

ETHICS READINESS: AN ANALYSIS OF VIRGINIA COMMUNITY COLLEGE
STUDENTS' MORAL SENSITIVITY SCORES

by

Julie Marie Wallace

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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ABSTRACT

In this retrospective causal-comparative study, the readiness of Virginia community college students to receive an accounting ethics curriculum was analyzed by measuring and comparing their moral sensitivity scores to the moral sensitivity scores of a group of four year university students. A sample of college students attending community college principles of accounting courses and a sample of college students attending four year university principles of accounting courses were administered a nationally recognized moral sensitivity survey instrument, the Defining Issues Test 2 (DIT2). The survey results were analyzed using a t-test for differences between means. It was found that there was no statistically significant difference in the mean moral sensitivity scores between the two groups. In addition, a t-test for differences between means indicated that there was no significant difference in the mean scores of the community college group compared to the DIT2 norms scores of students across the United States at the community college level students. A third t-test was performed comparing the community college group to the national norms scores of junior level college students who traditionally receive accounting ethics courses if offered in a college curriculum. A final t-test assessed the impact of gender on moral sensitivity scores. Although the mean score for females was higher than males, gender was found to have a low relationship to moral sensitivity scores. The implications of this study include a greater understanding of the moral sensitivity of community college students in comparison to four year college students who may traditionally receive ethics courses.

Key Words: accounting ethics, moral sensitivity, community college students, accounting curriculum.

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LIST OF ABBREVIATIONS

American Institute of Certified Public Accountants (AICPA)
Association to Advance Collegiate Schools of Business (AACSB)
Association of Certified Fraud Examiners (ACFE)
Certified Public Accountant (CPA)
Chief Executive Officer (CEO)
Defining Issues Test (DIT)
Defining Issues Test 2 (DIT2)
Federal Bureau of Investigation (FBI)
Hyper Text Markup Language (HTML)
Institute of Internal Auditors (IIA)
Institute of Management Accountants (IMA)
Institutional Review Board (IRB)
Liberty University Institutional Review Board (LU IRB)
Null Hypothesis (NH)
Research Question (RQ)

CHAPTER ONE: INTRODUCTION

There continues to be an interest in increasing ethical education in the accounting profession due to the increase in accounting scandals over recent decades (Davis, 2004; Dellaportas, 2006; Fleming, Romanus, & Lightner, 2009; Frank, Ofobike, & Gradisher, 2010; Haywood & Wygal, 2009, Lau, 2010; Massey & Van Hise, 2009; Sweeney & Costello, 2009; Welton & Guffey, 2009; Williams & Elson, 2010) . There are multiple venues for learning ethics: family, church, school, and workplace (Coulter, 2007; Gammie, E. & Gammie, B., 2009; Karakas, 2010; Longenecker, McKinney, & Moore, 2004). College students are a natural audience for receiving ethics education due to their availability in the classroom and their environment of changing life needs that tend to necessitate moral decision making (Exley, 2004; King & Mayhew, 2002).

Business professionals, educators, and business school accreditation agencies have voiced concern about the timing and method of teaching ethics in the college business curriculum (Bailey, Scott, & Thoma, 2010; Fleming, Romanus, & Lightner, 2009; Wilhelm, 2008). Some colleges have integrated ethics curriculum while some business curriculum and textbooks treat the topic of ethics in accounting as merely an afterthought. Improving the accounting profession by educating emerging future accountants of the necessity of properly interpreting and integrating ethics is critical to the reputation of the accounting industry which foundations rest upon integrity. Through a review of the existing literature on this topic, accounting professors are repetitively accused of causing the widespread lack of ethics that has become prevalent in the past few decades in the accounting profession (Adkins & Radtke, 2004; Fisher, Swanson, & Schmidt, 2007; Fleming, et al., 2009; Williams & Elson, 2010). The ever growing list of organizations allegedly involved in accounting abuse that have been publicized

include: Enron, WorldCom, Fannie Mae, Adelphia Communications, AOL Time Warner, Xerox, Bristol-Myers Squibb, Nortel Networks, Global Crossing, and Tyco (Schilit & Perler, 2010; Wild, Shaw & Chiappetta, 2011).

This lack of ethical conduct resulted in government intervention in the form of the Sarbanes-Oxley Act of 2002 (Wild, et al., 2011). This government reaction to the unethical behavior in the accounting industry drastically altered the environment in which accountants operate. That is, the consequences of poor ethical decision making in accounting reporting resulted in the accounting profession no longer operating as a self-regulated industry (Mintz & Morris, 2011).

The topic of ethics is defined as a framework of moral principles in which society relates to rules of conduct that are considered right or wrong (Mintz & Morris, 2011). In addition, business ethics addresses a conduct of integrity in the broader business realm encompassing finance, marketing, management, and accounting (Bernardi, Melton, Roberts, & Bean, 2008). More specifically, accounting ethics is a multifaceted concept that addresses specific rules of conduct directly related to right choices in presenting accurate, transparent, and truthful financial information (Mintz & Morris, 2011; Schilit & Perler, 2010).

Accounting ethics is of particular interest to business professionals and business educators alike due to the close relationship of business and accounting decision making. Accounting is defined as the language of business (Wild, et al., 2011). Businesses communicate through financial information to internal users and external users (Wild, et al., 2011). Therefore, it is essential that business professionals understand the implications of accounting ethics as financial reporting is the mode of communication about the internal performance of a business.

Background

Accounting educators seek to integrate accounting ethics curriculum for a variety of reasons including, but not limited to: accreditation pressure, individual college administration pressure, or personal convictions. A two-fold question emerges during this process: how to teach ethics and when to teach ethics. Ethics teaching takes place either as stand-alone courses or integrated throughout the business curriculum. Traditionally, stand alone ethics courses are given at the junior and senior level in the college course structure (Wilhelm, 2008). As a result, frequently, community college students are overlooked in receiving accounting ethics training. Historically, community colleges have also been referred to as junior colleges or two year colleges. These colleges offer more higher education choices in the local communities around the United States offering degree certificates and Associate's Degrees.

According to the National Center for Education Statistics (2012), in 2010, 26% of the 11 million full time undergraduate students attended community college. These community college students represent an important sector of the college population who could receive accounting ethics education. Some educators have reasoned that community college students are unprepared for accounting ethics because of their lack of foundation in accounting knowledge (Wilhelm, 2008). However, according to James Rest (1988), a leading authority and forerunner of ethics research, ethics education is not predicated upon the students' knowledge of accounting in order to understand ethical decision making in accounting. Following this line of thinking, community college students already possess skill sets of moral and ethical decision making that enable them to understand accounting ethics course material. This issue of the preparedness of community college students to receive accounting ethics education should be researched for its viability in the community college curriculum.

Problem Statement

Corporate, educational, and psychology researchers have delved into the pressing and insistent social problem of increasing unethical business decisions made in corporate America (Bailey, et al., 2010; Cooper, Leung, Dellaportas, Jackling & Wong, 2008; Fleming, et al., 2009; Halbesleben, et al., 2005; Lau, 2010; Rothenburg, 2003; Smith, L., Smith, K., & Mulig, 2005); Welton & Guffey, 2009; Wilhelm, 2008). Most of the high profile unethical decisions made having widespread negative impact resulted from unethical accounting decisions (Bernardi, et al., 2008). This concern is shared by various associations and agencies dealing directly with unethical business behavior.

The Association of Certified Fraud Examiners (ACFE) reported in 2012 that 5% of total annual corporate revenues were lost to fraud totaling \$3.5 trillion. Fraud is categorized by the ACFE as “corruption, asset misappropriation, and fraudulent financial statements” (Mintz & Morris, 2011, p. 91). These three types of fraud center on accounting policies and procedures. The widespread impact of accounting ethics encompasses all industries, organizations, employees, and stockholders. In addition, within these entities, employees at all levels who are a part of any accounting function are impacted by accounting ethics.

The Federal Bureau of Investigation (FBI) Financial Crimes Report to the Public (2011) reported that unethical accounting is involved in the majority of fraud cases pursued by the agency. Large losses to investors result from misleading or falsified financial statements. The FBI reported that during 2011 there were 242 cases resulting in indictments and 241 cases resulting in convictions of corporate criminals. During the same year the FBI collected \$2.4 billion in restitution orders and \$161 million in fines. Furthermore, the FBI reported a growing trend in the number of corporate fraud cases increasing to 726 cases in 2011 up from 661 cases

in 2010. Unethical accounting decisions continue to be a drain of financial, personnel, and government resources negatively impacts society.

The Association to Advance Collegiate Schools of Business (AACSB) (2004), the leading higher education business school accreditation agency, emphasized its concern about ethics education in this task force statement, “The AACSB encourages its member schools and their faculties to renew and revitalize their commitment to ethical responsibility at both the individual and organizational levels” (p. 14).

Some corporate and government executives blame educators for business professional’s lack of ethical decision making. They claim the lack of ethics courses provided in accounting and business college curriculum is the cause of unethical decision making in individuals. This has resulted in increased pressure on those in academia (Adkins & Radtke, 2004; Fisher, et al., 2007). However, upon further observation of continued problem of unethical accounting behavior in executives despite government intervention and increased public and professional awareness, suggest the answers to the problem and identifying who is to blame is not a simple task.

Academia may well not be at fault for the poor ethical decisions made by accounting and business executives. Extensive research in this area suggests no all individual ethics courses impact students as much as researcher would like to see. Researchers Cavico and Mujtaba (2009), Fisher, et al. (2007), Halbesleben, et al. (2005), and Massey and Hise (2009) found that students’ moral reasoning increased only nominally after taking an ethics course. Furthermore, Lau (2010) assessed eleven research studies based on the ethical impact on student decision making. Lau synthesized the findings that ethics courses had very little impact on student decision making processes. However, research indicates that the greater level of education

correlates to increased moral decision making ability. This seems to indicate that students' knowledge of ethical choices and moral decision making has been learned in the formative years and has a cumulative effect over the college career. Despite these potentially discouraging findings, additional research has been performed addressing how to integrate an ethics curriculum that significantly impacts students' moral reasoning and decision making (Dellaportas, 2006; Dolfsma, 2006; Fisher, Swanson, Schmidt, 2007; Guffey & McCartney, 2008; Halbesleben, Wheeler, & Buckley, 2005; Ivie, 1998; Karakas, 2010; Massey & Hise, 2009; Mintchik & Farmer, 2009; Welton & Guffey, 2009). A further research dilemma is the lack of longitudinal research in assessing how long students retain their ethics knowledge after an ethics course. Business professionals who have chosen to act unethically may have indeed received ethics education courses in college, but have chosen to ignore this information or have forgotten the information.

The foundation of most business ethics research is built upon Piaget's constructivist learning theories, Kohlberg's constructionist theory, Rest's Model of Ethical Action, and Jones' moral intensity findings. Rest and Kohlberg are widely accepted and firmly established as the preferred theoretical framework foundation for effective integrated ethics methodology, curriculum, and courses (Krebs & Denton, 2005; Sweeney & Costello, 2009). This theoretical framework provides researchers tools to effectively integrate ethical reasoning into the classroom in a manner that was consistent with developmental theories (Zane, 2009). At its elementary level constructivist learning theory in business ethics bridges a students' ethical awareness. For example, the moral lesson learned by a four-year old child that it is wrong to lie equates to the college student identifying that it is wrong for an employee to lie about a company's earnings on the financial statements.

In response to the detrimental impacts of the lack of trust in business decision making (Adkins & Radtke, 2004; Amlie, 2010; Verschoor, 2002; Waddock, 2005), many higher education instructors have implemented ethics in their business courses and believe that ethics should be a part of the college curriculum (Blanthorne, Kovar, & Fisher, 2007; Brandon, Kerler, Killough, & Mueller, 2007). Increased concerns by many researchers center around the concept that ethics courses must have measurable, competent, and useful assessment procedures to determine the effectiveness of the methodology chosen (Frank, Ofobike, Gradisher, 2010; Massey & Hise, 2009). College professors who utilize effective course assessments achieve feedback and useful information into determining the effectiveness of the ethics classes taught (Halbesleben, Wheeler, & Buckley, 2005).

Purpose Statement

This study utilizes a quantitative research approach with a non-experimental, causal-comparative design for two sample groups from the population of college students attending introductory principles of accounting courses. The purpose of this study is to describe the level of moral sensitivity in students as it currently exists in the community college environment through observing the level of moral sensitivity of introductory principles of accounting community college students through their moral sensitivity “P-score” on the Defining Issues Test 2 (DIT2). Tentative explanations are explored of the existing moral sensitivity of community college students in comparison with their peers in the interest of expanding the current empirical research to include this important population of college students. In addition, the two sample groups are compared to the national normative scores of community college and junior level undergraduate college students. An examination into the readiness of community college

students in introductory accounting classes will provide additional information on the receptiveness of those students to benefit from an accounting ethics curriculum.

Previous research has shown that moral sensitivity and ethical decision making in individuals is impacted by age, gender, and level of college education (Abdolmohammadi, et al., 2010; Adkins & Radtke, 2004; Bay & Greenberg, 2001; Bernardi & Bean, 2008; Borkowski & Ugras, 1992; Chan & Leung, 2006; Gammie, E. & Gammie, B., 2009; Leitsch, 2006; Shawver & Sennetii, 2009; Sweeney & Costello, 2009). These are significant factors to note for community colleges are reporting that they serve a growing number of diverse students in local communities (Germann, 2011). These students learn skills to enter into, engage in, and make an impact on many professions in the local community. These students have diverse needs, experiences, and backgrounds. It is beneficial to learn more about how to meet these students' educational needs in the context of accounting ethics. Are community college students ready to receive an accounting ethics curriculum in introductory accounting courses? Would these students benefit from learning about accounting ethics within their existing body of knowledge? Would their lack of accounting knowledge limit their understanding of ethics as it applies to accounting? With these questions in mind the purpose of this research is to test the appropriateness of an ethics integration curriculum in introductory accounting courses for students who may or may not have enough experience in accounting to cognitively process the ethics material as it relates to accounting concepts.

Significance of the Study

Most existing research in accounting and business ethics addresses students' levels of learning and impact at the junior and senior undergraduate and graduate level in four year universities. Little research exists in addressing the impact of ethics education in community

college environments. However, LaPanne (2007) addressed the impact of ethics on community college students. This research suggested that community college students did perform statistically significantly higher on Rest's Defining Issues Test 2 after an ethical curriculum intervention (LaPanne, 2007). Due to the traditional timing and suggested research findings many business programs at the college level wait to integrate ethics teaching until later in the curriculum program. Moreover, some business schools do not offer an ethics course until the graduate level. Some colleges offer no stand alone ethics courses. The Virginia Community College System does not offer any accounting ethics courses nor does the community college require an ethics course for the Associate's degree in Accounting. Research performed by King and Mayhew (2002) suggest that there are differences in moral sensitivity and ethical decision making among college students based upon the number of completed years of education. Therefore, assessing community college students' level of ethical cognitive ability is beneficial prior to suggesting a business ethics learning objective mandate for classes. In his axiological research, Rest developed the Defining Issues Test (DIT) and subsequently the DIT2 as a survey instrument to assess individual moral cognitive ability. This survey is appropriate and adequate for this research study based upon its widespread use, longevity, and reliability (Dong, 2012).

The Defining Issues Test 2 (DIT2) was used in this study as an ethical evaluation instrument to assess an individual's moral awareness, moral reasoning, and moral intensity. The survey was originally developed as the DIT in 1986 by James Rest and then updated, revised, condensed, and renamed to the DIT2 for the purpose of quantifying the moral development theory developed by Larry Kohlberg (Rest, Thomas, Narvaez, & Bebeau, 1997). Since its development, the DIT and the DIT2 have been used regularly in numerous applications to assess individual and group levels of moral sensitivity in decision making (Abdolmohammadi, et al.,

1997). The DIT2 is readily available and widely accepted as the leading source for gathering ethical assessment data from subjects.

Current literature sets the stage for addressing community college students' participation in receiving accounting ethics curriculum integration. The first step in this process is to determine if students attending community college are ready to receive ethics training. Within the context of the mission of community colleges to support societal goals, it is inherent in this mission that accounting departments within the community college environment train students to act ethically within society (Waddock, 2005). The findings of this research study will steer future progress in determining if ethics curriculum development is appropriate, beneficial, and productive for community college students.

Due to the notoriety of past accounting scandals involving Enron, World Com, Tyco, and many other corporations, the American public's awareness of accounting morals has been heightened (Albaum & Peterson, 2006; Halbesleben, et.al, 2005; Lau, 2010; Mintchik & Farmer, 2009). Many individuals and professional organizations have pointed the finger to blame college level accounting educators. (Mintchik & Farmer, 2009). As a result, much empirical research has been performed to exonerate educators or expedite necessary changes that must take place in college accounting departments to improve student ethics. The research for this article is based upon the review of existing literature on the subject of accounting ethics. Very little literature specifically addresses ethics courses at the community college level. As community college students encompass a large portion of higher education, it is beneficial for academia to be informed about the moral and ethical sensitivity of these students. Furthermore, in order to assess the level of readiness of community college students to receive an ethics curriculum intervention, what attributes in those students impact the level of moral sensitivity as indicated

by the Defining Issues Test-2 P-scores? Finally, it is relevant in light of the community college P-score level to compare those P-scores to students of four year universities who will receive ethics education? This information will shed light on the appropriateness and readiness of community college students to receive ethics training at an introductory course level.

Research Questions

The following research questions are examined in this study:

RQ1: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses and the moral sensitivity scores of four year university students enrolled in introductory accounting courses?

RQ2: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for students of the same education level?

RQ3: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for junior level college students who traditionally receive ethics education?

RQ4: Is there a difference in the moral sensitivity scores among community college students enrolled in introductory accounting courses based on the participants' gender?

Hypotheses

The null hypotheses for this study include:

NH1: There is no significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of four year university students.

NH2: There is no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of community college level students.

NH3: There is no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of junior level undergraduate students who traditionally receive accounting ethics education.

NH4: There is no statistically significant difference between male and female students in the level of moral sensitivity P-scores.

Identification of Variables

The independent variable in this study is the type of college education (community college or four year college). The dependent variable is the moral (ethical) sensitivity "P-score" a student receives on the DIT2 survey instrument. Some possible extraneous variables include the level of ethics knowledge a student may already possess, the student's age, and the student's gender.

The extraneous variables of age and gender have been researched in previous studies. Age is a common variable assessed in business ethics literature. The impact of age has shown to be a determinant in ethical decision making assessments in the research studies of Abdolmohammadi, et al. (2010), Adkins and Radtke (2004), Bay and Greenberg (2001), Borkowski and Ugras (1992), Chan and Leung(2006), and Shawver and Sennettii (2009).

Gender as an extraneous variable has been shown to be statistically significant in impacting student's ethical sensitivity and moral decision making; that is the classification of an individual as male or female. Multiple research studies considered age in their analysis:

Abdolmohammadi, et al. (2009), Adkins and Radtke (2004), Bernardi and Bean (2008), Chan and Leung (2006), Gammie, E. & Gammie, B. (2009), Leitsch (2006), and Sweeney and Costello (2009). In all of these studies women were found to have a slightly statistically significant increase in ethical decision making than men.

Current literature describes mixed findings on the correlation of increased college years of education and moral sensitivity scores. Jennings (2004) and Kermis, G. and Kermis, M. (2009) studied multiple corporate executives unethical behavior despite the ethics education they received in college. Clikeman and Henning (2000), Carlson, Kacmar, and Wadsworth (2009), Massey and Van Hise (2009), Mintchik and Farmer (2009), and O’Leary (2009) performed research focusing on senior level accounting and business classes as a basis for the level of education students had received prior to the study. Massey and Van Hise (2009) posit that students who have completed most of their course work can better integrate their learning to ethics and moral decision making. Table 1 lists the P-scores of ten studies ranked according to the level of education as compiled by Ponemon & Gabhart (1994).

Table 1
DIT P value scores for students in educational institutions

P-score	Type of Students	Area	Study
47.4	Liberal arts accounting seniors	Northeast	Ponemon & Glazer, 1990
45.8	Female accounting major	Midwest	Shaub, 1993
45.1	Accounting majors in ethics courses	West	Armstrong, 1993
41.8	Graduate level accounting majors	Southeast	Icerman et al., 1991
38.6	Graduate level accounting major	Northeast	Ponemon, 1993
37.4	Business school accounting seniors	Northeast	Ponemon & Glazer, 1990
37.1	Business school accounting majors	Midwest	Jeffrey, 1993
36.3	Male accounting majors	Midwest	Shaub, 1993
35.5	Business school accounting majors	Southeast	Icerman et al., 1991
34.5	Undergraduate accounting majors	Southwest	Lampe & Finn, 1992

Definitions

The following terms are important to the understanding of this research study. They include:

Accounting curriculum: The academic structure including textbooks

Accounting ethics: The concept of right and wrong in accounting methods (Mintz & Morris, 2011).

Axiology: The study of ethics.

Constructionist cognitive development: Learning theory “that emphasizes students’ development of new knowledge through active construction processes that link new knowledge to prior knowledge” (Good & Brophy, 1995, p. 180).

Ethics education: “More than studying a code of professional conduct, but rather a process whereby individuals become more consciously involved in making ethical decisions” (Haas, 2005, p. 67).

Integrity: “Integrity is a fundamental trait of character that enables a CPA (or non-licensed accountant) to withstand client and competitive pressures that might otherwise lead to the subordination of judgment” (Mintz & Morris, 2011, p. 2).

Moral awareness: According to Lau (2003), “recognizing the moral nature of a situation is considered to be the first step in ethical decision making” (p. 569).

Moral intensity: “A construct that captures the extent of issue-related moral imperative in a situation” (Jones, 1991, p. 372).

Moral theory: The method of how individuals develop their personal views of right and wrong (Sweeney & Costello, 2009).

Moral reasoning: “The ability to compare, weight, and evaluate different ethical perspectives” (Lau, 2003, p. 569).

Moral sensitivity: The method in which individuals are able to identify moral dilemmas and act accordingly in an ethical manner (Sweeney & Costello, 2009).

P-score: The P-value score of the Defining Issues Test Version 2 (DIT2) is a readily accepted score, main stream, popular instrument determining students’ moral intensity (Sweeney & Costello, 2009). The level of moral intensity in individuals results in empirical research findings that are very useful for accounting educators to consider when considering, developing, and implementing accounting ethics curriculum.

Social consensus: “The degree of social agreement that a proposed act is evil (or good)” (Jones, 1991, p. 375).

Research Summary

This study was conducted as a non-experimental, causal-comparative research design. This design was chosen because the independent variables are not manipulated by the researcher and the sample was surveyed and described as it exists currently. There was no intervention, control group, or pre-test/post-test assessment in this study. The results are reported as descriptive statistics and inferential statistics. The descriptive statistics include reporting mean and the measures of dispersion include reporting standard deviation. The power of the study are assessed through sample size, effect size (the amount the independent variable influences the dependent variable), and significance level (.05). An independent samples t-test was conducted on the two samples to determine if any statistically significant difference in the mean scores of the two groups exists. A one sample t-test was performed comparing the community college

sample group to two national norms groups. Finally, an independent samples t-test was used to compare means of male and female participants in the community college group.

CHAPTER TWO: REVIEW OF THE LITERATURE

Historical Background

A considerable amount of research in accounting ethics has emerged in the last decade in response to the growing number of scandals in the accounting profession. Although Enron is the most well known public accounting scandal, there are numerous other companies involved in improprieties, irregularities, and misstatements prosecuted by the SEC. These entities include: WorldCom, Sunbeam, Xerox, AOL TimeWarner, Tyco, and many more (Jennings, 2004). Although axiology (the study of ethics) became prominent with the research efforts of Rest, Jones, and Kohlberg in the 1970's, in the last several decades professional organizations and government entities have become more vocal and active in the topic of ethics. More specifically, a two-fold response occurred in reaction to the drastic events of the collapse of the U.S. firm Enron and its auditor Arthur Anderson.

First, Congress enacted the most sweeping reforms to public accounting policy since the Security and Exchange Act of 1934 with the passage of Sarbanes-Oxley Act of 2002 (Thomas, 2004). Second, government, public interest groups, and professional associations seeking answers for the party or parties who are responsible for the unethical behavior of the individuals involved in these accounting scandals demanding increased accounting ethics education at the college level (Persons, 2009; Russell & Smith, 2003; Schwartz & Weber, 2006; Smith, L., Smith, K., & Mulig, 2005; Verschoor, 2002). Russell and Smith (2003) blatantly point the finger at accounting educators as the culprit causing the Enron, Equity Funding, World Com and other public scandals due to the lack of ethics teaching in college accounting curriculum. On the other hand, Verschoor (2002) places the responsibility of morally wrong behavior on the individuals who made the wrong choices, not on the institutions who educated them or employed them. The

International Education Standards Board for Accountants, the American Accounting Association, National Association of State Boards of Accountancy, the Institute of Management Accountants, and the American Institute of Certified Public Accountants have all reiterated existing ethics rules and made additional policies addressing accounting ethics in direct response to the numerous public accounting scandals that have shaken the public confidence in the integrity of the accounting profession (Breux, et al., 2010; Cooper, et al., 2008; Flanagan & Clarke, 2007; Haywood, 2004).

Thomas (2004) admonishes accounting educators to do their part to increase ethics coverage in order to avoid future public accounting scandals. Before accounting educators leap to infuse existing courses into an already full accounting curriculum, some educators have questioned the viability and responsibility placed on them to teach ethics in business classes. Some argue that ethics is a philosophy course and should be taught by philosophy professors (Ravenscroft & Williams, 2004). Other educators argue that the existing Generally Accepted Accounting Principles developed by the Financial Accounting Standards Board inherently include ethics through the principles established of objectivity, truth, transparency, and independence (Dolfsma, 2006).

Despite the differences of opinion on who is to blame for the numerous past accounting scandals, a common ground has emerged for all interested parties. No one desires another public accounting scandal. Furthermore, everyone agrees more ethical decision making awareness is needed in the business and accounting industry. This awareness of the need for ethics and the human cognitive processing of ethical dilemmas has been researched for decades. Furthermore, this increased ethics awareness should translate into more ethical behavior on the

part of individuals. Much of the research in ethics centers on this very point, does increased ethics education result in increased ethical decision making?

Coleman Raphael, a successful corporate president, is an example of an ethical professional who makes moral decision making a priority. In his book *One Businessman's Guide to Success* (2004), he includes two important admonitions to his readers: "Dishonesty of any sort is illegal, immoral, and a violation of the policies of any responsible corporation" (p.4) and "The efficient executive should face and resolve unpleasant issues as they arise, rather than avoid them or postpone them in the hope they will go away" (p. 5). Ethics is a critical component of business from the entry level business professional to the president of the corporation.

One important area of consideration in accounting ethics is the population of community college students who are studying accounting. This portion of the population of accounting students on the whole has been overlooked in current literature addressing students' needs in axiology. Therefore, this current state of the lack of accounting ethics curriculum in the community college is of concern for the improvement of ethics coverage for accounting students as a whole.

This literature review addresses several key issues in accounting ethics that impact community college students: axiology frameworks, ethics pedagogy, axiological curriculum choices, and instruments to measure ethical decision making. Upon review of existing axiology concepts in current literature, prior to integrating an accounting ethics curriculum at the community college level, it is imperative to know if it is appropriate to integrate the curriculum at this learning level.

Theoretical Background

There is a growing trend in empirical research to determine just how to go about teaching ethics adequately to impact accounting students to act more ethically in the real world (Cooper, Leung, Dellaportas, et al., 2008; Mintchik, N.M., & Farmer, T.A., 2009). Williams and Elson (2010) state, “Accounting educators can no longer afford to educate technically proficient but shallow graduates since this would be a disservice to society” (p. 111).

The foundation of Kohlberg, Rest, and Jones’ ethical theories rely on Piaget’s constructivist learning theory in developing student instruction in axiology (Zane, 2009). It is beneficial to understand if students actually proceed through the steps hypothesized by the foundational researchers, Rest, Jones, and Kohlberg. Lau (2010) quoted Wright as stating, “Education is the best means to develop good ethical behavior in the modern business environment” (p. 565).

Kohlberg developed his moral theory based on Piaget’s constructivist theory of individual development (Krebs & Denton, 2005). As students are exposed to moral education when they are in the right stage of absorption of information, greater learning can occur (Krebs & Denton, 2005). This theory is based on justice moral reasoning as the person develops better ethical reasoning to the moral dilemma (Dellaportas, 2006). Kohlberg’s theory is utilized extensively in accounting ethics educational empirical research (Dellaportas, 2006).

The six stages of Kohlberg’s moral development theory are structured involving two stages paired within three moral definitions (Dellaportas, 2006). The first two stages of moral development involve moral decision making based on an external authority, termed “pre-conventional”. The third and fourth stages are based on morality as defined in social groups,

termed “conventional”. The final fifth and sixth stages involve the decision maker using their inner conscience in “post-conventional” moral reasoning (Dellaportas, 2006).

Kohlberg asserted that most adults will not surpass the third or fourth stage without significant intervention in ethical education (Dellaportas, 2006). Therefore, empirical research has been performed to determine how to motivate students through to the highest stage in

Level	Focus	Orientation	Moral Reasoning Defined By
Pre-conventional	Self-interest	Reward and punishment	External authority
Conventional	Community	Law and order	Social Group
Principled or post-conventional	Universal fairness	Principles	Inner conscience

Figure 1. Kohlberg’s three levels of moral development (Thorne, 2001, p. 105).

Kohlberg’s development theory. Figure 1 displays Kohlberg’s developmental phases. With additional education in ethical decision making researcher believe students can motivate successfully through the stages of moral development (Dellaportas, 2006). To ascertain if students have progressed in their ethical reasoning ability several tests have been developed to assess student development. These include Kohlberg’s moral judgment interview and Rest’s Defining Issues Test (Shawver & Sennetti, 2009; Welton & Guffey, 2009). Dellaportas (2006) determined that to significantly impact students’ ethical reasoning ability, a course must last at least twelve weeks. The goal is to have the impact of this ethical education last after the formal education process is over and the student has entered the accounting profession (Welton & Guffey, 2009). This is a main concern addressed by Welton and Guffey (2009) who advocate additional research to determine if students who learn ethics in college retain that knowledge long enough to apply it in the workplace after graduation. Students who experience interactive ethical instruction are more likely to transition that knowledge to the corporate environment (Welton & Guffey, 2009).

Lau (2010) expressed the belief that in the business environment, the best means to develop good ethical behavior in individuals is through education. If increasing education results in higher ethical decision making ability (Dellaportas, 2006), Rest theorized that students may not proceed through permanent stages of ethical and moral reasoning if they lacked adequate education. Rest believed students may cognitively process ethical decisions on a case by case

Stage of ethical development	Objective in ethical development
Ethics knowledge	Develop ethical intelligence
Ethical sensitivity	Develop ethical sensitivity
Ethical judgment	Integrate ethical sensitivity to decision making
Ethical behavior	Develop ethical context and competency

Figure 2. Rest’s ethical stages of development. (Cooper, et al., 2008, p. 410).

basis, using more information in each case they are exposed to. Rest developed four stages of moral reasoning. These stages include: recognition, judgment, intent, and engagement (Guffey & McCartney, 2008) as shown in Figure 2.

Other factors besides college ethics courses have been shown to influence ethical behavior and decision making in individuals. Employees who received ethical training scored higher in empirical studies than those who did not receive ethical training using Rest’s assessment testing (Lau, 2010). Previously ethically trained students may deviate from their moral stance if their work environment is perceived to be unethically based (Lau, 2010). Some corporations emphasizing reputational risk communicate their desire for accountants to act ethically to avoid negative publicity should a problem arise in the future (Lau, 2009). Accounting and tax aggressiveness can influence a person’s ethical decision making processes.

(Lau, 2009). An individual's perception of social acceptance can be in error. This error referred to as pluralistic ignorance can cause accounting professionals to act unethically under the assumption that their actions are socially acceptable (Halbesleben, Wheeler, Buckley, 2005). Ethical education that trains students to engage in ethical behavior despite social perceptions have a higher incidence of moral reasoning (Halbesleben, et al., 2005). Observations such as these inspired James Rest to develop an instrument to quantify an individual's moral sensitivity. He developed a Defining Issues Test (DIT) delivered as a pre and post test to students (Rest, 1988) which assessed the achievement of Kohlberg's six moral stage theory (Dellaportas, 2006) to further discover the moral sensitivity of individuals.

Rest developed several postulates in his research studies in ethics and moral decision making. He stated, "one of the strongest and most consistent correlates of development in moral judgment has been years of formal education" (Rest, 1986, p. 33). This finding supports waiting until a student has progressed further in his or her studies before integrating ethics training. However, it does not support the exclusion of ethics training to community college students who may not continue their education beyond an associate's degree. Rest believed it was essential for individuals to know what is right as well as do what is right (Rest, 1994). He expanded this idea by presenting three assumptions to ethical decision making. One, there is a way to decide what is right. Two, there is some agreement to the right course of action. Three, ethics courses make some positive impact on individuals and their ability to problem solve (Rest, 1994).

Jones proposed the study of the "moral intensity" of an issue as the basis of students to reason ethical solutions (Guffey & McCartney, 2008). Jones focused on student perceptions of ethical dilemmas (Guffey & McCartney, 2008). Many accounting principles are concise. However, there are areas of ambiguity that cause accountants to utilize complex ethical

reasoning in problem solving. This diverse and dynamic interpretation of accounting and tax laws necessitates the need for accountants who have received ethical training and education to be able to move through all the stages of ethical problem solving to successfully navigate problem solving towards higher corporate standards and promoting accounting actions that nurture the good of society (Lau, 2009).

All three moral theories of Rest, Kohlberg, and Jones point to the characteristics of the ethical dilemma and how a student will react to those circumstances (Guffey & McCartney, 2008). According to Jones, accounting students will have a greater propensity toward positive ethical decision making in correlation to the severity of the risk involved (Leitsch, 2006). Jones elaborated on Rest's four stage theory to include "six factors of moral judgment: magnitude of consequences, social consensus, probability of effect, temporal immediacy, proximity, and concentration of effect" (Guffey & McCartney, 2008, p. 329). These are not sequential stages as in Kohlberg's theory. However, they are thought processes that the decision maker proceeds through to determine what ethical decision will be made on a case by case basis (Leitsch, 2006). Rest determined that external influences can impact the level of consideration a student will place on the six ethical components (Guffey & McCartney, 2008). Therefore, ethical education should have a positive impact on successful student moral discernment.

The work of Kohlberg, Rest, and Jones form the framework of numerous accounting ethics research studies in existing literature. Duska (1991), Borkowski and Ugras (1992), Armstrong (1993), Lovell (1997), Bay and Greenberg (2001), Thorne (2001), Bampton (2005), Fraedrich, Cherry, King, and Guo (2005), Krebs and Denton (2005), Chan and Leung (2006), Dellaportas (2006), Leitsch (2006), Bradon, et al. (2007), Fisher (2007), Carlson, Kacmar and Wadsworth (2009), Cavico and Mujtaba (2009), Fleming, et. al (2009), Guffey and McCartney

(2008), Mintchik and Farmer (2009), Abdolmohammadi, et al. (2010), Amlie (2010), and Bailey, Scott and Thoma (2010) all extensively reference the work of Kohlberg, Rest, and Jones as applied to accounting ethical development and training college students. Lau (2010) sums up the research frameworks by stating there is no consensus on which moral axiological framework one should prefer to use in assessing methods of teaching ethics.

The “relationship between student ethical awareness and moral reasoning” (Lau, 2010, p.565) has been the source of much empirical research. Jennings (2004) researched five case studies out of a list of twenty publically held companies that were caught participating in unethical accounting practices. Jennings (2004) researched the corporate ethical accounting failures of Sunbeam, Enron, WorldCom, Tyco, and HealthSouth and the accountants who failed to act ethically. Information on where these corporate accountants attended college and what ethical education programs were they exposed to were studied to see if their lack of ethics training exacerbated their propensity to ignore proper accounting ethics (Jennings, 2004). A common thread found in the case studies was the accountant’s failure to maintain objective and independent professionalism. In short, the accountant caved to peer pressure and corporate pressure to act in an unethical manner (Jennings, 2004). Therefore, based on Jennings (2004) research, it is suggested that tracing an accounting professional’s educational background can point toward the possible best alternatives of the timing and content of accounting ethics education.

Some accounting educators have pointed out that ethical education may not result in ethical accounting in the real world work place due to confounding factors. Bodkin and Stevenson (2007) point out the difficulty in determining how long students’ ethical behavior lasts subsequent to attending ethics classes. This is the main point accounting educators make when

defending their position on how, when, and why to apply accounting ethics. Furthermore, this lack of empirical evidence on how long students retain their ethical training in college is the primary exonerating point for the lack of responsibility placed upon accounting educators for the growing list of accounting ethics scandals.

A critical question to address is of the students who receive ethics training, how strong is his or her fortitude in not caving to peer pressure in the workplace to act unethically (O'Leary, 2009). Bulutlar and Oz (2009) addressed accounting ethics from the perspective of professional bullying. The pressure to conform to negative peer pressure impacts an individual's ability to act ethically (Bututlar & Oz, 2009). On a related topic, Halbesleben et al., (2005) addressed the topic of plural ignorance where an individual may rationalize his or her unethical behavior because it is perceived that "everyone else is doing it". Adkins and Radtke (2004) express a common concern that research does not support or suggest findings that ethics education equates to increasing accounting ethical acts in the workplace. Sweeney and Costello (2009) questioned how accountants make ethical choices in the real world and how that decision making ties in to the education that individual received in the past. DiPrimo (2010) studied the leadership mistakes from chief executive officers who made disastrous ethical decisions that consequently ruined their respective companies. Each individual studied succumbed to pressure within and without the organization to act unethically (DiPrimo, 2010). Although current research is inconclusive on accounting ethics learning in the classroom impacting real world judgment calls, research does suggest that ethics education increases ethical decision making in the classroom.

Related Research

Existing empirical research in accounting ethics have mixed findings in the effectiveness of axiology in accounting and business courses. Emerson and Conroy (2004) summarized the

existing accounting ethics educational courses research as a combination of positive effects on students and neutral or no effects on students. Numerous research studies have suggested an increase in students ethical decision making after receiving ethics training in class (Boyd, 1982; Arlow & Ulrich, 1980,1985; Stead & Miller, 1988; Weber & Green, 1991; Glenn, 1992; Carlson & Burke, 1998; Gautschi & Jones, 1998; Weber & Glyptis, 2000; Brandon et al., 2007; Canarutto, Smith, K. & Smith, L., 2010; Fraedrich, Cherry, King & Guo, 2005; Clikeman & Henning, 2000; Dellaportas, 2006; Frank, Ofokike & Gladisher, 2010; Saat & Woodbine, 2010; Seda, 2004; Smith, L., Smith, K. & Mulig, 2005; Spain, Engle & Thoma, 2005). In contrast, four research studies suggested that no change in ethical behavior was found subsequent to in-class ethical training for students (Martin, 1982; Wynd & Mager, 1989; Earley & Kelly, 2004; Ritter, 2006;).

Need for axiology

Various sectors of society including educational researchers, business researchers, professional associations, government agencies, educators, corporate entities, and students have expressed opinions on the value and need of ethics education. Current literature in accounting ethics indicates educational and business researchers are highly concerned about the impact unethical decisions made by top business executives is having on society's confidence in the accounting profession (Rothenburg, 2003; Adkins & Radtke, 2004; DeBakker, et al., 2005; Halbesleben, et al., 2005; Chan & Leung, 2006; Haldeman, 2006; Madison & Schmidt, 2006; Fisher, et al., 2007; Abdolmohammadi, 2010; Breaux, et al., 2010; Williams & Elson, 2010). Many researchers have responded to this topic through performing their own empirical research to determine the status of accounting ethics. DeBakker et al. (2005) found a dramatic increase in the number of professional journal articles addressing ethics. The researchers used this as an

indicator of the importance of this issue to researchers. Bernardi et al. (2008) cited an increase in ethics published research articles in response to the growing professional and academic concern about ethics coverage and the impact on ethical accountants. A number of surveys and interviews conducted by McNair and Milam (1993), Everett (2007), Misiewicz (2007), and Persons (2009) found high percentages of accounting faculty who felt ethics is important in the curriculum, ethics should be taught in the accounting curriculum, and more ethics integration should take place. Etzioni (1991) challenged accounting professors to act as leaders of change in ethics through their leadership in the classroom to influence students in their ethical sensitivity and decision making. Furthermore, deans of business schools, as educational leaders, set the tone of high ethical standards and ideals for students and ensure this model is communicated to staff and students (Cavico & Majtaba, 2009).

The topic of ethics has long been addressed by Generally Accepted Accounting Principles (GAAP) developed by the independent Financial Accounting Standards Board (FASB) (Wild, et al., 2011). The American Accounting Association's Bedford Committee in 1986 and the American Institute of Certified Public Accountant's (AICPA) Treadway Commission of 1987 each called for an increase in accounting ethics emphasis in accounting education (Williams & Elson, 2010). Every major private accounting board in the United States and many international boards have directly addressed the current, pressing issue of ethics in accounting except for the FASB (Amlie, 2010). The FASB contends that ethics is inherently addressed in GAAP (Amlie, 2010). The Certified Public Accountant Exam administered through the AICPA includes an ethics portion that candidates must pass prior to certification. The International Education Standards Board for Accountants, the American Accounting Association, Institute of Internal Auditors, National Association of State Boards of Accountancy

(NASBA), the Institute of Management Accountants have all made statements and mandates to increase accounting ethical practices for accountants (Haywood, 2004; Bernardi & Bean, 2006; Blanthorne, et al., 2007; IESBA, 2010). Figure three summarizes the ethical components of three major accounting associations. Schwartz and Weber (2006) performed an extensive survey of

Institute of Management Accountants (IMA) www.imanet.org	Institute of Internal Auditors (IIA) www.theiia.org	American Institute of Certified Public Accountants (AICPA) www.aicpa.org
Competence	Competency	Due Care
Confidentiality	Confidentiality	Integrity
Integrity	Integrity	Objectivity
Objectivity	Objectivity	Public Interest
		Responsibilities

Figure 3. Professional organizations ethical codes of conduct. (Haywood, 2004, p. 87)

professional organizations and found that business ethics education is one of the highest ranking priorities for those organizations. However, in light of the opinions of these professional organizations, Mintchik and Farmer (2009) point out that accounting academia desires empirical evidence prior to uprooting the existing curriculum in higher education business schools.

NASBA suggests that a requirement of two ethics courses be added to the business curriculum to improve professional ethics. The United States is not the only country with professional organizations responding to public concern of professional accounting ethics. Other countries have not been immune to the public scandals experienced by the United States. The United Kingdom, Australia, Italy, Scotland, and New Zealand have professional accounting

organizations that have communicated concern and taken action on the subject of accounting ethics due to public accounting issues in their respective countries (Cooper, et al., 2008; Bui & Porter, 2010; Canarutto, Smith, K. & Smith, L., 2010). Furthermore, Waldmann (2000) suggested that poor accounting practices in the United States resulting in public accounting scandals have impacted numerous nations in Asia.

In the government sector, the Securities and Exchange Commission and Congress through the passing of the Sarbanes-Oxley Act of 2002 have shown vigilance in holding public auditing firms accountable to perform audits ethically and correctly (Amlie, 2010). In the education sector, the American Association of Collegiate Schools of Business (AACSB), the foremost accrediting agency in the United States for college schools of business, now requires an ethics class in the accounting curriculum to maintain accreditation (Amlie, 2010).

Educators on the whole embrace accounting ethics in college accounting curriculum. Anderson and Mohrweis (2008) found that among accounting faculty surveyed there was support for integrating accounting ethics in the business curriculum. Blanthorne, et al. (2007) conducted a survey that found 98.1% of the accounting professors desired ethics integration. In 2002, Lawson found a 100% positive response to a survey of professors concerning ethics curriculum integration. Furthermore, accounting faculty surveyed by Adkins and Radtke (2004) and Madison and Schmitz (2006) found faculty and accounting chairpersons were very concerned about accounting ethics and were in favor of the importance of including ethics in college curriculum.

Researchers have surveyed professional corporations to ascertain the importance of accounting ethics in the business industry. Overall, professional corporations have mixed responses concerning the impact accounting educators can have on corporate accounting ethics.

For example, Ward, S., Ward, D., & Deck (1993) state that Certified Public Accountants do not have confidence in educators at the college level to provide effective ethics training that translates to real world application. In contrast, Madison and Schmidt's (2006), Haas' (2005), and Bernardi and Bean (2006) research found that CPA's rely on educators to teach ethics. Breaux et al. (2010) surveyed accounting firms to determine if recruiters for entry level accountants desired ethics courses in a candidates academic resume. Of the accounting firms surveyed, the researchers found that recruiters do not value ethics coursework (Breaux, et al. (2010). These mixed findings of professional accounting firms' opinions should not dissuade accounting educators from implementing or increasing the amount of ethics curriculum at the college level. These findings are indicative of the continuing debate about the effectiveness of ethics education at the college level and its impact on the actions of accountants in the workplace. As Theodore Roosevelt said, "To educate a person in mind and not in morals is to educate a menace to society".

It is appropriate to address student opinions on the topic of accounting ethics because they are at the heart of this debate. Four research articles surveyed students specifically for their response to accounting ethics curriculum integration in their college work. Adkins and Radtke (2004), Bampton (2005), Cooper et al. (2008), and Canarutto, et al. (2010) found students were supportive of ethics learning in the curriculum. Cooper et al. (2008) reported that Australian course surveys indicated that ethics courses were among the most popular in the college curriculum. Canarutto, et al. (2010) reported that Italian students responded favorably to accounting ethics. Current research indicates that there is a favorable, supportive student perspective that is willing to be taught ethics.

Professional Ethics

Society has suffered from unethical accounting decisions made by corporate executives. Many individuals spanning private, public, and governmental entities are inquiring about who is to blame for the widespread errors and failings of these unethical individuals. Ultimately, the individual is responsible. However, researchers are looking for the underlying events and situations that laid the fertile ground for temptation to take root resulting in disastrous decision making.

Some researchers asserted that the rash of accounting scandals was a result of social problems. These social problems influenced decision making by individuals. Doyle, Hughes, & Glaister, (2009) linked individual ethical decision making with what individuals determined socially acceptable. Therefore, decision making was subjective and relative. This subjective system of beliefs is not conducive to proper ethical decision making and results in situation ethics and moral relativism (Doyle, Hughes, & Glaister, 2009).

Duska (1991) made a strong case for the demise of social moral thinking because of ethical relativism, descriptive relativism, and moral certitude. Duska defined descriptive relativism as every group having its own set of moral beliefs. Furthermore, Duska asserted that when an individual has moral certitude the individual believes, "I know the truth and there is no reason to think otherwise" (p.343). At this point, the individual has developed his or her own basis for truth. This concept is the basis for moral relativism. Moral relativism deteriorates accounting ethical decision making processes because it bases the decision making on what the individual has determined is right, contrary to believing in moral absolutes or social acceptance (Duska, 1991). Furthermore, Duska (1991) laid a thorough and piercing perspective of educational methodologies that accentuated humanism and moral relativism. Duska posed that

unethical accounting decision making is merely a symptom of the epidemic of relativism and moral certitude that society has embraced for the past several decades (Duska, 1991).

Other researchers conclude that individual decision making is based on the likelihood of being caught (Lau, 2010). This casino gambling attitude has an inverse relationship in the decision making process; the less risk of being caught, the higher likelihood for unethical behavior. Lau (2010) took moral relativism to another level by researching student's reasoning behind unethical decision making. This view led Lau (2010) to conclude that students and consequently corporate executives make ethical decisions based on their assessment if they believe they will get caught. Leitsch (2006) presented a similar study in students' assessment of the risk involved in the ethical decision. These research studies increasingly clarify that ethical decision making is a multifaceted decision making process that involves a broad spectrum of beliefs from absolutism to relativism.

Research studies, particularly qualitative studies, have examined a narrower component of society that may be to blame for unethical decision making, the corporate environment. Bernardi and Bean (2006) stated that at college and corporate levels ethical awareness increase. The peer pressure and corporate environment set the stage for how individuals perceive the corporate norms (Bernardi & Bean, 2006). Cavico and Mujtaba (2009) discovered that corporate executives who received ethics courses failed to apply the principles they learned to the business world. DiPrimo (2010) qualitatively researched the actions of three Chief Executive Officers (CEO) unethical decisions. The research concluded that the CEOs failed to understand and take into account the widespread consequences of their behavior.

Jennings (2004) took DiPrimo's research further and performed an in-depth case analysis of five corporate failures resulting from unethical CEO behavior. Jennings concluded that

despite ethical awareness, the CEOs in every case caved to corporate pressure to keep the company performing by grossly manipulating financial data. (Jennings, 2004). Jennings blamed unethical decision making practices on the corporate environment that cultivated an atmosphere of unethical decision making acceptance.

Fisher, et al. (2007) provided an interesting perspective on the corporate environment through continuing education classes that are required by the American Institute of Certified Accountants. The authors challenged the content of Continuing Professional Education (CPE) courses. They asserted that CPE courses were outdated in content and relied on rote memorization of ethical rules and regulations without practical application in high pressure realistic scenarios (Fisher, et al., 2007).

Advocating spirituality in the workplace was researched in reference to increased ethical awareness and accountability in decision making. Carlson, Kacmar, & Wadsworth (2009) articulated how an individual's spiritual beliefs applied to the decision maker and others in the business environment. Carlson, et al. posit when an individual has an active spiritual life, the individual is more likely to utilize decision making on a more personal level. Karakas (2010) expounded on this idea and developed a unique research analysis of how an individual's spirituality can influence his or her ethical reasoning and decision making ability. In light of this analysis, Karakas (2010) concluded that corporations should foster a spiritual environment for employees. Furthermore, Karakas believed that individuals who held themselves accountable to a higher authority were more likely to act ethically. On the other hand, Mintchik and Farmer (2009) discovered through their research that there was no connection between student's moral reasoning and their epistemological beliefs. Top executives who actively create a corporate culture that embraces positive ethical decision making practices influence the entire corporation.

Educational Ethics

Fingers ultimately point to the educational community when society has floundered ethically. Some individuals believe that poor ethical decision making is a product of poor education. Dolfsma (2006) asserted that instructors must address ethics from particular points of view in accounting and economics. College curriculum development that generalizes ethics education was less effective than ethics taught with an emphasis in each individual business subject (Dolfsma, 2006). Education impacts individuals. Therefore, curriculum development centers on teaching concepts through stand alone classes or integrated ethics curriculum to impact individuals. Calvert, R. Kurji & S. Kurji (2010) assessed the impact of tax preparation classes. Using the serve learning concept, students integrated ethical decision making in serving businesses in real world situations. This methodology provided students real life circumstances in which they experienced the pressures that come with making ethical choices (Calvert, et al., 2010). Real world application of ethics principles results in higher student impact.

Cooper, et al. (2008) introduced a “Toolkit Approach” for student ethical retention. These researchers expanded Rest’s moral theory into a “Toolkit Approach” for instructors to use as a framework for developing an ethics course curriculum. The toolkit stages closely mirror Kohlberg, Rest, and Jones’ prior research. The stages included ethics knowledge, ethical sensitivity, ethical judgment, and ethical behavior (Cooper, et al., 2008). Curriculum developers who used this toolkit approach ensured that the interactive ethics case studies took students through each of the four ethical learning stages.

Halbesleben, et al. (2005) provided research findings that supported their position that students who reduce their pluralistic ignorance made better ethical decisions in a variety of

situations. The authors found that when individuals were aware of the high ethical standards around them, they conformed to those high standards (Halbesleben, et al., 2005).

Educational leaders are aware that effective education must be assessed for achieving learning outcomes. Much research has been performed in assessing axiology as it applies to accounting concepts and financial decision making. Massey and Hise (2009) found that active student activities versus passive activities positively impacted student's ethical decision making. Dellaportas (2006) asserted that effective ethical methodology for ethics curriculum development utilized Kohlberg's theory of moral reasoning and development. The instructor then must follow through with qualitatively assessing student's increased level of ethical understanding (Dellaportas, 2006).

Frank, et al.(2010) researched the comparative effectiveness of stand-alone ethics courses versus integrated ethics courses. They recommended that colleges provide stand-alone ethics courses as their research concluded that this type of course presentation was more effective for student knowledge retention (Frank, et al., 2010). Welton and Guffey (2009) found that students who had meaningful, interactive, and substantive ethical instruction were more likely to transfer that knowledge to the corporate environment.

Axiological choices

Currently, three choices exist for ethical education in universities. The first choice, referred to as the discrete method of ethical education (Dellaportas, 2006), advocates accounting curriculum having an individual course dedicated to accounting ethics. Dellaportas' empirical research found that twelve weeks of accounting ethics was sufficient to impact students with sustainable ethical decision making ability. Many discrete courses use Kohlberg's theory as a framework for students to identify their progress in ethical decision making ethics (Frank, et al.,

2010). Breaux, et al. (2010) found of the top fifty business schools in the United States, only 25% have a standalone ethics course. Haas (2005) discovered through an American Accounting Association survey in 2003 that only 46% of schools surveyed offered a stand-alone ethics course. Blanthorne, et al. (2007) found surveyed educators preferred a stand-alone ethics course to an integrated course approach. The effectiveness of a stand-alone ethics course was addressed by Frank, et al. (2010). The research suggested that a stand-alone ethics course was a more effective delivery methods on increasing student ethical reasoning (Frank, et al., 2010).

The second choice for axiology in universities is through the pervasive method of ethical education (Dellaportas, 2006). This method does not employ a standalone accounting course. Rather, accounting ethics is integrated into various existing accounting courses throughout the curriculum. This integration is also referred to as across the curriculum integration (Benardi & Bean, 2006). This method is the most popular in higher education. Blanthorne et al. (2007) reported that 82% of educators surveyed used integrated ethics methods. Madison and Schmidt's (2006) survey indicated that 70% of surveyed schools integrate their ethics curriculum and 30% have stand alone ethics courses.

Various researchers have suggested positive and negative elements of the pervasive method of ethics learning. One drawback to this methodology is the time limitation in courses that are already full of accounting education objectives. This limits the amount of emphasis teachers place on ethics due to time constraints (Frank, et al., 2010). Breaus, et al., (2010) discovered that ethics integration resulted in an ad hoc type of "hodgepodge" of uncoordinated ethics teaching that may not be as effective as a coordinated, comprehensive approach. Ad hoc drawbacks were also cited by Arjoon (2008) who advocated a systematic constructivist approach to integration. Amlie (2010) research found that most professors integrate ethics at their own

discretion. On the other hand O'Leary (2009) found that integration is superior due to a "wider variety of ethical experiences" (p. 507) across the curriculum. Proponents of this style of ethics teaching include Lau (2010) who posits that integrated courses increase ethical awareness in students. Halbesleben, et al. (2005) also found that integrated courses in ethics education resulted in positive increases in ethical decision making in students.

The third method of ethics delivery in a college curriculum is to take the best of both worlds and use both a stand-alone ethics course and integrate ethics across the curriculum. This mixed method is advocated by Armstrong (1993), Swanson (2005), and Massey and Van Hise (2009). This method was found to be an effective option for college business departments.

Within these three teaching frameworks there exists learning theories closely related to this research topic: Kohlberg's constructionist theory, Rest's Model of Ethical Action, and Jones' moral intensity theoretical framework (Sweeney & Costello, 2009) that are conducive to use within stand alone courses or across the curriculum integration (Benardi & Bean, 2006). These theories, though closely related, provide a comprehensive framework for understanding human concepts of ethical reasoning and pedagogical method for coaching students through high thought processes. Each theory although interrelated, has a distinct reference point on how individuals are influenced to act in an ethical manner (Karakas, 2010).

Pedagogical curriculum choices

Accounting instructors may take a passive or active role in teaching axiology within an accounting context. A passive role involves referring to ethics in the text or using anecdotes to discuss ethical issues. An active role involves passive role concepts as well as utilizing case studies, problem solving in class, and interactive problem solving ethical case studies for students to apply critical thinking (Adkins & Radtke, 2004). Generally, an active role is one that

has the best opportunity for lasting impact on a student's ethical decision making ability.

Existing literature addresses multiple methods of approaching pedagogical ethical integration.

Multiple researchers advocate active learning. Active learning promotes deeper understanding as addressed by Moustafa and Alijifri (2009). Students who actively participate in active learning increase their understanding of a topic (Finnie, 2002; Massey and Van Hise, 2009; Dallimore, 2010). More specifically, real life case studies and real world corporate dilemmas discussed through dynamic questioning (Flanagan & Clarke, 2007) and reflective thinking (Mintz, 2006) foster increased student learning (Cooper et al., 2008; Carlson, et al., 2009). Vignettes are a popular method of ethical teaching in the classroom. Goutschi and Jones (1998), Ritter (2006), and Lau (2010) used vignettes in their research assessing ethical awareness and learning in students. Conversely, Ritter's (2006) research suggested that no increase in student ethical learning resulting from the vignette method.

Case studies are used frequently in the classroom as an effective tool for ethics teaching (Kerr & Smith, 1995; Hughes & Berry, 2000; McWilliams & Nahavandi, 2006; Cooper et al., 2008; O'Leary, 2009). Blanthorne, et al.(2007) surveyed professors concerning the use of case studies. Of those surveyed 78% used lecture, 71% used case studies, and 58% used textbook questions as the mode of delivery. Additionally the majority of professors believe the case study approach is the best method for axiology (Blanthorne, et al. (2007).

Current literature addresses some unique methods for teaching ethics that are designed to engage students. Calvert, et al. (2010) and Clovey and Oladipo (2008) researched service learning where students participate in internships in accounting firms. The research suggested that students acted more ethically after their work in actual accounting firms. The researchers hypothesized that the experience in the real world bridged ethical decision making with ethical

learning in the classroom (Calvert et al., 2010; Clovey & Oladipo, 2008). Properly integrated computerized accounting ethics learning tools are an effective method (Boyce, 1999; McPhail, 2003). In class, accounting games were presented in Seda's (2004) research where the study suggested that students ethical sensitivity was positively impacted through this method.

It is not necessary to choose one method over another as professors may use a variety of modes of delivery. Mintchik and Farmer (2009) and Fleming et al. (2009) advocated multiple pedagogical approaches for maximum potential for student learning. Duska (1991) states if an ethics course is useless it is because of "the way ethics courses are taught" (p. 336). Ethics educators should be weary of relativism and Machiavellianism that erect hurdles to the ethical understanding of social responsibility (Duska, 1991). Bay and Greenberg (2001) advocated an increase in empirical research to support a best methods approach. Furthermore, Jackling(2005) admonished educators to use multiple learning techniques for multiple learning styles. Classroom assessment techniques can assist educators in determining the effectiveness of methods throughout the course (Beard, 1993).

Factors influencing moral decision making

Existing literature indicates three confounding factors that may influence an individual's moral decision making process: religion, age, and gender. Lau (2010) cited four research studies where religiosity and business ethics were statistically positively correlated. Religiosity refers to an individual's self-perception of his or her level of religious conviction and religious living (Conroy & Emerson, 2004). Conroy and Emerson's (2004) research study suggested that increased student religiosity was a positive predictor of increased ethics decision making. Longenecker, et al. (2004) and Karakas (2010) both performed research studies that suggested age was a significant variable in assessing students' change in ethical decision making.

Early on in ethics research Rest (1988) proposed that in college age students an increase in ethical decision making was a natural cognitive development. The impact of age has shown to be a determinant in ethical decision making assessments in the research of Borkowski and Ugras (1992), Shawver and Sennett (2009), Chan and Leung (2006), Abdolmohammadi, et al. (2010), Adkins and Radtke (2004), and Bay and Greenberg (2001). Age is a confounding factor to be addressed in ethics research.

Gender is another factor impacting student's ethical sensitivity and moral decision making. Multiple research studies consider age in their analysis: Adkins and Radtke (2004), Chan and Leung (2006), Leitsch (2006), Bernardi and Bean (2008), Abdolmohammadi, et al. (2009), Gammie, E. and Gammie, B. (2009), and Sweeney and Costello (2009). In all of these studies women were found to have a slightly statistically significant increase in ethical decision making than men. These three variables of religion, age, and gender are all important factors when statistically processing data related to ethical testing

Factors limiting ethical instruction in the classroom

Practical considerations in teaching ethics in the classroom should be addressed as well as theoretical applications. Three main practical limitations for accounting and business professors should be considered when implementing ethics into a college curriculum. Time, lack of instructor training, and a lack of resources are three main reasons college professors contemplate, resist, or refuse to integrate ethics into existing college curriculums (Jennings, 2004; O'Leary, 2009).

Most existing business college curriculums are filled with required courses. Very few colleges offer electives in business degrees because of the volume of material that needs to be covered to adequately prepare a student for the business profession. Therefore, time is a major

constraint cited by professors in numerous surveys addressing this subject. McNair and Milam (1993), Bay and Greenberg (2001), Haywood, et al. (2004), Jennings (2004), Bampton and MacIagan (2005), and Williams and Elson (2010) all stated that according to instructor surveys, time is a major limiting factor in integrating ethics into a packed curriculum.

Due to the complexity of issues surrounding ethics such as philosophy, morality, relativism, and sociology that can impact ethical thinking, some professors believe they are not qualified to teach ethics. Adkins and Radtke (2004) surmise that professors who do not embrace teaching ethics within their business curriculum may do so because they lack ethics training themselves and do not feel qualified to teach the subject. A research study in the United Kingdom by Bampton and MacIagan (2005) stated 25% of the survey respondents stated they were not confident in ethics instruction. These findings were collaborated by Bampton and Cowton (2002) who stated 20% of the professors surveyed stated they lacked skills to teach ethics. Professional education and continuing education courses are options to increase instructor confidence in teaching ethics.

The third factor limiting instruction of ethics is a lack of resources. In many principles of accounting textbooks and intermediate accounting textbooks ethics is covered briefly and more often as an afterthought (Cooper, et al., 2008). Bay and Greenberg (2001) cited a lack of resources as a deterrent to professors to teach ethics. McNair and Milam (1993) discussed instructor lack of resources in accounting ethics as a limiting factor in increasing ethics coverage in college curriculum. Twenty percent of instructors in the United Kingdom surveyed by Bampton and Cowton (2005) stated a shortage of materials was the inhibiting factor in their resistance or inability to teach ethics in their courses. Action may be taken to reduce these three limiting factors to support instructors in teaching accounting ethics.

Project Specific Information

Various ethical measurement instruments are used throughout existing ethics research. The most well known and used instrument is the Defining Issues Test (DIT) developed by James Rest in 1979 (Rest, 1988). Over the past thirty years the DIT and the DIT2 have overwhelmingly been the ethics survey of choice for multiple disciplines. Academia in the medical, psychological, educational fields have used this instrument extensively (Rest, Thoma, Narvaez, & Bebeau, 1997).

Through careful development with foundations in moral cognitive theory the DIT and the DIT2 effectively assess individual's moral cognitive processing. The test uses various score measures to determine the assessment. The primary test measurement is a P-score rating to measure cognitive moral capability (Thorne, 2001). Bailey (2010) visually presented Rest's four components model of moral sensitivity, moral motivation, moral character, and moral judgment. The DIT measures the moral judgment of the subject based on the theory that all four components develop in an individual concurrently (Bailey, 2010).

Other ethical surveys are available and are suitable for assessing moral sensitivity. The Multi-Dimensional Ethics Scale (MES) was developed to enhance the findings of the DIT. The MES is considered a more dynamic instrument than the DIT (Shawver & Semetti, 2009). However, the MES has strengths and weaknesses in comparison to the DIT. Unlike the DIT, the MES provides explanations for ethical responses of the subject (Shawver & Semetti, 2009). Researchers also use self-developed ethics surveys customized for their particular use in controlling variables and assessing pertinent factors to their particular research. The DIT was developed as a quantitative measurement alternative to the existing Kohlberg qualitative interview method of research in assessing subjects' moral development (Thoma, 2006). Due to

the close development of the DIT and Kohlberg's theory, it is important to note Kohlberg postulates the necessity of a universal moral standard. This is significant in that Kohlberg was sensitive to the propensity of moral relativism and its impact on moral philosophy (Thoma, 2006).

Over time the Defining Issues Test has remained constant in its components; however, the interpretations of the test have changed since its inception (Thoma, 2006). One main component of change in the interpretation of the DIT test is the close ties the development of the test had with Kohlberg's theory of moral development. New theories in this area have spawned a new type of philosophy known as the neo-Kohlberg theory (Thoma, 2006). Neo-Kohlbergians focus on the cognitive development of moral sensitivity in individuals rather than the classical theory of social moral constructs (Thoma, 2006). Consistent with Piaget's theory of development, one may surmise that according to Neo-Kohlbergian thought, accounting ethics curriculum can indeed unlock cognitive development in students when they are exposed to new insights of dilemmas and choices in decision making.

In response to criticism that the original DIT contained outdated vignettes, the DIT2 was developed with an updated dilemma presentation with very similar questioning approaches to retain the strengths of the original DIT in assessing moral sensitivity (Thoma, 2006). Correlation studies performed on both versions of the test "suggest only that the DIT and DIT2 can be viewed as parallel forms, but that there is particular measurement advantage in having subjects rate and rank items" (Thoma, 2006, p. 77).

The DIT2 is administered in two formats. Originally, the survey was delivered via paper and pencil format. With the advent and convenience of online availability this format was converted to an online HTML format for ease of administration. Subsequently, Xu, Iran-Nejad,

and Thoma (2007) performed research to determine if this conversion from the paper-pencil format to the online format had a statistically significant impact on the DIT2 score reliability and validity. The researchers concluded that “findings from procedures based on the classical test theory indicated that the online version was comparable to the paper-pencil version in terms of item-to-total correlation coefficients and reliability coefficients” (Xu, et al., 2007, p. 23).

The perceived success of the DIT2 conversion from a paper and pencil format to an online format is attributed to several factors. One, individuals completing the survey are found to be familiar and comfortable with computerized formats. Two, the survey was thoughtfully designed for ease of use (Xu, et al., 2007). The online DIT2 offers a single page survey not requiring users to flip pages. The survey begins with clear, understandable instructions. Large, consistent, easy to read font type is used throughout the survey. One submit button is displayed at the bottom of the page in order to lessen any confusion on how to finalize the survey. The deliberate design of clarity, conciseness, and simplicity in format aid in helping the user focus on the content instead of focusing on distracting, confusing, or unnecessary content (Xu, et al., 2007).

The norms scores for the DIT2 are collected at two main centers focusing on the development and perpetuation of ethical development. The University of Alabama and the University of Minnesota provide extensive support of DIT2 administration, data collection, scoring, research, and interpretation. Norms scores from thousands of DIT2 tests are correlated and stored at the Office for the Study of Ethical Development at the University of Alabama (Dong, 2011).

An important factor of timing must be considered when tackling the need for accounting ethics curriculum integration from a pedagogical perspective and a practical perspective.

Wilhelm (2008) addresses timing in his extensive research on successful implementation of ethics into business courses. Much debate has taken place in academia addressing the appropriate timing of ethics courses (Wilhelm, 2008). The Association for the Advancement of Collegiate Schools of Business (AACSB) has laid the responsibility and formation of ethics timing and implementation up to individual AACSB accredited colleges. This action has put pressure on college business departments to determine for themselves the appropriateness, timeliness, and content of ethics curriculum (Wilhelm, 2008).

From a pedagogical perspective, Mintchik and Farmer (2009) state “while an individual’s moral growth is probable, it is not certain” (p. 261). Existing literature focuses on several levels of ethics integration: introductory freshman and sophomore accounting and business classes, undergraduate junior level classes, undergraduate senior level classes, graduate level classes, and professional continuing education classes. Lau (2010) states that students will respond to ethics education to a greater degree correlating to their ethics readiness. Therefore, in relation to this research study, it is imperative to look closely at the timing of ethics education in higher education.

Jennings (2004) and Kermis, G. and Kermis, M. (2009) studied multiple corporate executives unethical behavior despite the ethics education they received in college. The research suggested that corporate training and enforcement of ethics policies may be best accomplished at the corporate level.

Clikeman and Henning (2000), Carlson, et al. (2009), Massey and Van Hise (2009), Mintchik and Farmer (2009), and O’Leary (2009) performed research focusing on senior level accounting and business classes. The research suggested that the students exhibited higher levels of ethical decision making subsequent to the ethics intervention. Massey and Van Hise (2009)

posit that students who have completed most of their course work can better integrate that learning to ethics.

Research articles have also focused on junior level ethics integration. Bodkin and Stevenson's (2007) research suggested that junior level students were positively impacted by ethics education. Haywood et al. (2004) implemented ethics games geared toward junior level students for greatest learning effect. Junior and senior level students do have more accounting education to apply ethics, however, some students graduate from college with associate degrees and never reach the junior and senior level courses.

Ethics integration that occurs at the freshman and sophomore level captures all accounting and business students progressing through higher education. Pamental (1989) as cited by Amlie (2010) states that ethics introduced at a freshman or sophomore level will be less effective "since students at this stage are not yet well versed in the intricacies of the functional areas of business"(p.97). This statement should be examined by further empirical research to determine whether this important and vital segment of students should be excluded from ethics education. Bay and Greenberg's (2001) research corroborates with Pamental's statement where P-scores on the Defining Issues Test of ethics were higher for juniors and seniors than for freshmen and sophomores. However, just because the scores were lower for freshman and sophomores should they be excluded? Are the scores low enough to exclude them from ethics education?

Existing research in the concept of timing ethics education is critical to the premise of this research paper. Timing is important to avoid wasting resources if students are not ready to absorb ethics as it applies to accounting at the freshman or sophomore level. Mintchik and Farmer (2009) proposed that a lack of experience may result in lower ethics decision making

scores. Are these scores low enough to prohibit any ethics cognitive learning at the introductory accounting course level? Cooper et al. (2008) discuss the Ethics Educational Framework established by the International Accounting Education Standards Board (IAESB) and the International Federation of Accountants (IFAC) which “emphasizes the development of ethics knowledge and ethical sensitivity at an early stage in prequalification education before enabling students and professional accountants to demonstrate their ethical judgment and decision making skills” (p. 406). The research of Krebs and Denton (2005) support this statement asserting that student learning is most effective when appropriately matched with the student’s level of moral development. Rest, et al. (1999) questioned the developmental readiness for ethics in a realm of knowledge that student have not grasped yet. Finally, Shawver and Sennetti (2009) stated “Because the DIT measures cognitive development which increases with age, the DIT scores for younger accounting students are typically lower, have limited range, and are not likely to vary sufficiently with corresponding choices in ethical dilemmas” (p. 663). Despite the current literature on the topic of timing, one of the purposes of this study is to empirically test the existing status of community college students who are taking courses at the freshman and sophomore levels to determine any statistical significance in the level of ethical cognitive development. Assessing score levels and the factors influencing those scores will be beneficial to the existing research on this topic.

The existing research in accounting and business ethics addresses students’ levels of learning and impact at the undergraduate and graduate level in four year universities. There is a gap in the research in addressing the impact of ethics education in community college environments. A dissertation produced by LaPanne (2007) addressed the impact of ethics on community college students. The research suggested that community college students did

perform statistically significantly higher on Rest's Defining Issues Test 2 after an ethical curriculum intervention (LaPanne, 2007).

This literature review has sought to develop a thorough and well rounded discussion of existing foundations of ethics and the research associated with ethics. This method was used in accordance with Bay and Greenberg's (2001) statement, "If accounting ethics research is to continue using the DIT, then a solid understanding of the relationship of ethical development and DIT scores and unethical behavior, the most important construct in any ethics study, is crucial" (p. 378). Furthermore, the DIT is appropriate in this study as Shawver and Sennetti (2009) posit the DIT is more appropriate for assessing the timing of ethics in individuals.

Current literature sets the stage for addressing community college students' part in receiving accounting ethics curriculum integration. The first step in this process is to determine if students attending community college are ready to receive ethics training. Within the context of the mission of community colleges to support societal goals, it is inherent in this mission that accounting departments within the community college environment train students to act ethically within society (Waddock, 2005). The results of this research will steer future progress in determining if an ethics curriculum is appropriate to be developed for community college students.

CHAPTER THREE: METHODOLOGY

The thrust of this study is to utilize James Rest's moral sensitivity survey instrument the Defining Issues Test 2 (DIT2) to describe any differences between the moral sensitivity of two groups of accounting students. In addition, the study describes any differences between the community college sample group and the national norms scores for their peers at the community college level and the national norms scores for junior level undergraduate students who traditionally receive ethics courses. The methodology of this research study includes the design of the study as it relates to investigating the research questions and their implications in the community college academic environment. The instrumentation is a key factor in determining an adequate match between the data gathering tool and the data analysis performed (Creswell, 2003). Overall, it is important that the methodology match the thrust of this study in furthering the descriptive detail and analysis of community college student's moral sensitivity in terms of their ability to receive an accounting ethics education curriculum at their level of college education.

Design

This study utilizes a retrospective, causal-comparative research design examining the levels of the moral sensitivity of students enrolled in introductory principles of accounting courses in a community college and a four year college setting as assessed by the DIT2 survey. This study utilizes a nationally recognized moral sensitivity survey, DIT2. Of the ten scores assessed by the DIT2 test the P-score of "principled moral thinking" (Rest, 1994, p. 13) will be used in this research study. On a ranking of 0-95 the score assesses an individual's moral reasoning stage as defined by Kohlberg (University of Alabama, 2011) described earlier in this paper.

Several statistical procedures will be performed to compare the variable of the DIT2 P-score of a sample group of community college students enrolled in introductory accounting courses and a sample group of freshmen four year university students enrolled in introductory accounting courses. A histogram was developed to check for data normality and homoscedasticity. Statistical measures of central tendency were performed calculating the mean. Measures of dispersion were calculated for the standard deviation. An independent samples t-test was used to assess the differences (if any) between the two sample groups of community college students enrolled in principles of accounting courses and four year college students enrolled in principles of accounting courses. A one sample t-test was used to compare the community college sample group to the national norms scores for community college students and junior level undergraduate students. A final independent samples t-test was conducted to compare male and female participants' P-scores. The sample size and effect size should be considered in this student and the impact of the confidence level of rejecting the null hypothesis with a significance level of .05.

The causal-comparative research design is appropriate in this study because the researcher seeks to investigate any relationship between the independent variable and the two sample groups and the national norms group (Gall, M., Gall, J., & Borg, 2007). This method is appropriate for investigating factors that influence community college students in reference to their moral sensitivity scores and studying the relationships between the variables. Insights to the existing student characterization have an influence on assessing the readiness and appropriateness of proposing an accounting ethics education curriculum for introductory accounting courses in community colleges. The data will be collected via a cross sectional survey of "the data collected at one point in time" (Creswell, 2003, p. 155). Consequently, it

does not provide data from other time periods or longitudinal data. If a relationship does exist between the four groups, this will indicate a level of readiness of community college students to receive ethics training as it relates to their peers at the four year colleges who will receive ethics courses. The implications of this study include a greater understanding of the ethics readiness of community college students taking into account the potentially diverse backgrounds of these students.

This research seeks to build upon existing research providing descriptions of existing moral sensitivity levels of community college students in the interest of expanding the current empirical research to include this important population of college students. Traditionally accounting ethics courses are taught at the four year university level. As a result, community college level students are traditionally overlooked in receiving accounting ethics curriculum in introductory accounting courses. If community college students display DIT2 P-scores equivalent to other students who traditionally receive ethics courses, then educators are more able to support the viability of an accounting ethics curriculum at the community college level.

This study addresses if community college students are ready in reference to their developed ethical sensitivity to make appropriate choices through their understanding of the moral intensity of a dilemma (Sweeney & Costello, 2009). Due to the existing enrollment in community college courses and instructor assignments, this non-experimental design will not randomly assign students into groups; rather it takes place within the existing courses.

Research Questions and Hypotheses

The following research questions are examined in this study:

RQ1: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses and the moral sensitivity scores of four year university students enrolled in introductory accounting courses?

RQ2: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for students of the same education level?

RQ3: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for junior level undergraduate college students who traditionally receive ethics education?

RQ4: Is there a difference in the moral sensitivity scores among community college students enrolled in introductory accounting courses based on the participants' gender?

The null hypotheses for this study include:

NH1: There is no significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of four year university students.

NH2: There is no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of community college level students.

NH3: There is no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of junior level undergraduate students who traditionally receive accounting ethics education.

NH4: There is no statistically significant difference between male and female students in the level of moral sensitivity P-scores.

Participants

For the purpose of this study a convenience sample of approximately 209 students enrolled in introductory principles of accounting courses were given an opportunity to participate in an online DIT2 survey during the spring 2013 semester at a community college located in the Mid-Atlantic United States. A total of 76 students (32% of the enrolled students) took the DIT2 survey. Nine survey responses (13.4%) were removed from the data set due to incomplete survey responses. A second convenience sample of 20 students of approximately 110 students enrolled in introductory principles of accounting courses were given an opportunity to participate in an online DIT2 survey during the spring 2013 semester at a four year state university located in the Mid-Atlantic United States. A total of 24 students (21% of the enrolled students) took the DIT2 survey. Four survey responses (16.7%) were removed from the data set due to incomplete survey responses. The researcher discussed the lack of participation in the four year university group with the professors. It was determined that student participation was lacking due to students having to access the online survey outside of class. On the other hand, the community college sample courses took place in technology classrooms where the students were able to complete the online survey during class time. This difference in venues and opportunity had an impact on the sample sizes of both groups. In the community college group 32% of the students participated in the survey compared to 21% of the students in the four year university group. In reviewing the individual incomplete surveys it was surmised that the participants may have lost interest in the survey and quit prematurely. The population from which these samples are derived are college students enrolled in introductory principles of accounting courses. It is

assumed that these samples are representative of the population of college students enrolled in introductory accounting courses.

Setting

The community college and four year state university are located in a growing rural outer suburb of Washington, D.C. The populations of the colleges are growing exponentially. The community college student body is 64% women and 36% men (www.collegestats.org). The four year college student body is 67% women and 33% men (www.collegestats.org) and thirty percent of the students are over the age of 25 (www.collegestats.org). The student community college population is 78% White, 14% Black, 4% Hispanic, 3% Asian, and 1% Native American (www.campuscorner.com). This sample is assumed to be representative of the community college student population in the Eastern United States.

Due to the existing enrollment in courses and instructor assignments, this non-experimental design did not utilize randomization in the sample group. Therefore, convenience sampling was utilized in this study. Working within the existing courses, all of the students had an opportunity to participate in the research study. The accounting instructors used existing teaching methods and accounting curriculum throughout the semesters. Students who agreed to participate in the study completed the DIT2 instrument in order to collect data to assess mean scores of ethical readiness and moral sensitivity.

Instrumentation

The data collection instrument used in this study is the Defining Issues Test 2 (DIT2). This survey was originally developed as the DIT in 1986 by James Rest and then updated to the DIT2 for the purpose of quantifying the moral development theory developed in the 1970's by Larry Kohlberg (Rest, Thomas, Narvaez, & Bebeau, 1997). Since its development, the DIT has

been used regularly in numerous applications to assess individual and group levels of moral sensitivity in decision making (Abdolmohammadi, et al., 1997; King & Mayhew, 2002). The DIT is used by approximately 500 researchers annually across various disciplines (Bailey, Scott, & Thoma, 2010; King & Mayhew, 2002). Furthermore, it is the primary instrument that has been used to gain insight into college students' moral judgment (King & Mayhew, 2002). For the purposes of this study the main P-score will be used from the DIT2 although the instrument gathers numerous other moral sensitivity scores. The P-score is a "measure of cognitive moral capability" which is "the percentage of principled considerations an individual uses to decide how a hypothetical moral dilemma ought to be resolved" (Thorne, 2001, p. 108) in accordance with Kohlberg's six stage moral sensitivity ranking. The correlation of DIT2 scores and Kohlberg's model of moral development is shown in Table 2 below.

The DIT2 survey instrument is composed of five vignettes and corresponding moral dilemma questions. The survey participants need only to recognize and choose statement choices that reflect their opinion of the best alternative for each vignette by ranking ten statements about the vignette in order of perceived importance (Thoma, 2006). The DIT2 queries the respondent about age, gender, level of education, and religious status. The DIT2 question for political orientation was removed from the online test.

Although there are other ethics survey instruments available, the DIT2 was chosen for this study due to its widespread use, validity, reliability, and comparability with other research studies. The Office for the Study of Ethical Development at the University of Alabama reports a .84 reliability rate (Dong, 2011). The research performed by Xu, et al. (2007) assessing the two modes of DIT2 tests of paper and pencil versus the online version "indicate that survey mode did not affect respondents' ratings on their DIT2- taking experience" (p. 24). In addition, Xu, Iran-

Nejad, and Thoma (2007) reported that “the overall findings supported the reliability and discriminant validity of the paper-pencil and online versions of DIT2” (p. 24).

The norms for the DIT2 test available from the University of Alabama are displayed in Chart 2 below. These norms are the basis for t-test comparison with the community college

Table 2

Defining Issues Test 2 score interpretation in Kohlberg’s model of moral development

Stage 23 DIT Score	The proportion of questions answered by the individual which correlate to Stage 2 (“focus on the personal interest of the actor making the moral decisions” (DIT2 Spring 2009, p. 4)) and Stage 3 (“focus on maintaining friendships, good relationships, and approval” (DIT2 Spring 2009, p. 4)) level of moral decision making.
Stage 4P DIT Score	The proportion of questions answered by the individual which correlate to Stage 4 (“focus on maintaining the existing legal system, roles, and formal organizational structure” (DIT2 Spring 2009, p. 4)).
P DIT Score	The proportion of questions answered by the individual which correlate to Stage 5 (“focus on appealing to majority while maintaining minority rights” (DIT2 Spring 2009, p. 4)) and Stage 6 “focus on appealing to intuitive moral principles or ideals” (DIT2 Spring 2009, p. 4)).

Table 3

Norms scores for the DIT2 test

Sample Type	P-score Mean	P-score Std. Deviation	N
Undergraduate Students	35.09	15.21	32,989
Female Undergraduate Students	36.25	15.52	16,592
Male Undergraduate Students	33.25	15.23	16,121
College Freshman Students	34.11	14.99	10,327
College Sophomore Students	35.23	15.35	3,542
College Junior Students	34.91	15.28	6,913
College Senior Students	35.97	15.27	12,207

sample group, the community college norms group, and the junior level undergraduate norms group.

This instrument is designed from a positivist research perspective (Gahir, 2007) in alignment with typical accounting ethics research (Searcy & Mentzer, 2003) and the perspective of this research study. Due to the widespread acceptance, use, and norms available for this instrument, it is the one of choice for this research study. In addition, the DIT2 is an instrument that quantitatively describes the “social and cognitive constructs” (Thoma, 2006, p. 67) of moral development. This is an important factor as community college students are diverse in their social and cognitive backgrounds.

The survey was administered through Survey Monkey online at www.surveymonkey.com. This anonymous venue was available to students to complete during class and outside of class. Accounting instructors were provided paper copies of the Informed Consent document (Appendix A) and a Recruitment Form (Appendix B) to distribute to students. The Informed Consent was also provided to participants on the first screen of the survey prior to beginning the DIT2 questions. The collected data from the DIT2 included the participants’ age, gender, religious level, and level of education. Once the data was collected in the survey it was sent to the University of Alabama Center for Ethical Studies for compilation. A compiled P-score data file was then emailed to the researcher for statistical analysis.

Procedures

Permission from three higher education entities were obtained for this study. First, permission for this research study was obtained from the Liberty University Institutional Review Board (LU IRB) (Appendix C). An application for an Exemption Certification Review was submitted to the LU IRB due to the specific characteristics of this research study. The LU IRB

states, “Research activities in which the involvement of human participants constitutes no more than minimal risk and falls within one or more of the exempt categories described in 45 CFR 46.101 (see below) may be eligible for exemption” (LU IRB Policies, 2011, p. 1). These activities include, “Research that is to be conducted in established or commonly accepted educational settings, involving normal educational practices” (LU IRB Policies, 2011, p. 1). Furthermore, this “research involves the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior” (LU IRB Policies, 2011, p. 1). Second, the Dean of the School of Business at the community college approved this research study (Appendix D). Third, the four year university IRB provided approval of the study (Appendix E).

The research study was initiated upon receiving IRB approval from both universities. The researcher contacted the University of Alabama Center for Ethical Research and ordered the online DIT2 survey. The survey is pre-designed for continuity and consistency in use through the online survey provider Survey Monkey.com. During the spring 2013 semester all accounting instructors received an email from the Dean of the Business School of the community college and the four year college informing them about the nature and process of the study. The instructors were encouraged to allow students time and opportunity to complete the survey. Students enrolled in principles of accounting courses received an email detailing their optional, voluntary, and anonymous participation in the study. The email included the online URL to access the online DIT2 survey through SurveyMonkey.com. Information about the study was also posted in the courses in Blackboard at the community college and Canvas at the four year state university. Students at the community college and four year state university were also provided a hard copy of the Informed Consent Form and the Initial Recruitment Form. Students

at the four year state university were provided a university IRB required debriefing statement (Appendix F). Students were given a two week window of opportunity to complete the anonymous survey instrument online. Instructors gave the option to have students complete the survey in class or outside of class. After the initial two week period to complete the survey the survey deadline was extended another two weeks due to the lack of student participation. Instructors were contacted again by the researcher. At the conclusion of the research data gathering a sample of 67 students had been obtained from the community college and a sample of 20 students had been obtained from the four year state university.

Data Analysis

Compiled data was collected by SurveyMonkey.com in individual survey files and in a numeric summary. The data file was then sent to the University of Alabama Center for Ethical Studies. This center controls and monitors the DIT2 survey. The Center of Ethical Studies compiled the data into a format conducive for analysis and forwarded the data file to the researcher. The descriptive statistics were provided by the Center of Ethical Studies. The data was then prepared for inferential statistical analysis in SPSS statistical software based on the variables. The dependent variable was the level of moral sensitivity as indicated by the DIT2 P-score. The independent variables were level and type of college education. In a retrospective causal-comparative study although the observations and reporting take place after events have already occurred, it is important to determine if any extraneous variables are factors in the study. Data validity, reliability, and objectivity are very important components in this study. Various procedures were used to establish the validity and reliability of the data analysis. The DIT2 norms scores are reported by the University of Alabama to be 84% reliable.

After the data was collected, it was processed through several stages. First, a histogram was developed for both sample groups to check for normality (Gall, et al., 2007). Second, a Levene's Test for Equality of Variances was performed to confirm there was no difference in the variances between the two groups of data due to the skewed data in the four year university sample group. Third, an independent samples t-test was performed for the first null hypothesis to test the means between the two sample groups. Fourth, a Mann Whitney nonparametric test was conducted due to the small sample size of the four year university sample. Fifth, two one-sample t-tests were conducted on the community college sample group and the norms scores provided by the University of Alabama Center for Ethical Studies. Sixth, a final independent samples t-test was conducted on the community college and four year university sample groups combined comparing male and female P-score moral sensitivity scores.

There were several threats that may pose problems for internal validity (Gall, M., Gall, J., & Borg, 2007). First, history may pose a threat to the internal validity of this study (Gall, et al., 2007) should students gain knowledge and insight concerning ethics from other sources. Second, maturation may be a cause (Gall, et al., 2007) of a student increasing his or her understanding and sensitivity to ethics. Third, students may give answers to DIT2 questions that they believe the researcher desires to see (Gall, et al., 2007). Fourth, the researchers may unconsciously look for changes in data that may not exist (Gall, et al., 2007). Fifth, the DIT2 scores are not determined solely by the moral judgment of the individual, but are influenced by "religious ideology, socioeconomic status, ethnic background, occupational ideology, and geographic region" (Thoma, Barnett, Rest, & Narvaez, 1999, p. 103). Sixth, experimental mortality may alter the sample groups resulting in less data collection (Gall, et al., 2007). Finally, in conducting the analysis of this study, two additional considerations must be made.

The one shot design poses limitations to the interpretation of the data (Creswell, 2007) and the small sample group size of the four year university sample group must be factored into the care of data analysis and its representation of the population group. In conclusion, it is essential to not only be mindful of these threats, but also to evaluate how to control their impact.

There is a two- fold perspective of the ethical considerations of this research study. First, the reliability of the data relies upon the subject's willingness to be honest about his or her ethical decision making processes. The tendency for some individuals to provide answers he or she thinks the interviewer wants to hear can skew the data collection process. The second perspective of research ethical considerations involves the researcher's procedures. Participants in the study remained anonymous. Participation in the study was voluntary. These two procedures allows for the maximum amount of freedom, choice, and protection for the students in this research study.

CHAPTER FOUR: FINDINGS

In this study, community college students' moral sensitivity scores were compared to their peers at a four year university and national norms scores. A sample of college students attending community college principles of accounting courses and a sample of college students attending a four year university principles of accounting courses were administered a nationally recognized moral sensitivity instrument, the Defining Issues Test 2 (DIT2), to determine individual moral sensitivity scores. This study provides research to increase understanding of the ethics readiness of community college students in comparison to college students at four year universities. This first step in assessing the readiness of community college students will set the stage for curriculum decision making to include ethics education in the school of business that adheres to the community college mission to positively impact society, strengthen the accounting profession, and improve accounting education curriculum for improving decision making in business.

The following research questions are examined in this study:

RQ1: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses and the moral sensitivity scores of four year university students enrolled in introductory accounting courses?

RQ2: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for students of the same education level?

RQ3: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for junior college students who traditionally receive ethics education?

RQ4: Is there a difference in the moral sensitivity scores among community college students enrolled in introductory accounting courses based on the participants' gender?

The null hypotheses for this study include:

NH1: There is no significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of four year university students.

NH2: There is no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of community college level students.

NH3: There is no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of junior level students who traditionally receive accounting ethics education.

NH4: There is no statistically significant difference between male and female students in the level of moral sensitivity P-scores.

Descriptive Statistics

The statistical analysis for this study began with an assessment of the normal distribution of the data using SPSS statistical software. Histograms were generated for both sample groups. Figure 4 shows the bimodal, positively skewed data for the four year university sample. Figure 5 shows the unimodal, symmetric data for the community college sample. The frequency of each DIT2 P-score was categorized within rank sets of ten in the histogram. The University of Alabama Center for Ethical Studies reports the following DIT2 P-scores in Figure 6. The frequency of the two sample groups centers on the categories of 20, 30, and 40 rankings.

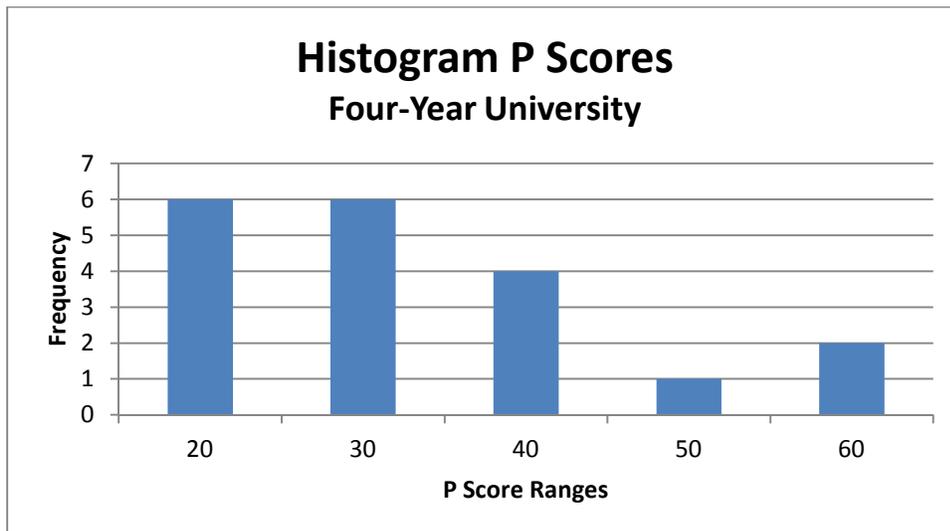


Figure 4. Four year university histogram.

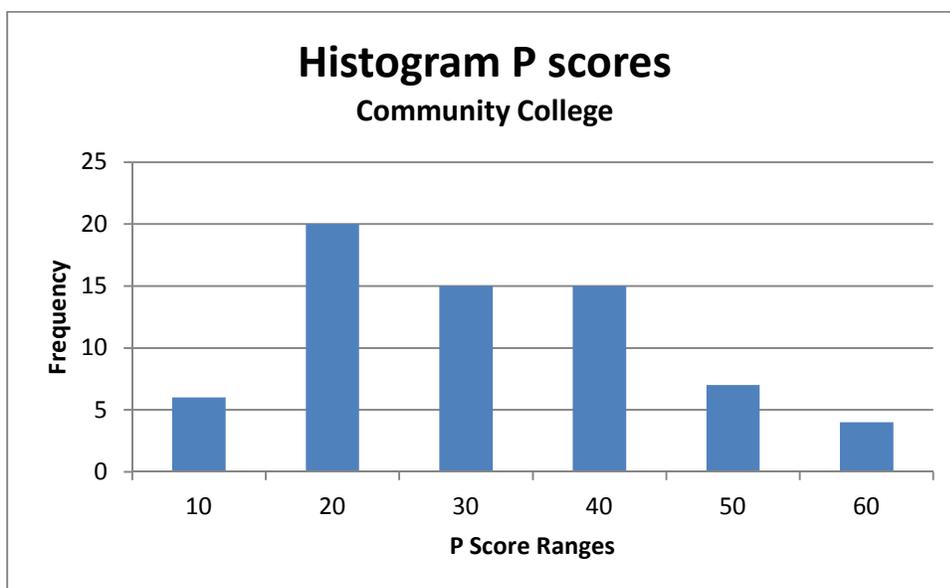


Figure 5. Community college histogram.

This suggests that compared to the national norms the sample groups exhibited high school to college level moral sensitivity scores with the largest percentage ranking in the 20 level P-score.

Table 4 reports the age categories for the community college sample group. The majority of the sample (70.15%) was in the 18-21 age category. The four year university group had 100% of the participants in the 18-21 age group range.

P-Score	Group
20s	Junior high school students
30s	Senior high school students
40s	College students
50s	Graduate students (not studying moral thinking)
60s	Graduate students (studying moral thinking)

Figure 6. DIT2 P-scores norms.

Table 4. Age categories for community college group.

Age	Number	Percentage
18-21	47	70.15%
22-25	8	11.94%
26-29	3	4.48%
30-33	3	4.48%
34-37	3	4.48%
38-41	2	2.99%
42-49	1	1.49%

Table 5. Descriptive statistics for two samples

P-Scores	N	Mean	Median	Mode	Standard Deviation	Range
Community College	67	26.955	26	14	13.213	56
Four Year University	20	29.800	27	20	15.285	54

Descriptive statistics were calculated for both samples and the measures of central tendency and measure of dispersion are reported in Table 5. The community college group mean P-score of 26.955 is lower than the four year university mean P-score of 29.8. However, the difference was not statistically significant based on the analysis of the data as reported below.

Inferential Statistics

Due to the nature and composition of the data groups nonparametric and parametric statistical tests were performed in this study. Initially assumptions were tested on the data to determine the viability of utilizing a t-test as a means of testing the data. First, the data is continuous. Second, based on the histograms, the data has a normal distribution. Third, the samples are independent of each other. Ideally, samples are randomly chosen from their population. However, due to the nature of this study, a convenience sample was used. In order to determine if the assumptions of the t-test have been met a Levene’s Test of Equality of Variances was used to test the homogeneity of variance resulting in a p value of .633 which was greater than a .05 alpha. Therefore, the variances are assumed to be equal.

The first null hypothesis addressed that there was no significant difference between community college students’ ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of four year university students. An independent samples t-test was conducted to compare the mean scores of moral sensitivity between the two groups. There was not a significant difference in the scores for the community

Table 6. Moral sensitivity P-score independent samples t-test

	Sig.	T	Df	Sig. (2 tailed)
Equal Variances Assumed	.209	.815	85	.418

college group ($M=26.955$, $SD=13.213$) and the four year university group ($M=29.800$, $SD=15.285$), $t(85)=.815$, $p=.418$ with an alpha of .05. As a result, the researcher failed to reject the first null hypothesis. In order to reduce the possibility of a Type II error whereby the researcher fails to identify a difference in means when a difference does exist, a Mann Whitney nonparametric test was conducted on the data. The parametric statistical tests assumptions of normality are a concern for the small sample size of the four year university group ($N=20$). Since the Mann Whitney test does not rely on the same assumptions as the independent samples t-test this test was chosen to increase the validity of the study findings. The Mann Whitney test supported the t-test findings that the two sample means are not significantly different ($n_1=67$, $n_2=20$, $U=730$, $P=.55212$ ($P>.05$)). Table 6 details the inferential statistics results of the t-test for the first null hypothesis.

The second null hypothesis stated that there was no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of community college level students. A one-sample t-test was conducted on the community college sample group and the norms scores provided by the University of Alabama Center for Ethical Studies. There was not a significant difference in the DIT2 P-scores for the community college group ($M=26.955$, $SD=13.213$) and the DIT2 P-scores for community college ($M=27.99$, $SD=13.72$); $t(66)=.641$, $p=.524$. Since the P value was greater than .05 alpha the researcher failed to reject the second null hypothesis. There was no significant difference between the mean P-scores measuring moral sensitivity of the community college group and the national norm group of community college students .

The third null hypothesis stated there is no statistically significant difference between community college students' ethical readiness as measured by the Defining Issues Test 2 P-score measuring moral sensitivity compared to the P-scores of national norms scores of junior level undergraduate students who traditionally receive accounting ethics education. The national norms scores for the DIT2 P-scores for junior undergraduate students (M=34.91, SD=15.28, N=6913) were reported by the Office for the Study of Ethical Development. These norms scores compared to the community college DIT2 P-scores were analyzed using a one sample t-test for the difference in two means. There was a significant difference in the scores for the community college group (M=26.955, SD=13.213) and the norms scores for the junior level undergraduate group (M=34.91, SD=15.28); $t(66)=4.9278$, $p=.0001$. This finding suggests that there is a difference in the moral sensitivity of community college students compared to junior level undergraduate students. As a result, the researcher rejected the third null hypothesis.

The fourth null hypothesis stated there was no statistically significant difference between male and female students for the level of moral sensitivity P-scores. An independent samples t-test was conducted on the data to compare male and female DIT2 P-scores for moral sensitivity. Table 7 denotes the percentages of males and females from both sample groups. There was not a significant difference in the scores for males (M=25.512, SD=13.310, n=41) and females (M=29.478, SD=13.872, n=46); $t(85)= 1.357$, $p=.178$, $p>.05$. These findings caused the researcher to fail to reject the null hypothesis at p-value .178. Therefore, although the P-score for moral sensitivity for females was higher, gender was not found to have a statistically significant impact on the moral sensitivity scores between the groups. Table 8 details the independent samples t-test data.

Table 7. *Gender percentages*

	Male	Percentage	Female	Percentage
Community College	33	49.25%	34	50.75%
Four Year University	8	40.00%	12	60.00%

Table 8. *Moral sensitivity P-score independent samples t-test based on gender*

Community College and Four Year University samples	Levene's Test	t	df	Sig. (2 tailed)
Equal Variances Assumed	.761	1.357	85	.178

CHAPTER FIVE: DISCUSSION

Introduction

This study examined the moral sensitivity scores of students enrolled in introductory accounting courses to investigate how their DIT2 P-scores compared to other groups of students. The research questions addressed how the community college sample group compared to a sample group of students attending a four year university attending introductory principles of accounting courses. In addition, the community college group was compared to two other national norms DIT2 P-scores. The study also examined the factor of gender on moral sensitivity scores.

Due to the attention given four year undergraduate and graduate college programs in ethical empirical studies, community college student populations have been overall ignored in empirical research. Therefore, this lack of understanding of the community college student population has a negative impact on the progress of accounting ethics curriculum advancement as so many of the accounting professional groups and college accrediting entities endorse.

Accounting ethics is a fertile ground for discussing moral decision making. In light of the growing trend of societal moral relativism and situational ethics, the topic of accounting ethics points students to consider the source of their moral compass and contemplate the implications of their choices. In turn, Christian accounting instructors have an opportunity to share the foundational biblical principles as applied to society problems through the moral code found in the Bible. The widely known and socially accepted biblical principle known as “The Golden Rule” found in Matthew 7:12, “So in everything, do to others what you would have them do to you” is a good starting point for accounting ethics.

Summary of the Research

This research sought to explore the existing moral sensitivity of community college students in comparison with their peers in the interest of expanding the current empirical research to include this important population of college students. In addition, the community college sample group was compared to the national normative scores of community college and junior level undergraduate four year college students. An examination into the readiness of community college students in introductory accounting classes will provide additional information on the readiness of those students to benefit from an accounting ethics curriculum. The data results suggest that community college students do exhibit comparative moral sensitivity scores to their peers in the four year university environment and their peers at the national level. However, the community college students' moral sensitivity scores are significantly different from the students who traditionally receive accounting ethics courses at the junior level at four year universities and colleges.

Summary of the Findings

The results of this study suggest that the community college sample group mean DIT2 moral sensitivity scores were not statistically significantly different from their peers in the four year university group or the norms group for community college students. Furthermore, an analysis of the hypothesis for any difference in the mean scores in male and female participants did not indicate statistical significance. However, the mean DIT2 moral sensitivity scores between the community college group and the junior level undergraduate norms scores group was significantly different. This was the only null hypothesis to be rejected by the researcher in this study. These results are similar to the findings of Abdolmhamadi, et al. (1997) and LaPanne (2007) who analyzed college student DIT2 P-scores with peer national norms scores.

Their study found that their sample group when compared to national norms scores was not significantly different.

Gender as an extraneous variable has been shown to be statistically significant in impacting student's ethical sensitivity and moral decision making. In the research of Abdolmohammadi, et al. (2009), Adkins and Radtke (2004), Bernardi and Bean (2008), Chan and Leung (2006), Gammie, E. & Gammie, B. (2009), Leitsch (2006), and Sweeney and Costello (2009) women were found to have a slightly statistically significant increase in ethical decision making than men. This study suggested that there was no statistically significant increase in ethical decision making between differences of gender.

The purpose of this research study was to address four research questions in order to fill a gap in the existing research.

RQ1: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses and the moral sensitivity scores of four year university students enrolled in introductory accounting courses?

No, there is no difference in the moral sensitivity scores of community college students and four year university students enrolled in principles of accounting courses based on the findings of the parametric statistical independent samples t-test ($p=.418$, $p>.05$) and the nonparametric Mann Whitney test ($p=.552$, $p>.05$). This comparison is helpful to gain a perspective of how community college students rank within their peer group in relation to moral sensitivity. Furthermore, it is helpful to see that the mean score of the community college sample ($M=26.955$) fell in the lower category typically for junior high students in relation to James Rests' ranking of moral sensitivity in Figure 6 of P-score moral sensitivity rankings. This

may indicate that community college students need to have an ethics course to increase their ethical decision making in general.

RQ2: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for students of the same education level?

No, there is no statistical difference between the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to their peers in the national norms scores. The one sample t-test indicated that the mean DIT2 score was not significantly different at a level of ($p=.524$, $p>.05$). Therefore, these findings suggest that although the mean score of the community college sample may be lower as indicated in the first research question, the group is not statistically different from their peers nationwide. This gives further perspective of the characteristics of the group for educators to make informed decisions about the needs of community college students in reference to their moral sensitivity.

RQ3: Is there a difference in the moral sensitivity scores of community college students enrolled in introductory accounting courses compared to the national norms moral sensitivity scores for junior level undergraduate college students who traditionally receive ethics education?

Yes, there is a difference in the mean scores of community college students' moral sensitivity scores ($M=26.955$) compared to national norms scores for junior level undergraduate students ($M=34.910$). The one sample t-test findings revealed at a significance of $p=.0001$ there was a significant difference between the mean scores of the two groups. Therefore, the researcher rejected the null hypothesis. Although the community college sample mean score is lower and significantly different from the junior level norms scores, does not negate their opportunity to receive ethics curriculum. However, this information does give community

college educators data to make informed decisions on whether to defer ethics curriculum to the four year universities when students may have higher moral sensitivity scores and more accounting knowledge to apply ethics principles.

RQ4: Is there a difference in the moral sensitivity scores among community college students enrolled in introductory accounting courses based on the participants' gender?

No, there is no statistical difference between the moral sensitivity scores in the two groups based on gender. For the independent samples t-test, the community college and four year university groups were combined into one group ($N=86$, $p=.178$, $p>.05$). The results of this test indicated that male ($M=25.512$) and female ($M=29.478$) scores although numerically were different, were not statistically different between the two groups. Existing research indicates that gender is another factor impacting student's ethical sensitivity and moral decision making. Multiple research studies consider age in their analysis: Adkins and Radtke (2004), Chan and Leung (2006), Leitsch (2006), Bernardi and Bean (2008), Abdolmohammadi, et al. (2009), Gammie, E. and Gammie, B. (2009), and Sweeney and Costello (2009). In all of these studies women were found to have a slightly statistically significant increase in ethical decision making than men.

Limitations of the Study

This study focuses on the general moral sensitivity as measured by the Defining Issues Test 2 developed by James Rest. The Accounting Ethical Dilemma Instrument is a survey instrument that measures moral decision making specifically in an accounting context (Thorne, 2001). Therefore, a limitation in this study is the assumption that the general moral sensitivity measured in the DIT2 is a sufficient measurement to assess the moral decision making ability necessary in an accounting context in the community college environment. In addition, Thorne

(2001) expressed concern in her research that hypothetical ethics training may not correlate to real world actions. It is the desire of educators to have students apply their classroom learning to applications in the real world. The results suggested in this study are limited to students applying their learning in real world situations.

There are several limitations to the research concerning the data. One, data was collected from one locality. A larger sample collected from various regions in the United States would improve the breadth of the research collection. Two, the sample was collected at one point in time. Researchers have discussed the benefits of longitudinal studies in ethics research (Welton & Guffey, 2009). Three, the data collected did not include the participant's major. As this study focuses on accounting students, those students attending principles of accounting courses are not necessarily accounting majors. Four, the sample size is on the small size particularly for the four year university sample of twenty participants. Five, the data from the national norms scores for junior level students are not necessarily from four year universities.

The DIT2 survey use has research limitations as well. There is an assumption that the participants in this study understood the DIT2 survey questions and answered them carefully and honestly. The validity of the survey responses relies on the participant's honest and accurate responses. Although the DIT2 has a sample question to acclimate participants to the test format, the DIT2 is a lengthy survey with multiple columns and multiple options to weigh and rank. This format increases the risk of participants becoming bored and rushing to complete the survey resulting in unreliable survey results. However, despite these limitations, this research coupled with existing research provide a clearer picture of the conditions as they exist at the community college and provides foundational information for curriculum decision making supported by empirical research.

Implications of the Study

Among the 11 million full time undergraduate students attending community college (NCES, 2012) many will attend introductory accounting courses in the pursuit of a business degree. These community college students represent an important sector of the college population who could receive accounting ethics education. Some educators reason that community college students are unprepared for accounting ethics because of their lack of foundation in accounting knowledge (Wilhelm, 2008). However, as the literature review in this study indicates, the existing level of a student's cognitive ability to process ethics education curriculum is sufficient at the community college level. Based on James Rest's (1988) research, the constructivist nature of ethics education is not predicated upon the students' knowledge of accounting in order to understand ethical decision making in accounting if presented at an elementary level. Following this line of thinking, community college students already possess skill sets of moral and ethical decision making that enable them to understand accounting ethics course material.

Based on the information in the community college sample histogram the highest number of participants scored in the 20 category. According to James Rest's (1988) research and his DIT2 moral sensitivity rankings this equates to a junior high level of moral sensitivity. The mean group score was 26.955. This data finding suggests that as a whole community college students are lacking higher levels of moral sensitivity and are in need of ethics education in general. Particularly in light of the multiple degree majors attending principles of accounting courses, this moral sensitivity score may be indicative of the community college population in general. This is of significant interest to educators and administration as community colleges seek to meet student needs and increase student experiences in academia. This may result in

additional comparisons that can be made with other classes and community college departments to assess student moral sensitivity college wide.

In addition, a base line has been established for the moral sensitivity scores gathered for this group of community college students. Using these base line scores research may be conducted to assess the impact of future ethics teaching in the community college environment. Viewing the mean group scores for males and females fosters implications of the needs of students depending on other factors such as gender, age, and perceived religious level. The diverse student bodies of community colleges may be assessed and needs met based on further specific data groups within the sample group shown in this study.

Traditionally accounting ethics courses are taught at the four year university level. As a result, community college level students are overlooked in receiving accounting ethics curriculum in introductory accounting courses. The implications of this study include a greater understanding of the ethics readiness of community college students in comparison to college students who traditionally receive ethics training at four year universities. This first step in assessing the existing moral sensitivity of community college students will set the stage for curriculum decision making that adheres to the community college mission to positively impact society, strengthen the accounting profession, and improve accounting education curriculum for improving decision making in business and at the same time is appropriate for the needs of community college students.

Implications for Further Research

Although much research exists on ethical education and the moral sensitivity scores of four year undergraduate and graduate college students at various levels of their education additional research would be beneficial to investigate. First, it would be beneficial to study the

differences in moral sensitivity between students according to their proposed major. Students attending introductory accounting courses at the community college level have a broad spectrum of declared majors. Second, it would be beneficial to study the type of ethics education delivery that would benefit this population of students, integrated ethics learning objectives throughout existing accounting classes or a stand-alone ethics course. Third, a longitudinal study of students who receive an ethics education and their decision making habits in the business environment subsequent to their graduation. Fourth, a research study utilizing the DIT2 instrument before and after ethics education would shed light on how the ethics curriculum impacted student's moral decision making processes. Fifth, duplication of this research would be beneficial to broaden the depth of understanding of students' existing moral sensitivity scores from a longitudinal perspective.

An exciting further step to this research would be to conduct a research study comparing two groups of community college students. One group would receive accounting ethics teaching based upon the moral sensitivity scores reported in this study and the other group would not receive any teaching other than the existing course objectives. A pre-test DIT2 survey would be given to both groups. At the conclusion of the semester, the two groups would receive a post-test DIT2 survey. Any differences in the DIT2 moral sensitivity scores before and after the ethics teaching would shed light on the impact ethics teaching makes in the classroom.

Summary

A number of surveys and interviews conducted by McNair and Milam (1993), Everett (2007), Misiewicz (2007), and Persons (2009) found high percentages of accounting faculty who felt ethics is important in the curriculum, ethics should be taught in the accounting curriculum, and more ethics integration should take place. Anderson and Mohrweis (2008) found that among

accounting faculty surveyed there was support for integrating accounting ethics in the business curriculum. Blanthorne, et al. (2007) conducted a survey that found 98.1% of the accounting professors desired ethics integration. In 2002, Lawson found a 100% positive response to a survey of professors concerning ethics curriculum integration. Furthermore, accounting faculty surveyed by Adkins and Radtke (2004) and Madison and Schmitz (2006) found faculty and accounting chairpersons were very concerned about accounting ethics and were in favor of the importance of including ethics in college curriculum. In light of this positive atmosphere of a willingness to teach ethics, the other side of the issue is the students' opportune learning window of opportunity to fully understand and glean ethical knowledge. Prior to implementing a curriculum change, it is important to support that proposed change with empirical research to support the initiative. This study seeks to inform and empower community college business schools with empirical knowledge to help educators understand the ethical awareness and potential abilities of community college students to glean knowledge from an accounting ethics education integration in the college accounting curriculum.

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APPENDIX A
Consent Form

ETHICS READINESS: AN ANALYSIS OF COMMUNITY COLLEGE
STUDENTS' MORAL SENSITIVITY SCORES

Julie M. Wallace

Liberty University

Department of Education

You are invited to be in a research study of accounting ethics. You were selected as a possible participant because you are a college student attending an introductory accounting course. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

This study is being conducted by Julie Wallace in the Business Department

Background Information:

The purpose of this study is gain a greater understanding of the ethics readiness of community college students in comparison to college students who traditionally receive ethics training at four year universities.

Procedures:

If you agree to be in this study, we would ask you to do the following things:

Take a one-time 20-30 minute online survey.

Risks and Benefits of being in the Study:

The study has several risks: The risks are minimal and are no more than the participant would encounter in everyday life. The risks include boredom or slight fatigue.

The benefits to participation: an indirect benefit to society in developing better methods of ethical education for college students.

Compensation:

Participants will not be compensated.

Confidentiality:

The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Research records will be stored securely and only researchers will have access to the records. Research procedures are designed to protect the confidentiality and privacy of the participant. The online survey form does not record your name. Age, gender, political affiliation, and level of education are recorded as data information. Data is stored at the

researcher's home computer and is only available to the researcher. Data will be stored for the amount of time necessary to complete, confirm, and publish the research report. The data will be stored for three years after which the data will be destroyed.

Voluntary Nature of the Study:

Participation in this study is voluntary. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Julie Wallace. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact them at 540-842-0175 or jwallace10@liberty.edu. The research advisor in this study is Dr. Melanie Hicks at 434-592-3723.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 1837, Lynchburg, VA 24515 or email at fgarzon@liberty.edu.

Statement of Consent:

I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

IRB Code Numbers: 1485.122012

IRB Expiration Date: 12/20/2013

APPENDIX B

Initial Recruitment Form

You are Invited to Make an Impact

To Voluntarily Participate in an Online Survey

To Help Educators be Informed about

Your Needs as an Accounting Student

How Do You View Ethics?

Who: students enrolled in introductory accounting classes

Where: Online

When: Anytime between March 11 through March 15, 2013

How: At your convenience, go online at any internet access location (home, school, even your smart phone) and type this web site URL into your web browser:

<https://www.surveymonkey.com/s/Go>

What: Read 5 separate paragraph long scenarios and answer multiple choice questions about each scenario

Time: It takes about 20-30 minutes to complete the survey

The survey is easy and confidential!

Thank you for your time and participation

helping accounting educators!

Your participation is completely voluntary and has no impact on your course grade.

APPENDIX C

Liberty University IRB Approval Letter

February 20, 2013

Julie Wallace

IRB Exemption 1485.022013: Ethics Readiness: An Analysis of Community College Students' Moral Sensitivity Scores

Dear Julie,

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

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

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

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

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

Sincerely,

Fernando Garzon, Psy.D.

Professor, IRB Chair

Counseling

(434) 592-4054

APPENDIX D

Community College Approval Letter

January 17, 2013

Dear Liberty University Institutional Review Board:

The following study is approved to take place at _____ Community College:
IRB Conditional Approval 1485.122012: Ethics Readiness: An Analysis of Community College
Students' Moral Sensitivity Scores .

Sincerely,

Dean of School of Business

APPENDIX E

Four Year State University IRB Approval Letter

February 13, 2013

Dear Researcher:

Your research proposal titled **Ethics Readiness: An Analysis of Community College Students' Moral Sensitivity Scores** has been approved through an expedited procedure by the IRB. Your research falls into the following category making it eligible for an expedited approval:

- Clinical studies of drugs and medical devices meeting conditions described by federal code.
- Collection of blood samples by finger stick, heel stick, ear stick, or venipuncture. The participants meet the federal codes description for eligibility under expedited review.
- Prospective collection of biological specimens for research purposes by noninvasive means.
- Collection of data through noninvasive procedures (not involving general anesthesia or sedation) routinely employed in clinical practice, excluding procedures involving x-rays or microwaves.
- Research involving materials (data, documents, records, or specimens) that have been collected, or will be collected solely for nonresearch purposes (such as medical treatment or diagnosis).
- Collection of data from voice, video, digital, or image recordings made for research purposes.
- **Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.**

This IRB approval expires on **February 12, 2014**. If your research is to continue after the expiration date you will need to submit a letter asking for an extension. If your research methodology changes, please submit a new application. However, if the change to the research protocol is minor (such as adding one question to a survey), you may submit a letter to the IRB chair explaining the changes and how the research continues to meet the criteria indicated above. Best of luck with your research,

Member, IRB

APPENDIX F

Four Year State University Debriefing Information Form

Debriefing Statement

1. This study investigates the ethical decision making of college students enrolled in introductory accounting courses. The research questions involved in this study include an investigation to see if there are differences in the ethical decision making of four year college students compared to two year college students.
2. Over the past several decades multiple highly publicized accounting scandals have had a detrimental impact on society and its confidence in accountants and business leaders. In addition, this perceived deterioration of ethical behavior in the workplace has caused some to scrutinize the ethical and moral decision making ability of accounting graduates. In response, many business colleges have moved toward implementing ethics courses into the accounting, marketing, and business management curriculum.
3. In a variety of choices for higher education, community colleges provide a popular and viable option for accounting students to further their education. Community colleges produce accounting graduates who should be prepared to face ethical decisions they will face in the workplace. In this study, the moral sensitivity of college students is studied by measuring their readiness to receive an accounting ethics curriculum.
4. A sample of college students attending community college and a sample of college students attending a four year university will be administered a nationally recognized moral sensitivity instrument, the Defining Issues Test 2 (DIT2), to determine individual moral sensitivity scores. The implications of this study include a greater understanding of the ethics readiness of community college students in comparison to college students who traditionally receive ethics training at four year universities.
5. You may choose to withdraw your data from this study.
6. If you would like to receive a report of this research when it is completed, please contact Julie Wallace at jwallace10@liberty.edu.
7. Please contact the IRB at www.provost.edu/irb/ if you have any ethical concerns about this research.
8. If you would like to know more about this type of research please visit http://www.psychology.sunysb.edu/ewaters/552-04/slide%20sets/steph_sohl/rest_neokohlbergian_approach.pdf.
9. Thank you very much for your willingness to participate in this study to better develop accounting curriculum to meet student needs.