Initiative 12	.334	.085	.209	.328	.042	.370
Initiative 8	.218	.037	.127	.218	.036	.253
Initiative 11	.206	.041	.123	.205	.005	.210
Initiative 4	.114	.005	.059	.114	.003	.117
Initiative 9	.046	.046	.046	.044	.044	.088
Initiative 10	.028	.018	.023	.027	.004	.031
Initiative 3	.016	.002	.009	.014	.000	.014
Resident/Commuter	.003	.002	.003	.003	.002	.005
Cheating @ institution	.016	.569	.292	.016	.569	.585
Witness Cheating	.064	.493	.279	.048	.492	.540
Honor System	.058	.422	.240	.042	.420	.462
School	.023	.253	.138	.022	.253	.275
Initiative 16	.031	.118	.074	.023	.109	.132
Initiative 14	.017	.073	.045	.013	.072	.085
Age	.007	.034	.021	.006	.034	.039
GPA	.003	.014	.008	.001	.014	.015
Grade Level	.000	.005	.002	.000	.005	.005
Female/Male	.000	.000	.000	.000	.000	.000
Initiative 5	5.218	2.619	3.918	5.152	2.161	7.313

### Faculty and Student: Variance Accounted For

	Centroid Coordinates			Total (Vector Coordinates)		
	Dimension		Mean	Dimension		Total
	1	2		1	2	
Initiative 5	.871	.082	.476	.870	.006	.876
Initiative 13	.832	.045	.439	.832	.012	.844
Initiative 15	.593	.042	.317	.592	.013	.606
Initiative 6	.517	.060	.289	.516	.009	.525
Initiative 1	.507	.049	.278	.506	.015	.521
Initiative 7	.406	.051	.229	.406	.000	.406
Initiative 2	.336	.060	.198	.334	.037	.371
Initiative 12	.335	.082	.209	.330	.039	.369
Initiative 11	.204	.032	.118	.204	.001	.205
Initiative 8	.195	.042	.118	.194	.041	.235
Initiative 4	.107	.009	.058	.107	.008	.115
Initiative 9	.044	.036	.040	.042	.033	.075
Initiative 10	.027	.018	.023	.026	.007	.033
Initiative 3	.015	.004	.010	.013	.003	.015
Cheating @ institution	.014	.578	.296	.014	.578	.592
Witness Cheating	.062	.493	.278	.045	.491	.536
Honor System	.054	.441	.248	.036	.440	.476
School	.020	.242	.131	.019	.242	.261
Initiative 16	.028	.108	.068	.019	.099	.118
Initiative 14	.015	.079	.047	.011	.078	.089
Active Total	5.184	2.554	3.869	5.117	2.152	7.269

## APPENDIX F

### FACULTY AND STUDENT COMPONENT LOADINGS

#### Faculty: Component Loadings

	Dimension	
	1	2
Initiative 5	.948	-.086
Initiative 2	.937	-.082
Initiative 7	.937	-.082
Initiative 8	.932	-.166
Initiative 13	.847	-.014
Initiative 6	.737	.476
Witness Cheating	.722	-.090
Initiative 12	.632	.480
Initiative 11	.556	-.142
Initiative 16	.507	.127
Initiative 10	.493	-.074
Initiative 9	.422	-.027
Total Yrs Teaching	.366	.334
Female/Male	.309	.268
Initiative 1	.235	.087
Honor System	.012	.912
Initiative 4	.020	-.858
Initiative 14	-.044	.804
Initiative 3	-.044	.529
Cheating @ institution	.216	-.388
Initiative 15	-.252	-.338
School	.263	-.307
Tenure Status	-.236	-.299
Yrs @ current school	.119	.293

**Student: Component Loadings**

	Dimension	
	1	2
Initiative 5	.930	-.099
Initiative 13	.909	-.138
Initiative 15	.767	-.119
Initiative 6	.717	-.114
Initiative 1	.708	-.146
Initiative 7	.637	-.010
Initiative 2	.582	-.187
Initiative 12	.573	.204
Initiative 8	.466	-.189
Initiative 11	.453	.070
Initiative 4	.338	-.057
Initiative 9	.211	.209
Initiative 10	.164	-.065
Initiative 3	.118	-.020
Resident/Commuter	.057	.041
Cheating @ institution	-.126	-.754
Witness Cheating	-.220	-.701
Honor System	.204	.648
School	-.147	-.503
Initiative 16	.152	.330
Initiative 14	.115	.268
Age	-.075	-.184
GPA	.036	-.118
Grade Level	-.013	.068
Female/Male	-.002	.005

### Faculty and Student: Component Loadings

	Dimension	
	1	2
Initiative 5	.933	-.077
Initiative 13	.912	-.111
Initiative 15	.770	-.116
Initiative 6	.718	-.093
Initiative 1	.711	-.123
Initiative 7	.637	-.001
Initiative 2	.578	-.192
Initiative 12	.574	.197
Initiative 11	.452	.024
Initiative 8	.441	-.201
Initiative 4	.327	-.090
Initiative 9	.205	.181
Initiative 10	.161	-.086
Initiative 3	.112	-.053
Cheating @ institution	-.119	-.760
Witness Cheating	-.212	-.701
Honor System	.191	.663
School	-.137	-.492
Initiative 16	.137	.315
Initiative 14	.104	.279