

**THE RELATIONSHIP BETWEEN THE PEDAGOGICAL DELIVERY OF
ACCOUNTING ETHICS AND ITS EFFECTS ON ETHICAL DECISION MAKING OF
ACCOUNTING STUDENTS**

by

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Abstract

The importance of accounting ethics as one of the core accounting, financial reporting, and business ethics decision making is widely accepted by management practitioners, academics, and investors. However, the significance of the relationships between the teaching methods and its effect on the ethical decision making of accounting students remains a contentious issue. Even with ethics being taught and reviewed, there has been limited research on the effectiveness and impact on the accounting student's ethical decision-making abilities. Research in the field of moral judgment and accounting ethics in the accounting profession continues with numerous studies examining factors impacting ethical reasoning abilities of accounting students and accountants. However, no conclusive evidence exists on the significance of accounting ethics teaching method on the ethical decision-making of accounting students. The focus of this quantitative study was to investigate and determine the relationship between the pedagogical delivery of ethics in accounting and its effects on the ethical decision-making of accounting students. The study utilized a well-established Rest's Defining Issues Test 2 (DIT-2) measurement instrument to measure the variables. DIT-2, measurement instrument including the demographic information was administered to 144 qualified participants to test the hypotheses and answer the research questions. A multiple regression analysis utilizing an independent sample *t*-test was conducted to determine the impact of teaching accounting ethics as a stand-alone or discrete course and teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students. The results of the independent sample *t*-test showed that neither the stand-alone nor integrated accounting ethics within the accounting curriculum significantly impacted the ethical decision-making of accounting students as measured by the DIT-2 instrument.

Dedication

This dissertation is dedicated to some very special and important people in my life for their support not only during this journey but also for the knowledge, determination, and their presence that imparted a great sense of importance to my educational development. Thank you, Mom and Dad (Iyom Eunice and Obi Victor, Sr.) for always emphasizing education, and instilling in me the importance and the need for education, and for planting the seed that vegetated into this research study. To my grandmother, I love you, I miss you, and I know that you are rejoicing with me, always.

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CHAPTER 1. INTRODUCTION

Early in the year 2000, the world economy experienced a financial crisis that was attributed to ethical misconduct, misappropriation of funds, misrepresentation of financial statements, and poor ethical and accounting decision-making. These inappropriate behaviors affected many organizations in the United States and around the world and were evident in organizations such as Enron, HealthSouth, WorldCom, Tyco, and other financial and mortgage institutions (Hogan, Rezaee, Riley, & Velury, 2008). The actions of those companies placed many institutions, organizations, and countries in difficult positions and in some cases, organizations were dissolved (Hogan et al., 2008). These events created a renewed focus on ethical financial reporting and in particular, on ethical practices in the accounting profession. Ethics in financial reporting plays a significant role in the functionalities and sustainability of an organization (Sharif & Scandura, 2014). There is consequently an ongoing need to incorporate ethics courses into accounting curricula so that all accounting students can be thoroughly grounded in ethical concepts and practices.

The above mentioned ethical lapses by companies and CEOs have led to an increased demand for ethical behavior in the accounting profession (Sharif & Scandura, 2014). Ethical behavior must start at the university level, where new accountants receive their degrees and training (Williams & Elson, 2010). The precise methods by which accounting ethics training is delivered have become a topic of much debate, as the best methods will lead to the best ethical behavior on the part of future accountants. Williams and Elson (2010) asserted that academia must play a significant role in accounting ethics education and ethical issues should have a major impact on the decisions made by corporate managers and officers. Furthermore, it is important that accounting teachers prepare themselves with training in ethics to be able to assist accounting

students to understand and address ethical concerns by developing suitable educational materials with clear objectives (Massey & Hise, 2009). The best way to ensure ethical behavior in the accounting profession is to make sure that ethics is a significant part of undergraduate accounting education. This is a critical issue because stakeholders within organizations and the public rely on accounting information such as financial statements to make informed investment decisions. They must be able to trust that information, but recent financial scandals may have weakened that trust (Royae, Ahmadi, & Jari, 2013). Responses to this problem have included the formation of the Ethics Education Task Force, which evaluates the status of business ethics as taught in all The Association to Advance Collegiate Schools of Business (AACSB) accredited schools (Heller & Heller, 2011).

According to Sigurjonsson, Arnardottir, Vaiman, and Rikhardsson (2015), business graduates are still not well equipped through existing programs to make ethical decisions or become ethical accounting leaders, which could be because these courses are not delivered in the best way possible. There are essentially two ways to deliver accounting ethics training: as an integrated aspect of the accounting curriculum, or as a standalone course or courses (Uyar, & Güngörmüs, 2013). There is no consensus, either in the literature or in practice, regarding which is better in terms of instilling ethical concepts in accounting students and hopefully, moderating their future behavior when they enter the accounting profession.

Background of the Problem

The 21st-century accounting scandals (Enron, Tyco, WorldCom, HealthSouth, and Arthur Anderson) within corporations have resulted in ongoing discussions of accounting ethics. These high-profile cases of corporate malfeasance and financial fraud cast doubt on the integrity of the accounting profession (Martinov-Bennie & Mladenovic, 2015; Thomas, 2012). The public has

entrusted the accounting profession with the fiduciary responsibility to present ethical financial statements and reports, but that trust has sometimes been violated. The accounting profession must practice ethical behavior in order to restore and maintain that trust (Martinov-Bennie & Mladenovic, 2015; Thomas, 2012).

Businesses, organizations, and various agencies expect and demand professionalism, integrity, and honesty from the accounting profession. Recent events have shown the need for an effective teaching method that will enable accounting professionals to handle the complexities of ethical accounting dilemmas as they arise. Currently, programs such as business and accounting ethics are viewed as inadequate, stagnant, and ineffective, especially considering recent financial debacles (Martinov-Bennie & Mladenovic, 2015; Tello, Swanson, Floyd, & Caldwell, 2013). This view is due to the perception that not enough time is spent in teaching accounting students' ethical concepts; that there is no agreed-upon systematic curriculum for doing so; and there is no method in place (other than grading students in such courses) to measure how effective that teaching has been. The academic world must enhance accounting and business ethics curricula "if the profession is to regain public trust" (Martinov-Bennie & Mladenovic, 2015, p. 189). Thus far, these increased efforts have done little to foster effective, ethical decision-making by accounting professionals.

There is a consensus among accounting students, accounting educators, and accounting professionals that to regain the public's and investors' trust, there is a need to recognize that ethical guidelines and technical excellence are part of a well-structured accounting curriculum (Martinov-Bennie & Mladenovic, 2015; Tello et al., 2013; Thomas, 2012). To help avert a repeat of previous financial crises, the inclusion of professional skills and organizational ethical expectations into the accounting curriculum is pivotal (Martinov-Bennie & Mladenovic, 2015).

Since the financial crisis of early 2000, financial reporting and ethical behaviors have become major concerns for both the U.S. and the International Federation of Accountants (IFAC), an international accounting regulating board. According to Martinov-Bennie and Mladenovic (2015), the IFAC has established extensive guidance for accounting education to maintain and foster professional values, attitudes, and ethics. Also, in 2004, the Association to Advance Collegiate Schools of Business (AACSB) recommended similar ethics instruction to help students and managers to identify ethical dilemmas and sensitivities and understand ethical issues and judgment within a business context. Such an understanding is vital in effective accounting ethical decision-making (Lau, 2010).

Lau (2010) argued that unethical accounting behavior not only hurts the profession, but also impacts society. Accounting and business teachers must develop and practice the best instruction method of ethics education to students. Jennings (2004) and Williams and Elson (2010) contended that solving the ethical accounting crisis rests on effective, ethical training for accountants with a focus on identifying ethical dilemmas and making ethical decisions regardless of the mode of delivery. A refocus on values, ethics, integrity, and moral understanding is very critical at this juncture.

Ge and Thomas (2008) informed that Kohlberg's (1969) theory of cognitive moral development (CMD) had been recognized as an ethical reasoning theory used by academic researchers, including accounting researchers, to study individuals' ethical decision-making process. For the current study, the general theory guiding this quantitative research study came from the work of Kohlberg (1969) study of cognitive moral development. Kohlberg (1969) established a step-by-step development stage grouped into three key levels to help understand the

moral reasoning and judgment of individuals which is known as the Preconventional level, Conventional level, and Post-conventional level (Rest, Narvaez, Bebeau, & Thoma, 1999).

Based on Kohlberg's (1969) cognitive moral development theory, which asserted fundamental differences in moral reasoning among individuals and within the same individuals, it is timely and interesting to understand whether the method of teaching accounting ethics or what type of curriculum would work best in teaching is the best to achieve optimal results. It is important to finding out whether intergrating ethics into the overall curriculum or teaching specific, standalone accounting ethics courses would be more effective. As the primary theoretical orientation for the current study, Kohlberg's theory of cognitive moral development is reviewed further in Chapter 2.

Statement of the Problem

Accounting ethics education is a vital part of the accounting curriculum because new accountants entering the profession must be fully grounded in ethical concepts and behavior. Despite this acknowledged need, however, there is little consensus in how such education should be delivered at the university level. The general problem to be studied, is that because of that lack of consensus, accounting ethics are not taught in an optimal fashion. The specific problem is that it is not known or agreed which of two methods are best in such education: integrating ethics into the overall curriculum, or teaching specific, standalone ethics courses (Williams & Elson, 2010). The consequence of this problem is that accounting students receive varying types of ethics education, which also vary in effectiveness. If the problem remains unaddressed, there will be a continuing lack of standardization and optimization of ethics course delivery, with the future problem of possible unethical behavior by these future students when they enter the accounting profession.

Lau (2010) and Williams and Elson (2010) stated that little research had been done on how to incorporate accounting ethics into accounting programs effectively. Some researchers have said that accounting ethics programs should be integrated into accounting curricula (Dellaportas, Jackling, Leung, & Cooper, 2011; Els, 2009); however, others (Bean & Bernardi, 2007; Dellaportas, 2006) have stated that stand-alone accounting ethics courses will provide an in-depth review and better understanding, which will lead to better judgment and ethical decision-making. As an example of the problem, Graham (2012) argued that there is no convincing or irrefutable evidence as to which approach (stand-alone or integration) is better in influencing the ethical decision-making abilities of accounting students. Accordingly, the current study will investigate and compare the efficacy of stand-alone and integrated accounting ethics teaching methods.

Purpose of the Study

The purpose of this quantitative survey research study is to investigate and determine the relationship between the pedagogical delivery of ethics in accounting and its effects on the ethical decision-making of accounting students (Williams & Elson, 2010). Through the study of moral training and a review of the existing literature on cognitive moral capability, the present study's goal is to understand the effects of teaching accounting ethics as an integrated or as a discrete course on accounting students' ethical decision-making. The quantitative research study will examine the moral awareness and moral reasoning of accounting students and their ethical decision-making via the Defining Issues Test-2 (DIT-2), administered online to accounting students (Rest, Narvaez, Thoma, & Bebeau, 1999).

The primary theoretical foundation of this study was in assessing the past contributions from the literature as they relate to ethical decision-making, dealing with topics such as

deontological ethics, virtue ethics, and stakeholder/agency ethics. Stakeholder and agency ethics relates directly to the functionalities of an organization, including the ethical decisions made by accounting professionals. The theoretical foundation of this study is, therefore, decision-making theory (Crossan, Mazutis, & Seijts, 2013; Martin & Parmar, 2012). Furthermore, this ethical theory critically investigates and presents an inclusive and comprehensive model integrating virtue, values, character strengths, and ethical decision-making. This theoretical basis guides investigations into answering the research questions in the study as well as evaluating the hypotheses (D'Anjou, 2004).

Using the DIT-2 and extensive literature review, the researcher will attempt to address the core effects of accounting ethics teaching methods on the ethical decision-making of accounting students, whether such methods are a stand-alone or an integrated curriculum, or both. Decision-making theory in this study considers the integration of personal attributes or dimensions with decision-making ethics (Crossan et al., 2013).

Significance of the Study

The significance of this quantitative research study is that it can contribute to the existing body of knowledge by providing evidence on the statistical significance of accounting ethics teaching methods and whether the integration of accounting ethics or discrete accounting ethics courses influences the decision-making of accounting students. Academia, institutions, organizations, and accounting professional bodies can be informed on effectively training accounting students in identifying ethical dilemmas and making ethical decisions (Crossan et al., 2013). Through the review and analysis of the applicable theory (decision-making theory) and a survey of accounting students, this study can supplement and expand on decision-making theory. Furthermore, this study can contribute to the body of knowledge by further informing the

academic world that ethical accounting decision-making is an acquired and developed skill (Crossan et al., 2013). By this quantitative research study's contribution to theory, accounting institutions and academia can be equipped with the knowledge that one accounting ethics course delivery method may be superior to another.

Ensuring accounting ethics course effectiveness is a goal of the academic community as well as accounting governing bodies, which include the International Federation of Accountants (IFAC) and the Association to Advance Collegiate Schools of Business (AACSB) (Martinov-Bennie & Mladenovic, 2015). Even with the extensive research on business and accounting ethics, minimal research exists on the effectiveness of accounting ethics delivery methods to accounting students. The understanding that this study provides can aid institutions in the understanding and knowledge of ethical concerns. Also, it may influence executives to make informed moral decisions. Williams and Elson (2010) argued that accounting professors should prepare accounting students for discourse on accounting ethics. Such preparation can enhance the understanding of ethical dilemmas and better assist students in recognizing ethical issues, which will, in turn, lead to better corporate decision-making (Williams & Ellison, 2010).

Rationale

The 21st-century financial crisis was due to unethical behaviors such as corruption, financial fraud, misappropriation of funds, bribery, embezzlement, and misleading financial records (Cavaliere, Mulvaney, & Swerdlow, 2010). These behaviors were caused by a lack of integrity on the part of corporate officers and other stakeholders (Williams & Elson, 2010; Kidwell, Fisher, Braun, & Swanson, 2013). Kidwell et al. (2013) went further to state that lack of education of accountants in ethics and morals was the cause of the unethical behavior of organizations. Business and accounting professionals are entrusted with fiduciary responsibilities

that require them to maintain integrity, honesty, objectivity, and adherence to rules and regulations (American Accounting Association, 2017; Doolan, 2013).

Accountants' responsibilities go beyond their immediate clients' needs, as they often are faced with obligations to investors, including shareholders and other stakeholders, as well as other government agencies such as the Security and Exchange Commission (SEC) and the accounting profession. Some of the responsibilities of accountants include maintaining and documenting financial transactions, providing relevant financial actions through analysis of alternate accounting options, and providing timely and valid financial statements based on good morals, ethical behavior, and judgment. If corporate and accounting scandals are to be prevented, it is imperative that colleges and universities institute a best practice of preparing accounting students to meet these ethical challenges as they encounter them. Preparing future managers, accountants, and CEOs is essential to good ethical decisions and judgment (Shafer-Landau, 2015; Armstrong, Ketz, & Owsen, 2003; Arjoon, 2000; Lara, 2008; Mintz 2006).

Research Questions

Despite continuous efforts at the organizational, state, and federal level to improve and foster effective accounting ethics education, the ethical decision making of the accounting students and accounting professionals remains questionable. The following are the research questions that this quantitative research study seeks to address:

RQ1: What is the effectiveness of teaching accounting ethics as a stand-alone or discrete course on the ethical decision-making of accounting students?

RQ2: What is the effectiveness of teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students?

Definition of Terms

Accountant. Accountants are individuals whose responsibility it is to record, prepare, and examine financial records, and as well as interpret records and transactions to ensure recording accuracy and compliance. Accountants also include independent auditors who examine organizations' financial documents to determine accuracy and validity in reporting (Amlie, 2010).

Accounting student. Accounting students are individuals, both undergraduate and graduate, studying or majoring in accounting (Amlie, 2010).

Business and accounting ethics. Business and accounting ethics are the standards or codes set forth by organizations and industries under which they are to operate in a fair and just manner. Business and accounting ethics are the moral principles used in evaluating accounting industry and organizations (Koumbiadis & Pandit, 2014; Low, Davey, & Hooper, 2008).

Defining Issues Test-2 (DIT-2). The DIT-2 is an effective and valid instrument for measuring moral comprehension and prosocial behavior and evaluating desired professional decision-making (Cooper & Schwartz, 2007; Rest, Narvaez, Thoma, & Bebeau, 1999).

Deontological ethics. Deontological ethics relies on the concept of morality as a duty and moral rule that defines universal norms. It prescribes how society or people should behave (Van Staveren, 2007).

Ethical decision-making. Ethical decision-making is the process and the ability to understand an ethical framework as well as having the ability to make ethical decisions based on accepted values and morals (Wilhelm & Czyzewski, 2012).

Ethical dilemma. An ethical dilemma is an ethical problem or situation presenting the conflict between moral values of right and wrong that results in decision-making that may affect the organization (Low, Davey, & Hooper, 2008).

Ethics. Ethics is a branch of moral philosophy that investigates the study of moral standards and provides moral guidance and societal standards in defining, defending, and deciding what is right and what is wrong (Montja, 2016).

Ethics education. Ethics education involves the teaching and learning of ethics, whether as a stand-alone or as an integrated ethics course in a curriculum (Hejase & Tabch, 2012).

Integrated ethics course. Integrated ethics course refers to the teaching of ethics in accounting as a mixed course with other accounting courses in the accounting curriculum (Williams & Elson, 2010).

Morals. Morals are the beliefs, understandings, views, behaviors, or principles regarding what is right or what is wrong, good, or evil according to society (O’Leary & Stewart, 2013).

Moral awareness. Moral awareness involves having the ability to interpret situations concerning moral or ethical dilemmas and the awareness that ethical or moral problems exist. Moral awareness is interchangeable with moral motivation; wherein there is an individual commitment and willingness to correct action and act on moral values (Wilhelm & Czyzewski, 2012).

Moral judgment. Moral judgment involves one’s ability to understand a situation, understanding the cause-effect of such event and action, and the capability to make a moral decision. Moral judgment involves having the ability, character, and courage to adhere to the morally acceptable norm (Wilhelm & Czyzewski, 2012).

Stand-alone/discrete ethics course. A stand-alone ethics course refers to the teaching of accounting ethics as a separate or isolated course within the accounting curriculum (Williams & Elson, 2010).

Research Design

The purpose of this quantitative-survey study is to study the relationship between the pedagogical delivery of ethics in accounting and ethical decision-making of accounting students. Also studied will be to what extent, if any, the integration of an accounting ethics course or a stand-alone course influences the ethical decision-making of accounting students (Williams & Elson, 2010). This quantitative survey research will utilize a non-experimental survey (the DIT-2) and a multiple regression statistical approach to analyze the data collected. The research will be conducted using a survey and questionnaire method, employing the services of Peanut Labs, an online service provider in the area. This quantitative method includes a survey of the chosen population of college and university accounting students through a randomized selection. The minimum number of participants required for this study was determined to be 107 accounting students in the United States (U.S.) This sample size was determined using G* Power 3.1.9.2 software. G*Power 3.1.9.2 is a free statistical software commonly used to calculate sample size, and power analysis for many statistical tests used in social sciences including regression analyses (Faul, Erdfelder, Buchner, & Lang, 2009).

The DIT-2 instrument for measuring ethical studies will be administered by an online service company, Peanut Labs, in the form of questionnaires. In measuring the data collected, the DIT-2, which uses a Likert-type scale, closed-ended, will be employed; this method has been used for over 25 years for ethics study, attesting to its reliability and validity as a measurement instrument (Rest, Narvaez, Thoma, & Bebeau, 1999). The Defining Issues Test-2 (DIT-2) is an

effective and valid instrument for measuring moral comprehension of what is wrong, right or good and prosocial behavior and to desired professional decision-making (Cooper & Schwartz, 2007).

The questions investigated through the survey are related to the gender, age, knowledge, values, attitudes, intentions, stand-alone, and accounting ethical scenarios relating to ethical decision-making (O'Leary & Pangemanan, 2007) of accounting students. This research is based on the philosophical approach of objectivism, which is the essence of moral values. The data collected will be statistically analyzed in SPSS version 24 using multiple regression analysis to answer the research questions and the hypotheses.

The research findings will help to inform the academic community of the need for better structure in delivering accounting ethics training to accounting students. The findings may also assist faculties and institutional curriculum designers in designing curricula for accounting ethics whether as a stand-alone, as an integrated course, or both. Also, the study results can add to the literature regarding the effectiveness of accounting ethics and ethical decision-making.

Assumptions and Limitations

Assumptions

This study involves some general, theoretical, and methodological assumptions. A survey will be administered to colleges and university students with access to the computerized system with the assumption that the respondents are registered accounting students. A further assumption is that the online-based survey was appropriate and an acceptable means of research in social studies and that student participants would provide answers truthfully and honestly (Abdallah, Maarof, & Zainal, 2016). This assumption provides a limitation on the researchers'

reliability regarding the respondents' understanding of the questions. A further assumption is that Peanut Labs is qualified to perform the survey.

There are several methodological assumptions that result in the use of various statistical analyses. By using multiple regression analysis, this study assumed that the variables in the study maintained a linear relationship, normality, homoscedasticity and that the variables under investigation were independent and quantifiable (Field, 2013). Additionally, multiple regression is assumed to be robust regarding error rate and can be fairly corrected to reduce the impact of potential source of sample bias or violation (Mertler & Vannatta, 2013). An additional assumption is the use of accounting students for ethical study, as the theoretical assumption is that accounting students will be the custodians of financial records preparation and that financial decisions made are by those trained in the accounting area. Furthermore, the researcher also assumes that these accounting students will eventually become decision makers within their organizations.

A further assumption of this study is the use of the DIT-2 for measuring ethical behavior. The assumption in using the DIT-2 was that any increase in moral awareness would result in an effective increase in the ethical behavior and decision-making of the accounting professionals (Rest et al., 1999). This assumption may not have considered other variables such as religious background, paternal benevolence, and ethnicity. Thus, any increase in the DIT-2 study of participants may not provide a corresponding significant increase in ethical behavior of the accounting professionals necessary for generalization.

Limitations

With regard to limitations of the study, the survey is of accounting students from colleges and universities in the west coast region of the U.S. Therefore, the findings of this research may

not be generalizable to the overall accounting profession in the U.S. or globally. The research also does not consider any school specifics, such as whether the participants have taken accounting ethics courses in the past. Another limitation is the degree of accuracy in the assumption that the participants selected are accounting students and that they answered the questions candidly. Furthermore, the use of self-reporting and the web-based survey approach presents some weakness and uncertainty as to whether the respondents understand the questions.

Theoretical Framework

The primary theoretical orientation for this research study was deep-rooted in one of the most widely used and accepted theories, Kohlberg's (1969) cognitive moral development theory. Cognitive moral development (CMD) theory was established by Kohlberg (1969) and has been widely accepted and further advanced by numerous researchers (Blay, Gooden, Mellon, & Stevens, 2016; Rest et al., 1999) in accounting and accounting ethics education. Kohlberg (1969) pioneered the theory regarding moral education, development, and reasoning, and several authors have relied on Kohlberg's theory in their research. Kohlberg's theory has been successfully utilized in experimental business and accounting ethics studies (Blay et al., 2016). Kohlberg (1969, 1976) offered an understanding of differences in moral reasoning among and within individuals, which occurs at three key levels through step-by-step development (Ge & Thomas, 2008). This theoretical framework is further reviewed and analyzed within the literature review section.

Also, additional areas of morality such as virtue ethics and deontological ethics were discussed to provide an understanding of ethical accounting decision-making as it relates to accounting students and the accounting profession (Crossan, Mazutis, & Seijts, 2013). For this study, examination of stakeholder and agency ethics is deemed necessary to provide critical

analysis of organizational structure and decision-making. This study is related to decision-making theory, which considers the integration of personal attributes and dimensions in trying to understand the relationship between accounting ethics delivery methods (stand-alone or integrated) and the ethical decision-making of accounting students. This integrated framework provides the foundation for understanding the core effects of accounting ethics education.

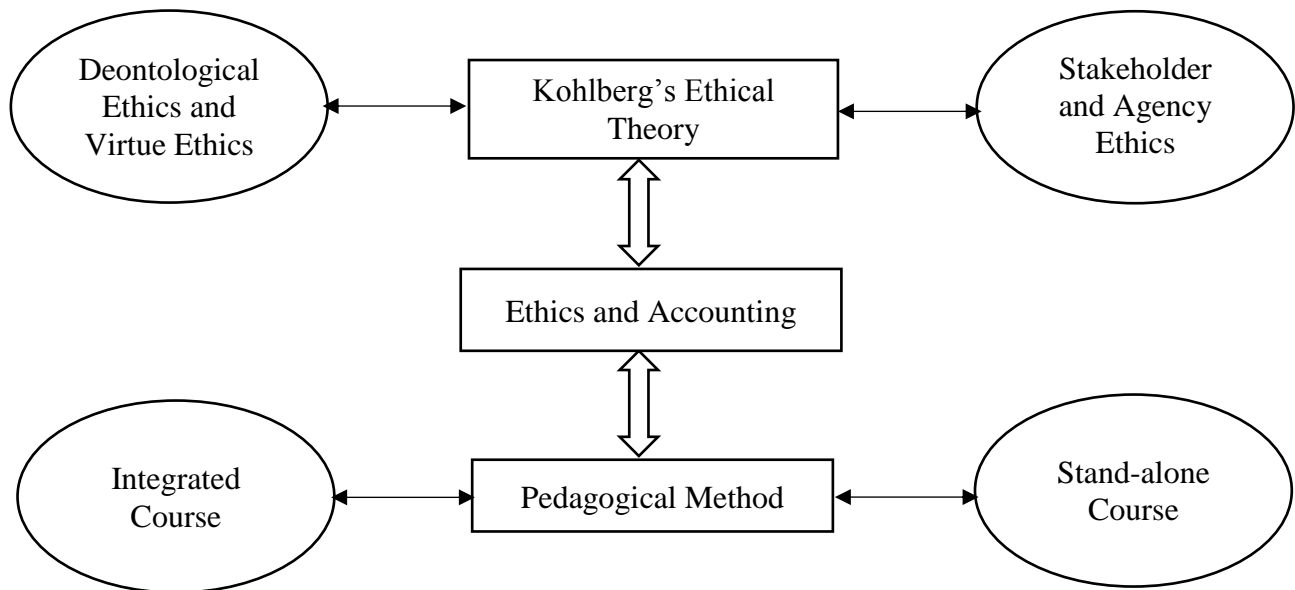


Figure 1. Theoretical Framework of Ethics and Accounting-The foundation for understanding the core of accounting ethics education.

In Chapter 1, the researcher introduced the topic in focus by providing the study background, statement of the problem, the purpose, the significance, rationale, research questions, definitions of key terms, research design, as well as possible assumptions and limitations of the study, and the theoretical framework that presented the foundation for understanding the effects of the accounting ethics education.

Organization of the Remainder of the Study

The remainder of this study is organized into four chapters. Chapter 2 provides the review of related literature to include Kohlberg's ethics theory of cognitive moral development, accounting and business ethics, accounting and business ethics education, virtue ethics, deontological ethics, stakeholder ethics, agency ethics, an integrated ethics course, a stand-alone ethics course, and defining issues test-2 (DIT-2). Chapter 3 provides an outline and explanations of the research design, methodology, research instruments, population, sample, data collection, data statistical analysis procedures, and ethical considerations relating to this research. Chapter 4 includes the review and data descriptive analysis resulting from the data collection. Chapter 5 includes the summation and discussion of the results of the research, implications, and provisions for future research recommendations.

CHAPTER 2. LITERATURE REVIEW

Introduction

The public relies on professional accountants to provide objective, reliable, and relevant financial statements that will aid them in making informed decisions. These responsibilities are as strong as the accountant identifying and understanding the nature of ethical accounting dilemmas (McCoy, 2012). As noted by various accounting organizations, including the Institute of Management Accountants (IMA), accountants have an obligation to provide the public with financial information generated with utmost standards and professionalism (McCoy, 2012). A review of the literature indicates the need for higher ethical standards, as even though professional organizations such as The American Accounting Association (AAA), American Institute of Certified Public Accountants (AICPA), and Institute of Management Accountants (IMA) provide ethical codes of professional conduct, they rely on members' understanding and self-discipline (McCoy, 2012).

Lack of ethical behavior by both professional accountants and business management has led to a financial crisis, which has led organizations, including the Association to Advance Collegiate Schools of Business (AACSB), to emphasize the need for institutions to incorporate ethics education into accounting curricula. By teaching ethics education, accounting students will be better exposed to ethical issues and be better equipped to make an ethical decision when an ethical dilemma arises (Enofe, 2010). The concept of what is right and what is wrong has been the root of ethical issues, ethics and standards, and recognizing these moral issues by the accounting profession and accounting educators is a necessity for the moral and honest decision-making process to begin (Jose-Luis Godos-Diez, Fernández-Gago, & Cabeza-García, 2015). The lack of ethical values is a major societal concern that the accounting educators can play a vital

role in mitigating. The roles to be played by educators include teaching accounting and business ethics to accounting students, even though many questioned whether morality could be taught in colleges and universities (Enofe, 2010).

Methods of Searching

Chapter 2 includes a review of the literature in the areas of Kohlberg's cognitive moral development, virtue ethics, deontological ethics, stakeholder/agency ethics, accounting and business ethics. The chapter also includes evaluation of accounting and business education, integrated accounting ethics course, discrete/stand-alone accounting ethics course, and the use of DIT and DIT-2 to understand ethical decision-making of accounting students. Defining Issues Test (DIT) was the initial measurement instrument and was later revised to what is currently known as DIT-2 (Rest, 1979).

In searching for peer-reviewed articles, the researcher consulted numerous peer-reviewed journals to obtain valid and reliable data. The search utilized Capella University databases, ABI/INFORM, ProQuest, Accounting, Tax, and Banking Collection, Business Source Complete, EBSCOhost, PsycArticles and PsycINFO, SAGE journals, Summon, LexisNexis, Google Scholar, and Internet search engines to identify peer-reviewed articles. Keywords used included *accounting, ethics, accounting education and ethics education, moral, morality, reasoning, moral education, cognitive moral development, Kohlberg, moral standards, virtue, deontological, and stakeholder and agency theory.*

Theoretical Orientation for the Study

Kohlberg's (1969) Theory

The primary theoretical orientation for this research rests on Kohlberg's (1969) theory of cognitive moral development (CMD). This section of the study analyzes Kohlberg's (1969)

theory of cognitive moral development and moral reasoning with regards to accounting ethics education in our institutions, which according to Gibbs (2014, 2013) and Lourenço (2014), originated from Piaget (1932). In Kohlberg's acknowledgment of both Dewey's philosophy and Piaget as cited in Gibbs (2013), Kohlberg stated:

My views...were based on John Dewey's philosophy of development and his writings concerning the *impulsive, group-confronting, and reflective* stages of moral development. The first empirical work to pursue this direction was taken by the Swiss Child psychologist Jean Piaget, in 1932.... Using [in my dissertation: Kohlberg, 1958] dilemmas created by philosophers or novelists, I was stuck by the fact that adolescents had distinctive patterns of thinking in younger children (Gibbs, 2013, p. 82).

The above distinctive pattern of thinking was categorized by Kohlberg as stages. However, Piaget's theory was not of the position that a child's thinking and understanding of morality could be viewed and captured sufficiently by the "stage model" (Lourenço, 2014, p. 3). Kohlberg (1969) advanced cognitive moral development through stages, in contrast to Piaget's theory of moral development, and included adults in his cognitive moral stages.

At the time of Piaget's (1932) cognitive moral development (CMD), limited information on the moral development structure of the brain existed. As noted above, Swiss child psychologist Piaget, in observing a group of children, sought to provoke genuine responses in children by combining what he called "naturalistic observation, psychometrics, and the psychiatric clinical examination" (Lefmann & Combs-Orme, 2013, p. 641). The general idea of Piaget's model was to observe how children responded to various situations and how they articulated those situations, whether through a thoughtful process or by assessing their attitudes.

Piaget's theory was instrumental in understanding the ontology of early brain activities and development in children.

Piaget's observations and belief that development of the structure of the brain is vital to developmental tasks led to the (1932) publication of four major stages of children's moral development. According to Piaget, the four stages are a *sensorimotor period* (0 to age 2); *the preoperational thought period* (about age 2 to age 7); *the concrete operations period* (age 7 to age 11); and *the formal operations period* (age 11 to age 15). These stages, as depicted by Piaget inform various developmental stages of the brain by indicating that a child at the beginning follows reflexive actions and sensory practices such as sucking on an object (sensorimotor period). At the preoperational stage (2-7 years), a child becomes inventive and develops new ways of dealing with situations or objects, such as imaginary play (Lefmann & Combs-Orme, 2013). Piaget established that during the concrete operations period (7-11 years), even though still reflexive, children start developing and thinking logically through abstraction and theorization. At the final stage, the formal operations period (11-15 years), the ability to exercise and use deductive reasoning and conceptual thoughts emerge (Ghazi, Khan, Shahzada, & Ullah, 2014). At the formal operations period, children gain the ability to understand their actions, results, and effects of such activities. Piaget theorized that at this stage, children could solve problems through intellect and logical thoughts (Lourenço, 2014). However, Piaget emphasized that to move up to the next stage, individuals must satisfactorily complete the prior stage, and if they fail to accomplish that, the likelihood of experiencing difficulties is greater in achieving subsequent levels. Even, with little or no known evidence at the time, Piaget believed that "development of the structures of the brain is key to the development tasks" he alluded to and insisted that such psychological explanations as in biology or logic would come sooner or later

(Lefmann & Combs-Orme, 2013, p. 641). Piaget's theory established the moral, cognitive development groundwork and Kohlberg's (1969) theory emerged from that and was later advanced.

The future of accounting ethics theory is one that is hard to envisage, and predicting the future is perhaps beyond anyone. However, our knowledge based on historical events suggests that accounting ethics theory and accounting research will continue to evolve to new heights from premodern, neo-Kohlberg theory to positive accounting ethics, and to what Birnberg (2011) labeled behavioral accounting ethics, which encompasses ethical decision-making by accounting and business students and the accounting profession. Kohlberg's (1969) theory expanded the work of Piaget and advanced the understanding of cognitive moral development through his six stages of moral reasoning (Lourenço, 2014) that encompasses adults.

The theoretical orientation for the current research study is Kohlberg's (1969) theory of cognitive moral development (CMD) and serves as the framework for the study. Kohlberg's (1969) theory of cognitive moral development and moral reasoning was the pioneer and leader regarding moral development, moral education, moral reasoning and moral judgment, and has been emulated and advanced by numerous authors (Blay, Gooden, Mellon, & Stevens, 2016). Kohlberg's theory has been successfully utilized in nonexperimental and experimental business and accounting ethics (Blay et al., 2016) research. Kohlberg's (1969, 1976) theory offers an understanding of fundamental differences in moral reasoning among individuals and within the same individuals, which occurs at three key levels through six different step-by-step progressions, known as stages (Ge & Thomas, 2008).

According to Blay et al. (2016) and Ge and Thomas (2008), the steps are from "self-interest also known as *preconventional*, respect for society's conventions and laws called

conventional, and proceeding to the highest level of principled reasoning called the *post-conventional*” (Blay et al., 2016, p. 11). (see Figure 2).

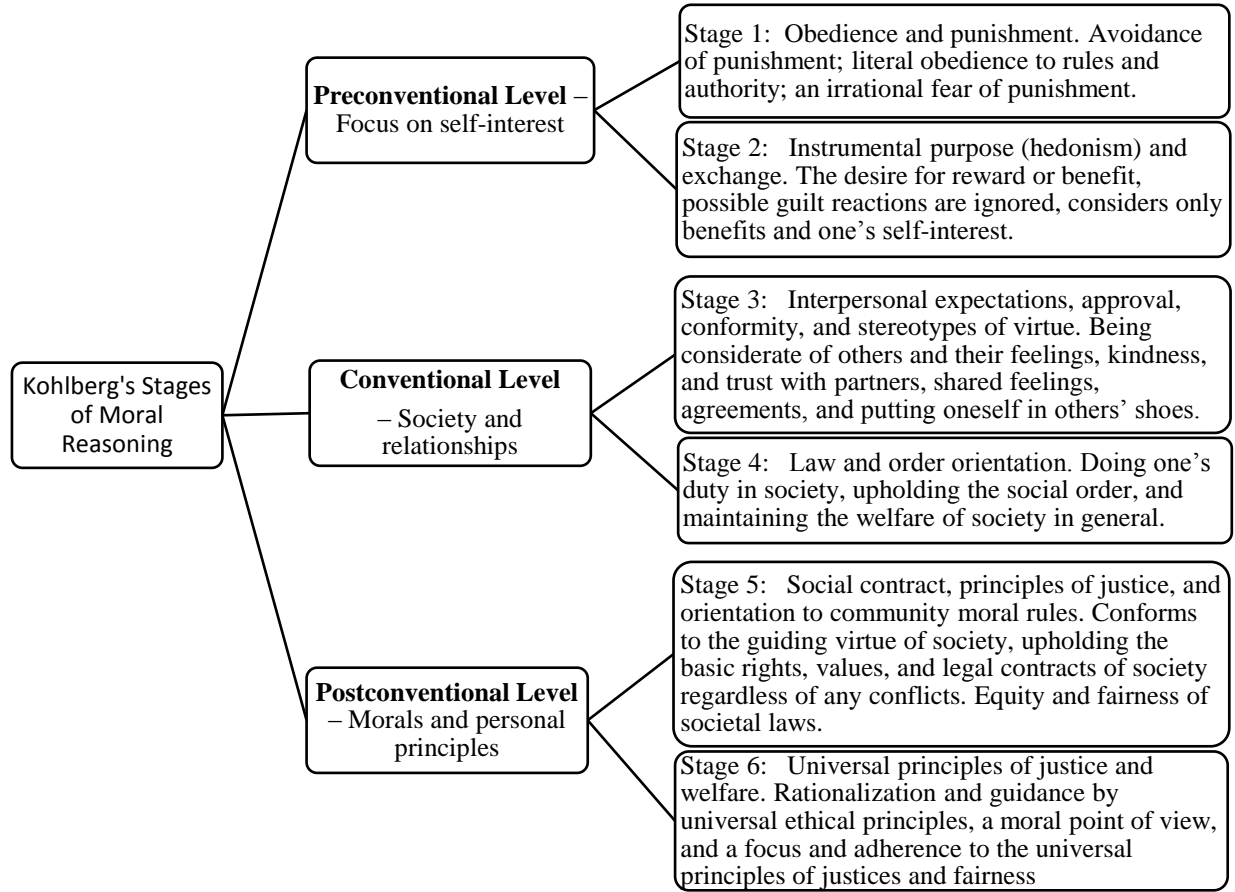


Figure 2. Kohlberg’s stages of moral reasoning (abstracted from Snell, 1996). The model depicts the progressive stages when deciding the morality of an action or judgment.

Review of the Literature

The public relies on professional accountants to provide useful and relevant financial statements produced with objectivity, integrity, and professionalism. However, high competitiveness and globalization faced by businesses and accounting leaders have led to various unethical activities. Society has lost faith and trust in the profession, resulting in various accounting bodies and governmental agencies trying to effectively police widespread corporate

scandals (Baker & Comer, 2012). The accounting profession must understand that there is an interdependency between accounting, business, ethics, and morality if they are to curtail these scandals that are affecting the industry and society. When one of the agents (accounting, business, ethics, and morality) falters, such as in lack of ethics or morality, the accounting profession and the business community suffer (Bostan, Costuleanu, Horomnea, & Costuleanu, 2011; Olaru, 2010). The commonality of morality, which is universal, is characterized by rules of engagement, principles, or codes, which businesses and accountants must follow as rational persons (Olaru, 2010).

To mitigate unethical and fraudulent financial activities, organizations such as The Association to Advance Collegiate Schools of Business (AACSB) have recognized the need for ethical decision-making and ethical leadership and have encouraged the inclusion of ethics studies in the business curriculum (Baker & Comer, 2012). By the same token, governmental oversights such as Sarbanes-Oxley, enacted in 2002 and the amendment to the U.S. Sentencing Commission's Federal Sentencing Guidelines for Organizations in 2004 were established to help create responsible reporting and to help deter unethical behaviors (Baker & Comer, 2012). These rules and regulations *per se* are not practical solutions to the moral dilemmas we face but rather, in a pragmatic sense, recommendations that guide one's actions.

Nonetheless, the significance of the above assertion and knowledge is that accounting ethics or lack thereof plays a fundamental role in organizational behavior and practices and the role that the academic circles must play (Sharif & Scandura, 2014; Williams & Elson, 2010). The authors accentuated the critical need for accounting ethics to start from the ground up before reaching the corporate level. Williams and Elson (2010) further contended that students are the leaders of tomorrow and will perhaps be in the position of a corporate decision maker. The above

reinforces the need for understanding ethical meanings and what constitutes an ethical dilemma and what does not. O’Leary (2009) contended that there is a critical need for accounting ethics education and that the predominant and lacking issues are the effectiveness of each method (integrated accounting ethics course or discrete/stand-alone course) of teaching accounting ethics. Whether accounting ethics can be taught to accounting students, expressively, entails having an ethical mindset, which, O’Leary (2009) postulated, involves the constant practice of ethical principles from early on. O’Leary stated that ethical behaviors are first developed and imparted at home and later influenced by educators, peers, environment, and other surrounding or trending factors. Such early training in ethics helps individuals to understand and apply ethical decisions.

On this note, Kohlberg developed a theory of cognitive moral development and moral reasoning (CMD). Kohlberg’s theory, which is a normative theory, emphasizes macro-moral matters related to societal structures to include general practices, laws, rules, and institutions (Blay et al., 2016) and is used to assess and analyze cognitive moral developments of individuals. Kohlberg believed that when deciding right or wrong, individuals use cognitive moral reasoning. Unlike Piaget’s (1932) review of cognitive moral development, Kohlberg (1969) investigated the responses of both children and adults to ethical dilemma cases in trying to ascertain the respondent’s moral judgment and reasoning in ethical decision-making. At each level of Kohlberg’s (1969) cognitive moral development, a type of moral reasoning is developed and dominates at each stage.

The first level in Kohlberg’s (1969) theory, pre-conventional, includes stage one obedience and punishment, and stage two-instrumental (hedonism) and exchange. At the pre-conventional level, the notion of right or wrong is emphasized and understood in the form of

obedience, disobedience, rewards, and punishment. Ge and Thomas (2008) insisted that at this stage, unethical behaviors do not exist mainly because of irrational fear and avoidance of punishment. Children, at the early stage, do not think about the reasoning behind their actions but rather, the consequences of those actions dominate their thinking. In stage one, according to Kohlberg's theory, individuals are predisposed to following the rules established by authority (Snell, 1996). Kohlberg's stage two is the instrumental purpose (hedonism) and exchange. Stage two involves the individual's desire for reward and is dominated by also instrumental purpose and exchange. Individuals at this stage are self-centered and self-absorbed, where individual's self-interest dominates one's behavior and possible guilt reactions, pragmatically, are ignored and justified (Brown-Liburd & Porco, 2011; Snell, 1996).

From the accounting ethics perspective, Kohlberg's (1969) ethics theory has far-reaching implications within the accounting profession. Those involved in the recent financial scandals acted from self-interest at the expense of society (Soltani, 2014). In contrast to Kohlberg's stage two, accountants and financial report preparers may have employed the desire for rewards and benefits in a positive way by serving their needs and others at the same time (Snell, 1996).

Kohlberg's (1969) second level of cognitive moral development and reasoning is the conventional level. At the conventional level, stages three and four, which focus on society and relationships, are dominant. The Conventional level, according to Kohlberg's theory, views ethical truth as dependent on individuals and the society as a group and fosters a sense of social relativism, shared feelings, and in a relationship with others in society. Stage 3 of the conventional level relates to the orientation of mutual interpersonal relationships and expectations, conformity, and stereotypes of virtue. At this stage, one is perceived as in a relationship with other individuals where expectations and others' feelings take precedence over

one's interest. In essence, one is considerate of others, kind, and trusts others for a common goal, exercising the "golden rule" of putting oneself in others' shoes (Snell, 1996, p. 24). While stage four of conventional level deals with law and order orientation, the expectations of acceptable and ethical behavior dominate stage four (Thorne & Hartwick, 2001), which suggests the relevance of social influence in resolving the moral, ethical dilemmas that individuals, society, and the accounting profession face. Stage four of Kohlberg's theory suggests duty in society, upholding social norms and order, and preserving the integrity of professions and society in general.

The accounting profession, as a social member of organizations, is entrusted with the fiduciary responsibility to provide financial reports based on integrity, relevance, and professionalism that applies cognitive morality in its decision making (Frank et al., 2010, Arjoon, 2000). By following a set of ethical accounting standards, individualistic thinking and behaviors give way to a holistic thinking that encompasses society. According to Doolan (2013), the above viewpoint is adopted from the organizational attitudes, values, and virtues while not compromising society, law, and order. Accordingly, accountants must rely predominantly on reaching and maintaining organizational and societal expectations based on rules and laws that rely less on consequential information and self-interest (MacDougall, Martin, Bagdasarov, & Mumford, 2014). To move further into the next Kohlberg taxonomy, one must complete each stage before moving in progression to the next level.

The third level of Kohlberg's (1969) cognitive moral development theory is the post-conventional level, also known as the autonomous, or principled level (MacDougall et al., 2014). The post-conventional level consists of stage five and stage six, which deal with morals, values, and principles of what is right and wrong. At this level, Kohlberg insists that individuals rely on

universal principles of justice and welfare for all, the orientation of community moral rules, rationalization, and guidance of universally accepted ethical norms instead of being self-centered and egotistic (Snell, 1996). Stage five of Kohlberg's theory conforms to the guiding virtue of the society, which upholds basic values, rights, and legal contracts with disregard for any conflict of personal or group interest. Essentially, moral values become the guiding principles defined by the social contract (Gibbs, 2013; MacDougall et al., 2014; Rest, Narvaez, Thoma, & Bebeau, 2000).

The final stage of the post-conventional level is stage six. At this stage of Kohlberg's theory, individual internalization of universal principles of justice is exhibited and demonstrated. At level three (post-conventional), the differences between Piaget's ethics and Kohlberg's theory are well noted (Kaplan, & Tivnan, 2014). Kohlberg advances the cognitive moral development changes from adolescence to adulthood with regards to shifting from the conventional to the post-conventional level. At an adult level, individuals are expected to develop and understand that one's actions have certain consequences and that morality emerges strongly in carrying out moral judgments, as was noted in a study involving high school and college students (Kaplan, & Tivnan, 2014).

From accounting and practical perspectives, the post-conventional level of Kohlberg's (1969) theory represents the highest level of ethical accounting decision-making, in which accountants are expected to be rational, reliable, impartial, and have a high understanding of morality when making financial and ethical decisions. Accountants' responsibilities also focus on their ability to care and represent others, regarding "perspective taking" as a necessary aspect of moral reasoning (Baril & Wright, 2012, p. 468). Ellis (2013) argued that in performing their duties, accountants believe in the rule of laws governing moral actions of rationalization and that

such actions must benefit society even when a conflict exists. There must be a balance of moral principles, rules, society, and professional expectations in the calculation of overall utility (Ellis, 2013). While Kohlberg's (1969) theory offers a great understanding of the cognitive moral development and reasoning of accountants, Kohlberg's study was exclusively a qualitative study that involved an interview of participants using his Moral Judgement Interview (MJI) (McGuire, Barbanel, Brüne, & Langdon, 2015). Kohlberg's (1969) theory of cognitive moral development model of moral reasoning, judgment, and understanding was criticized and deemed to be subjective and even gender-biased. Kohlberg's theory was deemed to be problematic due to its reliance on data obtained using Moral Judgment Interview that requires participants to generate justifications of their judgment (McGuire et al., 2015). Kohlberg's theory was further advanced and extended by Rest (1974, 1986), who utilized quantitative methodology to step away from the bias issues associated with the qualitative interview approach.

To eliminate or address the subjectivity of the Moral Judgment Interview approach used by Kohlberg, Rest developed the Defining Issues Test (DIT) in 1976 (Ellis, 2013), which was inspired by Kohlberg's (1969) theory of cognitive moral development. In redefining neo-Kohlberg ethics, Rest (1979) reorganized Kohlberg's three-level cognitive moral development model into a different and more simplified version of Kohlberg's complex theory. Rest, Narvaez, Thoma, and Bebeau (2000) argued that some differences exist between their cognitive moral development schemata and Kohlberg's (1969) CMD. Rest's new redevelopment of cognitive moral development was viewed as a soft approach to ethical decision-making based on moral actions, as opposed to Kohlberg's hard-stage stand. To point out the differences between Rest's (1979) and Kohlberg's (1969) cognitive moral development, Rest et al. (2000) used moral

schemata to distinguish their approach from Kohlberg's stage model. Rest et al.'s positions on the cognitive structures of moral judgment are presented below:

1. Hard Stages versus Soft Stages. The neo-Kohlberg (Rest) approach to ethical decision-making based on a soft approach allows for changes in usage, as opposed to Kohlberg's hard-stage approach that insists on one completing each stage before moving to the next.
2. More specific and concrete. Rest et al.'s schemata are more specific and concrete than Kohlberg's stages but are more abstract than the typical Social Cognition.
3. Cognitive operations and the content-output of operations. Rest et al., in redeveloping Kohlberg's stages, did not assert that their schemas "directly assess cognitive operation" whereas, Kohlberg claimed to be studying "justice of operations" (p. 385).
4. Universality. Kohlberg hypothesized the concept of universality as an integral part of stages, whereas Rest et al. (2000) viewed schema as an empirical question. With this belief, Rest et al. contended that morality is a social construct espoused in societal experiences.
5. Articulation versus tacit knowledge: Kohlberg's methodology was that of a qualitative approach that employed interview methods, while Rest et al. believed that the use of multiple choice yielded a more concrete result that did not allow for the subjectivity of the participant. In citing the work of Uleman and Bargh (1989) and Nisbett and Wilson (1977), Rest et al. argued that social cognition and cognitive science reject self-reported elucidations as having severe limitations.

Rest's thought principle presented a significant departure from Kohlberg's Moral Judgment Interview.

Rest et al.'s (2000) cognitive moral development approach has been utilized in numerous accounting ethical studies over the years (Bailey, Scott, & Thoma, 2010; Jones, Massey, & Thorne, 2003; Rest, Narvaez, Bebeau, & Thoma, 1999). Moreover, many have utilized DIT/DIT-2 to capture post-conventional thinking. DIT and DIT 2 use a multiple-choice approach, which removes bias that could exist due to participants' implicit and conscious understanding of the data. The assumption is that the answerers understand the question and can articulate their responses. The extent to which respondents can explain or articulate their answers becomes a hindrance and a constraint (Buono, Fletcher-Brown, Frederick, Hall, & Sultan, 2012; Rest et al., 2000).

Rest's (1979) philosophy disagreed with Kohlberg's (1969) model that one must work totally through a stage before advancing to the next (hard stage). He theorized that ethical reasoning and ethical decision-making consists of four schemas based on tacit recognition and constant interaction between each model (Jones et al., 2003; Rest et al., 1999; Swisher, 2010). Rest opined that

A schema is a cognitive structure that consists of the mental representation of some stimulus phenomena, including the relationships among the elements. Schema are general cognitive structures in that they provide a skeletal conception that is exemplified... by cases or experiences. That is, a schema has slots that can be filled in by particular instances. (Swisher, 2010)

Rest's (1979) interpretation of moral schema as a framework became the guiding factor in understanding and interpreting ethical dilemmas and ethical behaviors by using the defining

issues test (DIT) as a measuring instrument. Rest's four-component model, which was rooted in Kohlberg's (1969) theory, was: (See figure 3)

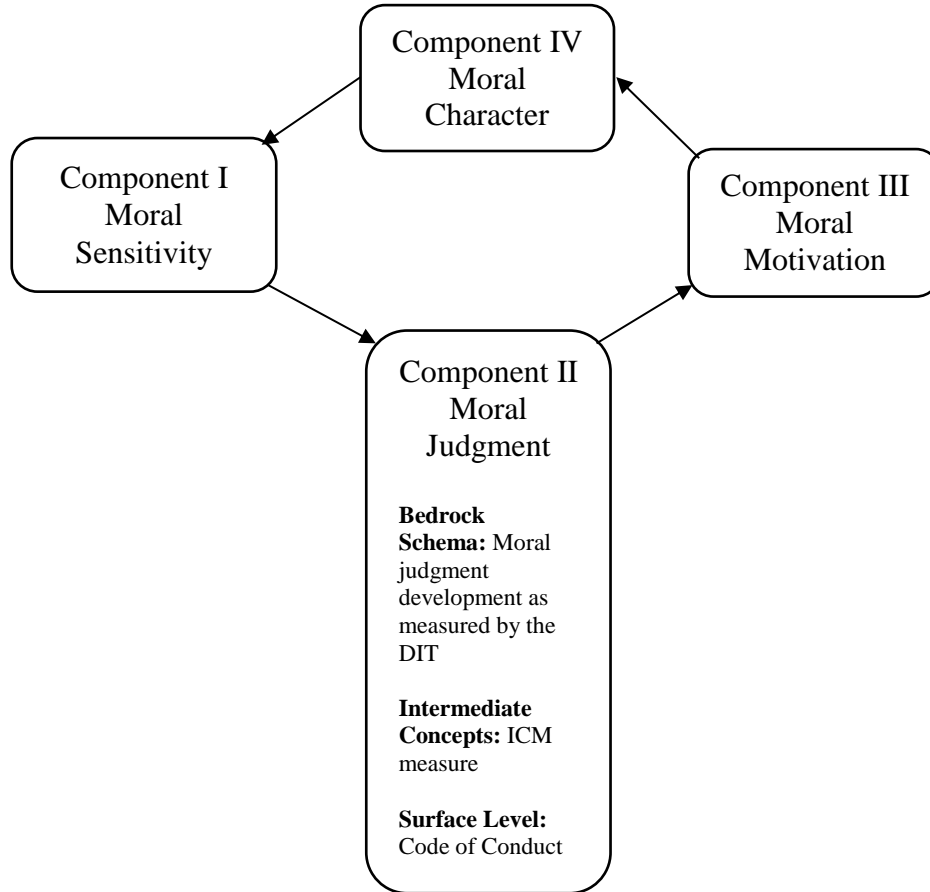


Figure 3. Relationships within Rest's Four-Components Schema (Bailey et al., 2010). As a measure of information processing, moral reasoning, justification of action, and decision-making.

1. *Moral Sensitivity* – encompasses understanding and interpretation of a situation or ethical dilemma and recognizing the ramifications of one's behavior to others. Moral sensitivity or ethical sensitivity suggests one's ability to interpret feelings, reactions, and being aware of other courses of actions and possessing role-taking skills. From the accounting perspective, accountants must understand the rules

and regulations guiding the profession and recognize when to apply it properly.

The emphasis for the accounting profession is of ethical sensitivity, indicating distinctive expectations based on the code of ethics and norms (Bebeau, 2002).

2. *Moral Judgment* – this component establishes the justification for one’s actions.

Moral judgment is the essence of individuals’ belief that their actions and behaviors should be undertaken after evaluating the dilemma.

3. *Moral Motivation* – moral motivation pertains to one’s intentions to act ethically.

In this case, one considers the alternatives before embarking on the right choice.

The relevance of moral motivation lies on the intent to act and the prioritization of the course of action.

4. *Moral Character* – the final component of Rest’s (1979) is a moral character.

Moral character involves the conviction to act based on moral duty and a model of ethical action and behavior. On the professional level such as accounting,

decision-makers must possess the ability to perform their fiduciary

responsibilities with integrity and exhibit the importance of character. At the

fourth component, the “practitioner may be *ethically sensitive*, may make good *ethical judgments* and place *high priority* on professional values; but if the

practitioner wilts under pressure, is easily distracted or discouraged, or is weak-

willed, then moral failure occurs because of a deficiency in character and

competence” (Bebeau, 2002, p. 287).

As noted earlier, Rest (1979) developed DIT-2 as an alternative measurement to Kohlberg’s Moral Judgment Interview (MJI) to eliminate bias, allow for rapid and easy responses, and provide a better means of scoring. Through this approach, Rest’s DIT/DIT-2

instrument uses a quantitative method to measure the level of moral reasoning and judgment instead of relying on Kohlberg's qualitative interview approach (Casali, 2011). The DIT-2, more direct and concrete in nature, uses multiple choice to obtain moral reasoning information using a survey administered to a group of participants and scored by The Center for the Study of Ethical Development. With the ongoing concern over Kohlberg's hard stage stand, the DIT as established by Rest (1979) was based on the moral schemata in 1974 and was revised later to DIT-2 (Bailey, 2011). Rest's (1979) four-schema model as described above includes a moral character which essentially defines individuals' action and behavior.

It is worth noting that ethics issues have been in existence before Kohlberg's (1969) theory, which evolved from such philosophers as Socrates, Plato, and Aristotle and Smith's moral sentiments, and evolved into Kohlberg's (1969) normative ethics theory (Rest et al., 1999; Minnameier, 2005). Virtue ethics such as Rest's moral character deals with what sort of person we should be and emphasizes individual character as opposed to rules (deontology ethics) or their consequences (consequential ethics) (Armstrong, Ketz, & Owsen, 2003). The above avowal was espoused from Aristotle's ideology and accentuated by numerous authors (Armstrong et al., 2003; Mintz, 2006; Shafer-Landau, 2015). Virtue ethics incorporates an assembly of theories that express a representation of virtuous life, character, and responsibilities. As an agent-based approach (Mintz, 2006), virtue ethics accentuates the "fundamental character and motivations of the individual" (p. 97-98) which is in direct correlation with Rest's (1979) fourth model of the moral character. Virtue ethics depends on good character traits that underscore both ethical motivation, beliefs, and moral judgment, which leads to ethical actions. From the accountant's perspective, the underlying supposition is that the accounting profession should maintain professionalism, honesty, integrity, and good character (Williams & Elson, 2010). To that end,

accountants reporting financial statements must uphold a professional attitude and be honest in reports and disclosures without misleading investors and the public. Accountants must maintain good moral character, reasoning, and judgment.

According to Lara (2008), virtue ethics is a moral character and moral behavior that is distinct from other ethical reflections and considerations, such as deontology or utilitarian ethics. Lara further contends that virtue ethics deals with the rudimental philosophies of good, right, and moral value as its moral structure. In contrast, utilitarianism underlines the foundation of the good, happiness, and endorses the good in one's actions (Lara, 2008), which is not contrary to Kohlberg's ideology. The deontological ethics framework, on the other hand, deals with ethical behavior as a universal principle of rules, right, justice, and duty, without much emphasis on social benefits (Crossan, Mazutis, & Seijts, 2013). In virtue ethics, goodness remains the principal focus (LeBar, 2009; Lara, 2008). To further support Kohlberg's theory and Rest's four-model schemata, Arjoon (2000) posited that virtue ethics is a philosophical ideology that describes good character traits that hold the underpinning of morality. Furthermore, Arjoon featured different tenets of virtue ethics consisting of the constructs found in Kohlberg's theory of cognitive moral development: moral complexity, moral understanding, and moral education.

Moral complexity. According to Arjoon (2000) and Shafer-Landau (2015), virtue ethics as a decision-making tool is complex since it involves emotional maturity and sound judgment, and from Aristotle's position, virtue is "eudaimonia," meaning "happiness" (p. 166), which comes in different forms. However, Arjoon (2000) opined that when virtue is imparted at an early stage, and ethical dilemmas arise, individuals will be able to reference back and make ethical decisions. Early education in virtue ethics helps with the concept of recollection from memory or experiences that one has had involving ethical dilemmas. Narvaez (2010) accepted

the difficulty of morality but asserted that a multifaceted person could retain and effectively analyze difficult issues and make accurate judgments and ethical decisions. Blasi (2009), Turiel (1998, 2006), Rest (1979, 1983), and Narvaez (2010) all stated that cognitive development is enhanced when ethics education starts from infancy (Kohlberg, 1969) and that when confronted with moral issues, individuals are able to address them. Early training helps in dealing with the complexity of morality. Williams and Elson (2010) applied the same principle by insisting that educating accounting students on accounting ethics could have the same ripple effect on their judgment and ethical decision-making.

Moral understanding. Moral understanding, reasoning, and judgment rely on ethical experiences, virtue-in-action, judgment towards rightness and wrongness, and the ensuing capacity for action and moral wisdom (Narvaez, 2010; Shafer-Landau, 2015). Morality includes knowledge and facts, though knowing some moral facts is not enough. However, one must understand and comprehend the intricacies of those facts to make an ethical decision which involves understanding right from wrong and being considerate (Riaz, 2015). Hence, comprehending why bribery, embezzlement of funds, and corruption are wrong and unethical may dissuade unethical behavior in the decision-making of accounting students and accounting professionals. Leitsch (2004) stated the need for accounting students to identify ethical dilemmas and the ability to recognize the moral intensity of ethical issues while at the same time, apply a moral decision-making process. In citing a study by Marshall and Dewe (1997), Leitsch (2004) posited that understanding various individual effects (social effects, financial consequences, benefit-harm, and the probability of effect) of a circumstance is a crucial and a critical component of interpretation and enhances the decision-making process. Leitsch's (2004) avowal is not contradictory to Kohlberg's cognitive moral development theory.

Moral education. Melé (2005) and Martinov-Bennie and Mladenovic (2015) posited that ethics and virtue are not natural or instinctive, but can be acquired. This assertion supports Kohlberg's theory of cognitive moral development stages and Rest's (1979) schema model and encourages teaching ethics to the accounting students regardless of the pedagogy (Graham, 2012). Accounting education with moral issues has ethical implications in accounting and financial reporting. Since the mid-1980s, ethics education has become prevalent, starting with the American Accounting Association Committee on the "Future Structure, Content, and Scope of Accounting Education" and in "1987 with the National Commission on Fraudulent Financial Reporting (Treadway Commission)" (Melé, 2005, p. 97). Due to widespread corporate accounting scandals (Enron, HealthSouth, WorldCom), significant attention has been focused on the accounting ethics training of accounting students (Ellis 2013; Melé, 2005). The need to educate accountants has impelled various accounting standards boards to require that accounting ethics courses be incorporated into the accounting curriculum. For instance, the State of California in 2014 mandated the inclusion of 10 credit hours relating to ethics courses (Ellis, 2013). Numerous studies (Bailey, 2011; Cohen & Bennie, 2006; Frank, Ofobike, & Gradisher, 2010) support Kohlberg's theory of the cognitive moral development of accounting students and affirm that ethics is an intrinsic value.

The study of moral judgment and reasoning has been associated with Kohlberg's theory and advanced by many authors. In accounting ethics, Kohlberg's (1969) theory is recognized and validated as a means of understanding the reasoning behind ethical decision making. Bailey (2011) reported that every year, about 500 researchers used Rest's DIT/DIT-2. The author further indicated that Kohlberg's theory as advanced by Rest (1979) had been the reigning paradigm in social science ethics-related studies, including accounting and businesses in general.

The accounting profession believes that accounting ethics should be integrated into accounting curricula and that it will impact accounting students' moral reasoning aptitude. In furtherance of this belief, Frank, Ofobike, and Gradisher (2010) analyzed the past 17 years' actions taken by the Ohio State Board of Accountancy. The central purpose of their review was to provide and educate accounting instructors with an exhaustive background on the consequences of code and ethics violations, and most importantly, provide accounting professors with sufficient background on accounting ethics. To determine the effects of accounting ethics instructions, Frank et al. postulated that Kohlberg's model of moral reasoning was ideal. Frank et al. cited Welton, Lagrone, and Davis (1994) to be one of the first studies to impact on accounting students. In this study, using Rest's (1979) DIT, they reported significant changes in moral reasoning and concluded that broadly integrating ethical issues into the accounting curriculum is warranted. Cohen and Bennie (2006) and Frank et al. (2010) also emphasized that Kohlberg's theory is the dominant means of studying ethical decision-making when conducting an audit.

In a study conducted by Ellis (2013), he utilized Rest's model and DIT-2 to study exposure to ethics sensitivity. The study involved 40 accounting students at the graduate level using a Likert Scale form of a questionnaire. In his short analysis, Ellis reported a statistical significance among master's students who took ethics discussions in their classes in comparison to those without such exposures. In his summation, Ellis (2013) concluded that having ethics courses or experience impacts a student's moral development, abilities, skills, overall moral judgment, and growth.

In a similar study, Ghazali (2015) posited that ethics is an intrinsic value with far-reaching impact on behavioral intentions and decision-making abilities. The increase in the widespread criticism of ethical concerns has been due to lack of effective ethics education, which

has contributed to the collapse of large corporations such as Parmalat, HealthSouth, and Enron. To mitigate further financial collapses, Malaysian authorities instituted a law requiring all public universities' curricula to integrate accounting ethics, professional ethical values, good behavior, and high integrity, as required by the International Federation of Accountants (IFA) (Ghazali, 2015). For this study, Ghazali's theoretical framework related to Kohlberg's moral development and moral behavior. In his research, out of 250 questionnaires distributed using a survey system, 221 respondents from accounting firms completed the questionnaire, representing 88.40% participants. The result of the research indicates that accounting ethics training has a significant impact on the ethical decision-making of accountants. From a practical perspective, this finding "suggests that ethics is an important factor influencing ethical judgments" (Ghazali, 2015, p. 147).

In exploring the perceived role of moral reasoning as prescribed by Kohlberg's theory, Gaffikin and Lindawati (2012), studied its influence in implementing the code of ethics as a professional standard and guidance for Indonesian public accountants. One key aspect of their study was on ethical performance by public accountants as moral agents for professional awareness of values. To investigate ethical performance, the authors employed Kohlberg's model of moral development by using a case study approach and interviewed 15 financial managers. Their findings indicated three key elements in ethical decision-making (Gaffikin & Lindawati, 2012):

- 1 That their moral development influences the moral reasoning of individuals such as public accountants.
- 2 The extent of public accountants' moral reasoning development determines the degree of professionalism exhibited by them.

- 3 Furthermore, to develop, build, and improve the efficacy of the Indonesian Code of Conduct, the moral reasoning of accountants and managers is influential.

Gaffikin and Lindawati (2012) suggested that moral reasoning as a development process will influence the decision-making of a public accountant in action. Through their findings, Gaffikin and Lindawati (2012) concluded that moral reasoning plays a vital role in accountants' and managers' ethical decision-making.

Nather (2013) utilized Kohlberg's cognitive moral development theory. The author also used Rest's DIT, structured from Kohlberg's cognitive moral development theory, as the instrument for measurement of moral development and reasoning and to investigate the paradigms of moral reasoning of Kuwait University students. A situational ethical dilemma study of 90 college students comprised of different levels of education ranging from first-year students to seniors was conducted using DIT-2. Nather (2013) noted that the participants were all Muslims. In making this declaration, the author alluded to the potential influence of the "homogeneity with regard to the religious affiliation of the participants" (p. 475). The result of Nather's (2013) study was that education lacked a significant impact on moral reasoning. To support this findings, the author insisted that the findings were consistent with other studies (Beltramini et al., 1984; Bouhmama, 1988; Hawkin & Cocanougher, 1972; White, 1999). However, Nather (2013) posited that these findings could not give a definitive position on the impact of formal education on moral judgment development. Further research on the effects of formal education on the moral development may be needed (Nather, 2013).

Nather's (2013) result of inconsistency was contrary to that of Musbah, Cowton, and Tyfa (2016), whose objective was to study the association of variables such as Islamic religious beliefs and moral intensity variables with the ethical decision-making of accountants in Libya

with Arabic/Muslim participants. Musbah et al. (2016) used a cross-sectional study designed to collect data from management accountants in Libya. To conduct their study, they designed a questionnaire with ethical scenarios modeling Rest's schemas and administered it to 229 participants. This number represented only 58.40% of the 329 samples. Musbah et al. (2016) concluded that a correlation existed between ethical recognition, ethical judgment, and ethical intention, thereby supporting Rest's model of moral development and reasoning.

In contrast to both Nather (2013) and Musbah et al. (2016), Brown-Liburd and Porco's (2011) study was conducted in the United States and did not consider religion as an influential factor. However, they measured other variables such as membership in Beta Alpha Psi, volunteerism, student government participation, and increased level of internship experience as contributing factors in higher cognitive moral development. To test their hypothesis, Brown-Liburd and Porco (2011) surveyed 396 undergraduate accounting students and administered Kohlberg's (1969) theory of cognitive moral development and Rest et al.'s (1999a) Defining Issues Test (DIT-2). Both measuring instruments were used to determine the impact of the variables on the moral development, moral judgment, and moral reasoning of the students. Evidence indicates that most studies base their findings on the effects of classroom education to cognitive moral development. However, the study of 396 accounting students investigated factors outside the classroom influence cognitive moral development. The authors believed that a more holistic study would provide additional understanding of moral growth. The study concluded that extracurricular exposures beyond the classroom such as the variables in this study had a positive impact on the moral growth of accounting students.

Ethical Decision-making and Its Effect on Stakeholders

Ethical decision-making is imperative in the accounting profession and must continue from a person's early college years into his/her professional career if the financial fraud and unethical behaviors of the past are not to be repeated. This transformational process involves accounting students and professional accountants being able to evaluate and navigate among choices when confronted by any ethical dilemma that conflicts with their interest. The deliberate involvement in ethical decision-making requires setting aside self-interest (Hejase & Tabch, 2012). In a study conducted by Hejase and Tabch (2012) regarding ethical issues and decision-making, 39.70% of respondents set aside their self-interest and benefits, believing that potential harm to others was wrong, while 29.40% in the same study disagreed. Hejase and Tabch (2012) concluded that ethical decision-making is about the situation and circumstances of the decision-maker, based on 60.30% of their respondents' overall response informing on personal morality.

Thomas (2012) believed the ethics education of accountants to be an influential factor in the ethical decision-making of the accounting profession. Furthermore, ethical misconduct by the accounting profession was attributed to self-interest, conflicting with societal interest. As stated by Thomas (2012), the focus of ethics and ethics education should be on "deliberative reasoning rather than relativism and egoism" (p. 411). Some of the ethical conflicts were as a direct result of accountants or auditors trying to either satisfy their greed or being coerced into pleasing certain stakeholders (Sternberg, 2013). In his study, Thomas (2012) concluded that when observing students employing deliberative reasoning (moral equity) as in Kohlberg's post-conventional modes, a significant increase in the number of those making ethical decisions was evident, but when using relativism and egoism, there were no significant differences. The use of relativism should, then, be minimized by the accounting profession, as this concept affects

universal moral values by suggesting that honesty depends on the situation. Accountants should never compromise the integrity of the accounting profession for self-interest or stakeholders since everything in business has financial ramifications (Sternberg, 2013).

Stakeholders' Effects

Accountants' ethical considerations should emphasize honesty, values, and fairness in maintaining their fiduciary responsibility, which includes providing relevant and timely financial information that informs on good moral behavior and ethical judgment (Doolan, 2013). The relationship between various aspects of an organization should be managed properly cohesively and ethically. Fernando and Lawrence (2014) suggested that an effective relationship must exist between the public, stakeholders, and the organization and that such relationships depend on trust, honesty, and fairness. The lens of theorization enables students, accountants, and auditors to evaluate practices and policies that benefit society rather than their self-interest. Fernando and Lawrence (2014) stressed the need for an ethical perspective that enriches the political economy, accountability, and balancing of all competing interests.

In their assertion for a holistic approach based on values, Lopez-de-Pedro and Rimbau-Gilabert (2012) insisted that an understanding of a normative aspect of business and accounting ethics as a guide for ethical perspectives should be adopted. The stakeholder concept provides ethical leadership for the accounting profession when trying to create value for stakeholders. By educating students on stakeholder ethics, accounting students, the accounting profession, and managers will be able to comprehend and interpret ethical concerns and be able to serve those with legitimate stakes in the organization and society. Additionally, understanding the stakeholder philosophy by the accounting profession augments the fundamental assumption that creation and measurement of value will sustain the organization (Harrison & Wicks, 2013). This assertion

generates an effective and ethical distribution of resources. However, the question remains on the effectiveness of the accounting ethics delivery method of integration into curricula and stand-alone accounting ethics courses.

Accounting Ethics Integration into Accounting Curricula

Accounting ethics education has become an accepted part of social science studies, including accounting. Numerous literature (Chang, Davis, & Kauffman, 2015; Royae et al., 2013) has been written and published on the need for accounting and business ethics both in the undergraduate and graduate levels. The consensus by these authors and educators is that accounting ethics is needed.

Williams and Elson (2010) investigated the importance of accounting ethics and its pedagogical approaches. The study was an effort to determine the significance of the accounting ethics teaching method. They articulated that accounting ethics is crucial for the accounting industry and business sustainability and as such, accounting educators must prepare accounting students to confront matters involving accounting ethics when faced with ethical concerns.

Williams and Elson's (2010) quantitative study utilized a survey method and a literature review approach to inform on two key principal areas of concern: who should teach accounting ethics, and whether accounting ethics should be taught as a discrete course or integrated into the accounting curriculum. They reviewed numerous studies (Armstrong & Mintz, 1989; Cohen & Pant, 1989; Karnes & Sterner, 1988; Madison, 2001); some advocated for stand-alone accounting ethics courses, while others preferred accounting ethics integration into the accounting curriculum.

Even though most literature they reviewed advocated for accounting ethics integration, Williams and Elson (2010) made a persuasive and passionate argument for a different concept.

They called their concept a team teaching approach, suggested that it was a better means of assisting the accounting profession, and contended that philosophers are more interested and better equipped to teach ethical issues. They argued that philosophers should teach “moral reasoning” while accounting educators should teach the “ethical dilemmas within the accounting profession” (p. 108). The idea of team teaching does not take away from either approach, integrated or stand-alone, but rather, enhances the ease of understanding ethics taught from a philosophical perspective.

In another study, Dellaportas, Jackling, Leung, and Cooper (2011) proposed an orientation of ethics education with the structured learning of ethics. Their study presented three key elements that are interrelated in characteristics: Rest’s (1986) Four-Component Model, which advanced Kohlberg’s theory of ethical decision-making, behavior, and judgment; the key cognitive and behavioral objectives of ethics education; and the discrete and pervasive approaches to ethics instruction. With regards to the pervasive (integrated) approach, Dellaportas et al. (2011) maintained that ethical issues interlaced across existing accounting and financial curriculums were better than an isolated accounting ethics course. In integrating accounting ethics with the existing subject matter, learners are presented with a cohesive knowledge of ethics to assist them in developing the necessary competencies in ethical judgment, sensitivity, and understanding of ethical concepts and theories (Dellaportas et al., 2011). The findings in their study led to their conclusion that an ethics education framework enhances students’ reasoning by providing structured learning that identifies ethical issues, analyzes them, and resolves them through ethical action.

Klimek and Wenell (2011) posited that most colleges and universities with accounting programs integrate ethics into accounting curriculum to meet the demand by the public for

ethical accountants and ethics in the accounting profession. They tested the ethical reasoning abilities of accounting students using the Defining Issues Test-2 (DIT-2) designed by Rest (1979). Their research presented arguments from the instructor's perspective, in which accounting educators believed that an integrated accounting ethics course approach would be more convenient, less difficult to implement, and more cost-effective. In arguing for an integrated accounting ethics course rather than a discrete course as being more effective, the authors cited the work of Desplaces et al. (2007), which showed no conclusive evidence that a stand-alone accounting ethics course significantly increased students' moral development and ethical reasoning abilities.

Bampton and Cowton (2002) agreed that little is known, if any, of the effectiveness or the extent to which accounting ethics integration advances ethical understanding. However, they insisted that in Britain, given the recent corporate scandals, accounting students must possess the rudimentary tools necessary to succeed in the profession. They concluded through their quantitative study that their respondents preferred accounting ethics integration due to its simplicity, likeliness to be more effective, and the fact that educators would not be required to have special training in the area. Even with the trending desirability of the accounting ethics integration approach, and the overarching need for accounting ethics, no significant evidence of its effect on the ethical decision-making of accounting or business students has been identified (Bampton & Cowton, 2002).

In another study, Els (2009) found that discrete or stand-alone accounting ethics was trending upward, however; he argued against this method of teaching. In an empirical study with students from a prominent university in South Africa, Els (2009) attempted to underline the attitudes and perspectives of accounting students towards learning. The primary aspect of his

research was accounting ethics education and the pedagogical approaches that influence the ethical behaviors of students. Els (2009) pointed to numerous literature (Kenny & Eining, 1996; Nelson & Wittmer, 2001; Shaub, 1991; St. Pierre, Nelson, & Gabbin, 1990), condemning the idea of isolated accounting ethics courses. Els argued that such methods do not have any significant effect on the moral development, judgment, and reasoning of accounting students. Furthermore, The International Federation of Accountants (IFAC) posited, “Values education suffers most when it is separated from reality and taught as a dry, self-contained topic” and that “a well-planned programme, especially integrated with work experience, can handle the topic very effectively’ (IFAC, 1998:18)” (Els, 2009, p. 48). Even with that said, and the fact that academia has highly favored accounting ethics integration across the globe, Els concluded that accounting ethics course integration could not provide a guarantee of increase in moral, ethical development, reasoning, and judgment of accounting students. However, espousing knowledge and skills across subjects and disciplines can bring awareness of ethical issues and address complicated and complex ethical concerns as well as foster healthier ethical decision-making by accounting students (Els, 2009).

Tweedie, Dyball, Hazelton, and Wright (2013), study of a wider inclusion of ethical theories into accounting curriculum, believed that the existing accounting curriculum did not fully address non-western ethical concepts. A “thematic approach” to accounting ethics education will integrate accounting ethics within the core curriculum and will also address two competing principles: accounting education with global ethical standards, and ethics that emphasizes ethical tradition and practices with cultural diversities (Tweedie et al., 2013). In agreement with Klimek and Wenell (2011), they concluded that the multidimensional characteristics of ethical decision-making would serve best by incorporating accounting ethics

courses into accounting curricula. This approach will provide a discursive ethical theme that is less expensive, requires less space, and is less intrusive on accounting instructors (Tweedie et al., 2013). However, the authors acknowledged the difficulties that may exist with this approach such as lack of depth and diverse ethical knowledge, adequate resources, and teaching strategies.

Ultimately, it is incumbent upon accounting educators to help advance the progressive nature of accounting ethics education within institutions of higher learning regardless of the teaching format (Swanson, 2005; Thomas, 2012; Williams & Elson, 2010). Financial scandals have generated calls to enhance professional accounting ethics education and business ethics training (Massey & Hise, 2009; Mele´, 2005; Mintz, 2006; Swanson, 2005; Waddock, 2005). Various organizations have called for incorporating accounting ethics courses into the curricula. These appeals include organizations such as the American Accounting Association Committee’s “Future Structure, Content, and Scope of Accounting Education” and “National Commission on Fraudulent Financial Reporting (Treadway Commission) (Massey & Hise, 2009; Melé, 2005, p. 97). The concept of accounting ethics integration in accounting curricula is continually gaining credence as the most preferred approach for accounting ethics instruction (Ellis, 2013; Willey, Mansfield, & Sherman, 2012). A research survey conducted by Lawson (2002) upheld the above assertion of integration of accounting ethics courses into the accounting curriculum with 92.1% of the business faculty sampled. Additionally, in affirmation of Lawson’s (2002) survey, Liu, Yao, and Hu (2012) noted the widespread acknowledgment and acceptance for ethics education through a survey of faculty at five institutions. Also, Lawson’s research advocated the concept of team teaching, or joint ventures, between schools and businesses where students are exposed to ethical situations and need to learn moral reasoning skills (Williams & Elson, 2010). Despite the above 92.1%, there is another side of the spectrum that emphasizes a stand-alone/discrete

approach to teaching accounting ethics as a better means of preparing accounting students to make ethical decisions (Bean & Bernardi, 2007).

Accounting Ethics as a Stand-alone Approach

In contrast to Blanthorne, Kovar, and Fisher (2007) and Melé, Rosanas, and Fontrodona (2017), Bean and Bernardi (2007) advocated for a discrete ethics course as an important component in the training of accounting students. Bean and Bernardi posited that the obligation to properly educate accounting students on accounting ethics rests on accounting educators and further contend that integration (old ways) has not been productive and they do not support the “concept/practice of interweaving ethics across the curriculum” (p. 28). Melé et al. (2017) reiterated that the “discourse of business and the discourse of ethics can be separated so that sentences like ‘x is a business decision’ have no moral content, and ‘y is a moral decision’ have no business content” (p. 612). The authors were emphasizing the need for business separation from ethics, as business decisions may conflict with morality. The argument above leaves out the intertwined nature of the business, accounting, ethics, and morality. Such an argument will then justify unethical business activities such as the one committed by Bernard Madoff in his Ponzi scheme (Melé et al., 2017). Many accounting instructors expressed chagrin when the Association of Advance Collegiate Schools of Business (AACSB) did not mandate stand-alone ethics courses (Bean & Bernardi, 2007).

Numerous accounting programs with colleges and universities are in a constant struggle in trying to find an effective and productive means of structuring accounting and business ethics within the accounting curriculum. This pedagogical issue has long been the topic of debate amongst academia and accounting bodies. Some schools such as Nova Southeastern University proclaimed their business ethics inclusion across their curriculum (Sims, 2000); however,

Williams and Elson (2010) argued that such an integration approach lack sufficient attentiveness to accounting ethics. When accounting instructors adopt an active role in a discrete accounting ethics course, there are multiple benefits to accounting students and the accounting profession. An example of such benefits is that more time is devoted or spent teaching accounting ethics, instead of a few minutes' review or glance as with the integration method (Jonson, McGuire, & O'Neill, 2015). Active and reflective learning devotes more time to accounting ethics teaching by introducing ethical case studies as learning mechanisms, which will foster deeper ethical understanding and encourage avoidance of unethical corporate decision-making when faced with ethical dilemmas (Loeb, 2015). There are various contentions, though, that the accounting curriculum is already full; therefore, active and reflective learning may not be feasible for the integrated accounting ethics method (Williams & Elson, 2010).

With numerous data and researchers indicating the need and importance of ethics education, the statistical efficacy of the method of teaching remains unknown. Since very little, if any, has been written or published in this area, Kidwell, Fisher, Braun, and Swanson (2013) accepted that accounting ethics education is essential for today's businesses, but argued on the effectiveness and differences between the means of pedagogy. There is some argument that within the U.S., the moral, economic approach is prevalent and that accounting instructors perhaps lack full accounting ethics knowledge. Moral economy is based on the idea of fairness, goodness, and justice of economic behavior while utilizing the judgment of value (Atkinson, 2009).

The problem with accounting ethics integration lies in its lack of underlying foundation in the basic knowledge of ethics, which results from discussing only surface treatments of ethical issues. Kidwell et al. (2013) argued that this surface treatment approach merely inform students

of the existence of ethical accounting issues without equipping them with the necessary tools to evaluate, analyze, and make ethical decisions. Despite Kidwell et al. (2013) and other authors' advocacy for the standalone approach, only 5% of the 23% that favored stand-alone specified that they had taught a stand-alone accounting ethics course. While Miller and Becker (2011) reported in their study that 25% of schools in their sample was teaching accounting ethics as a stand-alone, they also mentioned that ethics were more prominent in the minds of accounting students when taught as a discrete course. In their study of UK universities, 80.6% indicated ethics to be part of their existing curricula, with 24% offering a stand-alone course (Ghaffari, Kyriacou & Brennan, 2008; Miller & Becker, 2011). The trend for stand-alone accounting ethics courses is on the rise even though three-quarters of universities rely on the integration approach, which was used before the recent financial and ethical scandals. Other issues with accounting ethics are in what to teach, who is most qualified to teach it, its structure, and the effect or impact of the standalone accounting ethics course or integrated accounting ethics course (Kidwell et al., 2013; Miller & Becker, 2011). Hence, these concerns created uncertainty and doubt on the impact or effect on the ethical decision-making of accounting students and the accounting profession.

Graham (2012) suggested that existing studies were not convincing regarding which delivery method (stand-alone or integration) had a more significant impact or was more influential in the decision-making of accounting students. Rather than study the instructors' viewpoints, Graham (2012) studied the students' perspectives and attempted to understand those that were directly influenced by accounting ethics education. The purpose of Graham's research study was to assess the effectiveness of the accounting ethics teaching method through the students' viewpoint, and how that associated with their ability to make an ethical decision.

In his study, Graham (2012) utilized a quantitative survey of 150 second-year students at a United Kingdom university to discern students' preferred method of receiving accounting ethics courses. Using a correlational analysis, Graham (2012) found that there were circumstances whereby one approach was favored over the other, which may have been dependent on resources rather than preference. Evidence suggested that accounting instructors preferred an embedded/integrated teaching method, while students preferred a "more concentrated approach, using a dedicated ethics model" (p. 610). Students argued that accounting ethics course scattered across the curriculum would essentially make accounting ethics incoherent, while a discrete and isolated accounting ethics course would give them a holistic exposure to ethics. Stand-alone provides students in accounting with a deep fundamental exposure that is absent with the integrated approach, although its significant effect remains debatable (Ghaffari et al., 2008)

Existing literature in the pedagogical delivery of accounting ethics remains inconclusive, but the stand-alone method has continued its growth. The fundamental question to be answered is the significant effect of either approach. The consensus for enhanced accounting ethics education remains steadfast. Jonson et al. (2015), case study, investigated both stand-alone accounting ethics courses and integrated accounting ethics courses. They utilized a situational vignettes survey method established by Brenner and Molander (1977) to express that stand-alone accounting ethics instruction produces a different response than the integrated approach (Jonson et al., 2015). The above result was attributed to the participants being exposed to a standalone method that presents greater awareness of accounting ethics while addressing complex accounting ethical issues. Furthermore, the literature supports the concept that isolated accounting ethics projects will enhance students' understanding of accounting ethics intricacies

more than an integrated approach would, thus fostering better ethical development and moral judgment (Jonson et al., 2015).

In another study, Chen, Chen, and Chenoweth (2013) delivered a persuasive argument with compelling evidence for their support for a stand-alone approach to accounting ethics education. Their research purpose was to determine who should teach accounting ethics courses. There is a growing need for more effective accounting ethics programs, which has led to the discussion of whether integrated or stand-alone accounting ethics courses are best. The demand for efficiency led the Texas State Board of Public Accountancy to effectually mandate from July 1, 2005, “candidates for the computerized Uniform CPA Examination to pass a college course on professional ethics before they can sit for the examination” (Chen et al., 2013, p.1).

Chen et al. (2013) suggested that an isolated or discrete method informs accounting students better by awareness of and exposure to the complexities of accounting ethics and contributes immensely toward moral growth, ethical reasoning, and judgment. In citing the works of Hanson (1987), Loeb (1988) affirmed that discrete or isolated accounting ethics education provides greater reliability and consistency, uniformity in academic practice for accounting students, and cost effectiveness by reducing the cost of educating every accounting instructor in the accounting ethics field.

In using a questionnaire (survey instrument), the authors administered 217 surveys to participants, with a 14.7% response rate. Sample data collected by Chen et al. (2013) and its analysis suggests that accounting students should be exposed more to accounting ethical studies, which will allow for better comprehension of the subject matter, even in the absence of conclusive evidence of which approach is significantly better. Chen et al. (2013) posited that no conclusive evidence existed of which approach to use; however, implementing both integrated

and stand-alone could yield fruitful results. The idea of a combined teaching approach merges the best of the two worlds and may deliver to accounting students timely and appropriate access to the most vital information necessary to make ethical decisions. Nonetheless, whichever pedagogical method an organization elects to introduce moral development, ethical reasoning, and judgment to accounting students, that method must include vital fundamentals of accounting ethics that must include more time dedicated to ethical accounting concerns (Chen et al., 2013).

Defining Issues Test (DIT-2) as a Measurement Instrument

As an objective easily quantifiable measurement instrument, the DIT-2 measures research variables that are vital in gauging ethical decision-making, and numerous studies in social science, including accounting and business, have conducted and measured the results using revised Defining Issues Test-2 (DIT-2) established by Rest (Auger & Gee, 2016). DIT-2 scores performed by The Center for the Study of Ethical Development are significantly related to the cognitive capacity measurement of one's moral comprehension and judgment, which is associated with ethical decision-making based on Kohlberg's (1969) stage theory. In measuring the data collected, DIT-2 uses a closed-ended Likert-type scale, whereby the participants are required to rank the statements provided to them numerically. This approach has proved to be a valid and reliable technique and has been in use for over 25 years for ethical studies. The DIT-2 has been used as a measure of ethical development and judgment in over 400 published reports investigating the moral judgment concept (Auger & Gee, 2016; Cooper & Schwartz, 2007; Rest, Narvaez, Thoma, & Bebeau, 1999).

Some researchers familiar with cognitive moral development have used the DIT-2 to examine and measure students' moral cognitive dimensions. In validating the DIT-2 as an ethics measuring instrument, numerous studies, including Auger (2016), Rest et al. (1999), Rest (1979);

Verrinder, Ostini, and Phillips (2016), and Abdolmohammadi and Ariail (2009) have utilized the DIT-2 in measuring related ethical issues. In their study of selected-socialization theory and the moral reasoning of Certified Public Accountants (CPAs), Abdolmohammadi and Ariail (2009) used the Defining Issues Test (DIT-2) as their measurement instrument to score the responses to 314 completed packets from the CPAs. In these studies, and many others relating to ethics of auditors, accountants, and businesses, the instructional method was utilized and measured using Rest's (1979) revised version of the DIT-2 (Wilhelm & Czyzewski, 2012).

Saat, Porter, and Woodbine's (2012) quantitative research were to analyze and report the effect of a moral education program on the ethical reasoning and judgment of university students. The study included various universities in Malaysia, with 113 accounting students. Saat et al. (2012) research utilized various aspects of quantitative methods in data collection and employed a longitudinal survey approach that involved 12 Malaysians. Through their research and study of the 113 respondents, Saat et al. (2012) employed Rest's (1986) version of the DIT as an instrument for measuring accounting students' moral development.

In a similar study, Christensen, Cote, and Latham (2016) found that numerous researchers had investigated morally related ethical issues of accounting students and their decision-making abilities and utilized the DIT-2 as a measuring instrument in their study. However, the DIT-2 does not consider all aspect of moral issues with ethical development but rather, provides added insights in the exploration of the ethical choice question. Eberhardt-Toth and Wasieleski (2013), in their empirical study of 180 financial managers, 83 finance students, 144 non-business managers, and 117 non-finance business students on their individual-level of cognition affirmed that the DIT-2 might not take into account all aspects of moral issues. However, they contended that DIT-2 is still the most widely used and validated instrument for

measuring moral development and judgment. The DIT-2 was used in this study and others due to its reliability and validity results. As a psychometric instrument, it has been tested multiple times as a way to evaluate moral reasoning (Ho & Lin, 2016; Lovisky, Treviño, & Jacobs, 2007; Rest, Thoma, & Edwards, 1997; Rest et al., 1999).

Synthesis of the Research Findings

Public trust in the accounting profession has been weakened due to multiple financial scandals. Unethical behaviors have also generated serious effects on the world's economy. These events and behaviors have led to an increased call for both organizations and educational institutions to examine the level of ethical accounting education, students' cognitive moral development, and pedagogical approaches.

Numerous studies have focused on the need for accounting ethics education, and their findings suggest that accounting ethics is lacking and accounting students are not properly equipped to deal with ethical issues. Moreover, various accounting ethics educating methods in existence have been identified to include accounting ethics integration within the accounting curriculum, integration into other business courses, the teaching of accounting ethics both online and in the classroom, and teaching accounting ethics as a stand-alone or discrete course. There exists a valid way of investigating moral, ethical development based on Kohlberg's (1969) ethics stage theory, which was further advanced by Rest's (1979) model. However, the extensive literature available could not provide conclusive and significant evidence on the significant impact of the pedagogy. The existing studies have led this research towards investigating the efficacies of pedagogical methods, which will inform academic institutions of the best teaching approach to enhance accounting students' recognition and understanding of ethical issues.

Studies reviewed have highlighted the roles that accounting educators need to play to advance the progressive nature of accounting ethics education within higher educational institutions (Swanson, 2005; Thomas, 2012; Williams & Elson, 2010) in light of the different financial scandals that have transpired in the recent decades (Massey & Hise, 2009; Mele', 2005; Mintz, 2006; Swanson, 2005; Waddock, 2005). Despite calls of organizations to incorporate accounting ethics courses into the curricula, how to do it has not been thoroughly explored. Some studies have shown ethics integration in accounting curricula may be more effective and preferred (Ellis, 2013; Willey, Mansfield, & Sherman, 2012).

Also, Klimek and Wenell (2011) concluded based on their research that integration of accounting ethics course in accounting curriculum is more cost effective, more convenient, and easy implementation. Accounting ethics integration is the more prevalent approach among academics (Ellis, 2013). Also, to lend more credence to the theory that accounting ethics integration is a better approach, Dellaportas et al. (2011) contended that ethical issues intertwined with the existing accounting and financial curriculums provide an interconnected view that will assist accounting students in understanding ethical concepts and theories, ethical judgment, and ethical sensitivity. Bampton and Cowton (2002), also, noted the inconclusiveness of existing literature to affirm the efficacy or the extent to which accounting ethics integration influences ethical understand and decision-making of accounting students. With no significant support of the effects of integration, Bampton and Cowton (2002) concluded that accounting ethics integration in the accounting curriculum is likely to be more effective based on less training required on the educator's part and the simplicity of teaching.

However, there are also studies that noted the benefits of the stand-alone/discrete approach to teaching accounting ethics (Bean & Bernardi, 2007). For instance, Williams and

Elson (2010) emphasized the importance of accounting ethics education and informed on the need to implement a discrete accounting ethics course with emphasis on team teaching approach. Bean and Bernardi (2007) in agreement with William and Elson (2010) suggested that a discrete accounting ethics education is more beneficial to the accounting students since the integration has not proven productive. Jonson et al. (2015) examined the learning process and concluded that with more instructors devoted to an active role in discrete accounting ethics course, the benefits involve more coverage of ethical issues, better ethical understanding, and improved ethical decision-making. Kidwell et al. (2013) research study contended that the effectiveness of a discrete or integration remained unknown but suggested that integration of accounting ethics in accounting curriculum provides only a superficial effect. Similarly, accounting ethics when discretely taught are more prominent in the mind of accounting students (Miller & Becker, 2011). Based on the reviewed literature, accounting instructors preferred integration of accounting ethics course, while accounting students, on the other hand, preferred an isolated/discrete accounting ethics course that provides a more focus to ethical issues (Graham, 2012).

Apart from the kind of approach, researchers have revealed other issues with teaching accounting ethics. Examples of these issues are what to teach, who is most qualified to teach it, its structure, and the effect or impact of the standalone accounting ethics course or integrated accounting ethics course (Kidwell et al., 2013; Miller & Becker, 2011). Overall, all these issues with teaching accounting ethics created uncertainty and doubt on the impact or effect on the ethical decision-making of accounting students and the accounting profession and should, therefore, be addressed.

There are limited studies showing statistically which method of teaching between stand-alone accounting ethics courses or integrated curriculum works better. However, there is a growing number of researchers highlighting the need to employ the best pedagogical approach because the means of pedagogy can shape the effectiveness of accounting ethics education (Kidwell et al., 2013). Some argued that within the United States, the moral, economic approach is prevalent and that accounting instructors probably have insufficient accounting ethics knowledge (Atkinson, 2009; Kidwell et al., 2013).

The primary topics of this chapter were insights into the knowledge of accounting ethics and the effects of cognitive moral development theory by Kohlberg (1969) as the study's theoretical framework. Thus far, all aspects of accounting ethics are debated by accounting educators, accounting organizational bodies, and governmental agencies charged with oversight. Even with increased oversight in place, researchers are calling for studies to establish the impacts of various accounting ethics teaching methods. To improve public perceptions of the accounting profession, implementing a method of teaching accounting ethics that is more effective for accounting students is imperative. Even with Kohlberg's theory proven effectiveness as a way of understanding cognitive moral development, it is not without criticisms.

Critique of Previous Research Methods

Methodologically, based on numerous researches reviewed in this study, the methodological approaches utilized by the authors were found to be appropriate. Most studies, such as those by Williams and Elson (2010) and Richardson (2015), deemed the quantitative research method to be the most appropriate method of research when measuring variables and testing hypotheses. In contrast, qualitative methods employing Kohlberg's Moral Judgment Interview (MJI) were found to be limiting and later advanced by Rest (1979). An additional

characteristic of the quantitative study is to provide an objective approach for studying phenomena of scientific concerns (Lock & Seele, 2015).

Researchers such as Ho (2010) and Shawver and Sennetti (2009) opined that the quantitative research method, which employs a larger sample than qualitative research, is ideal for generalization of one's findings. The quantitative method of research thus allows for the measurement of different relationships among variables that are statistically tested and epistemologically quantified (Creswell, 2014). The quantitative research method also allows for strategy formulation and design that answers the research questions that are critical to accounting ethics.

The data collection methods within the literature provided were also found to be of good practice. However, a good number of the studies were limited to the cognitive moral development of accounting students without giving proper consideration to external variables such as cultural backgrounds, ethnicity, other social activities, and religious affiliations. Ethical perception is a complex component of ethical decision-making, and culture as a patterned mode of thinking, feeling and reacting, and acting is a strong influence on the ethical development, reasoning, and judgment of individuals. Ho (2010) posited that most empirical research around ethical studies was centered on moral decision-making, moral judgment, and action, but only a small amount of the literature covers ethical perception.

Regarding the theoretical critique observed in the review of the literature, Kohlberg's (1969) theory was derived from Piaget's stage theory, which was a subject of considerable criticism. One area of concern was being unable to rely on language as a means of understanding children's inner developments since at the sensorimotor period, means of communication are not well developed in infants. Having said that, Piaget (1932) never believed that development

follows a smooth and predictable path as outlined in the staging process, but rather, children's thinking and perception is different from adults (Lefmann & Combs-Orme, 2013).

Even though Kohlberg's (1969) theory of cognitive moral development, reasoning, and judgment has been instrumental in shaping society regarding ethical decision-making considerations; it is not without its critics. Numerous empirical researchers in accounting and business found Kohlberg's (1969) theory to be lacking in information with regards to the micro-morality of individual ethical decision-making (Blay et al., 2016; Dakin, 2014; MacDougall, Martin, Bagdasarov, & Mumford, 2014). Philosophically, micro-morality is ethical concerns that relate to individuals' daily behaviors, while Kohlberg's theory is mostly concern with macro-morality issues, which relate to the societal formal structural definitions of rules, roles, and acting on principles (Rest et al., 1999). While some authors contended that Kohlberg's (1969) theory is limited to its considerations of individuals as separate, contractual or hierarchical (Rest, 1986b; Vitton & Wasonga, 2009).

Opponents of Kohlberg's (1969) theory have suggested that the pedigrees of knowledge, information, and truth that are recognized and uttered today, founded on Kohlberg's (1969) theory of cognitive moral development, were conceived, established, and molded based on male-dominated conventional ideologies or philosophies (Donleavy, 2008; Reiter, 1996). In 1982, Gilligan's ethics of care theory on moral education emerged and presented her theory from a woman's perspectives. Other intellectuals viewed Gilligan's work as being an examination of social injustice by discussing sexual inequities and gender differences in society (Okano, 2016). Ethics of care provides a way of learning that emphasizes empathy, which can influence the accounting ethics education and comprehension of ethical accounting dilemmas (Rest et al., 1999; Reiter, 1996).

The criticisms of gender inequality from Gilligan were weak due to her pronounced gender differences in business ethical attitudes. The Gilligan and Kohlberg paradigms, as argued by Gilligan, are that gender plays a fundamental role in business ethical thinking and scoring. Gilligan discarded “Kohlberg’s taxonomy” (Donleavy, 2008, p. 808) as male-oriented and asserted that women’s handling of ethical dilemmas relative to cognitive behavior relying on caring had caused scores to be lower than those of their male counterparts. Male values focus on the concepts of justice, right, and obligation. Based on the above assertion, the contention is that the male-dominated approach of Kohlberg’s stage model is inherently biased. However, as noted by Donleavy (2008), evidence (Derry, 1989; Pennino, 2001; Rest & Narvaez, 1994; Rest, 1979, 1988;) indicated higher gross mean “*p*” scores for females than their male counterparts, undercutting Gilligan’s argument.

Summary

This chapter critically reviewed literature and studies dealing with Kohlberg’s (1969) theory of cognitive moral development (CMD) and judgment as the present study’s theoretical framework. Numerous studies analyzing the theory found that ethics intervention should improve ethical cognition, thereby influence ethical decision-making. As a result, quantitative studies were implemented and executed. All studies reviewed agreed that accounting ethics education is imperative, but what remains unknown is the significance of the accounting ethics teaching methods.

There has been a considerable amount of research on whether accounting ethics should be taught as an integrated course within the curriculum or as a discrete/stand-alone course. Most studies indicated a preference for accounting ethics integration, while others argued that an isolated accounting ethics course can provide a better ethical awareness that will foster ethical

decision-making. Moreover, some debate whether ethics can be taught, and if so, who should teach it. There is a consensus in the literature that academia must play a vital role in educating accounting students about ethical matters, even in the absence of evidence of the efficacy of any one pedagogical approach. Chapter 3 of this study will present relevant information on the methodology used for the current study. The methodology for this study includes the purpose of the study, the research questions and hypotheses, the research design, the target population and sample including the power analysis, the study procedures, relevant instrument used in this study, the ethical consideration, and the summary of Chapter 3.

CHAPTER 3. METHODOLOGY

With the increase in corporate scandals and frauds, the accounting industry (e.g. profession and institutions) is faced with the challenge in developing an effective means of educating accounting and business students on ethics. Numerous studies have linked the increase of corporate scandals to low levels of moral education, reasoning, and judgment of accounting students and the accounting professionals (Bridgman, 2010; Enofe, 2010; Thomas, 2012). A constant decline in ethical and moral behaviors of the accounting profession led the need for further research regarding accounting ethics teaching methods (Brenner, Watkins, & Flynn, 2012; Hakan Özkan, 2013; Williams & Elson, 2010). According to Bridgman (2010), this latest soul-searching by accounting educators has indicated there may be short comings in our institutions. This has prompted studies such as this current study on the impacts of pedagogy.

Purpose of the Study

The purpose of this quantitative research study was to investigate and determine the relationship between the pedagogical delivery of ethics in accounting and its effects on the ethical decision-making of accounting students (Williams & Elson, 2010). Through the study of moral training and a review of the existing literature on cognitive moral capability, the present study's goal was to understand the effects of teaching accounting ethics as an integrated or as a discrete course on accounting students' ethical decision-making. The study examined the moral awareness and moral reasoning of accounting students and their ethical decision-making via the Defining Issues Test-2 (DIT-2), administered online to accounting students (Rest, Narvaez, Thoma, & Bebeau, 1999).

The primary theoretical foundation of this study was in assessing the past contributions from the literature as they relate to ethical decision-making, dealing with topics such as

deontological ethics, virtue ethics, and stakeholder/agency ethics. Stakeholder and agency ethics relates directly to the functionalities of an organization, including the ethical decisions made by accounting professionals. The theoretical foundation of this study is, therefore, decision-making theory (Crossan, Mazutis, & Seijts, 2013; Martin & Parmar, 2012). Furthermore, decision-making theory critically investigates a comprehensive model integrating virtue, values, character strengths, and ethical decision-making. The theoretical basis guides the investigation into answering the research questions as well as evaluating the hypotheses in the study (D'Anjou, 2004).

Using the DIT-2 and an extensive literature review, the researcher attempted to address the core effects of accounting ethics teaching methods on the ethical decision-making of accounting students, whether such methods are a stand-alone or in an integrated curriculum, or both. Decision-making theory in this study considers the integration of personal attributes or dimensions with decision-making ethics (Crossan et al., 2013).

Research Questions and Hypotheses

Research Questions

The demand for accountability among accounting educators, accounting, and business institutions, and accounting students has deepened because of constant corporate scandals. Hence, informing on the need for a valid and reliable accounting ethics delivery structure (integrated or stand-alone accounting ethics course) that is supported to provide significant results in regard to ethical decision making. The objective of this nonexperimental, quantitative study using a survey design was to study the relationship between the pedagogical delivery of accounting ethics and its significant effects on ethical decisions making of accounting students

(Williams & Elson, 2010). The research question investigated both independent variables (IV's) and the dependent variable (DV). The primary research questions are as follows:

RQ1: What is the effectiveness of teaching accounting ethics as a stand-alone or discrete course on ethical decision-making of accounting students?

RQ2: What is the effectiveness of teaching accounting ethics as an integrated course in the curriculum on ethical decision-making of accounting students?

Hypotheses

This research study utilized a nonexperimental, quantitative study using a survey design to investigate multiple independent variables (IV's) and one dependent variable (DV), to test the hypotheses, and answer the research questions (Field, 2013). Also, to assist in answering the research questions, an analysis of the data collected in the study enabled the researcher to accept or reject the null hypotheses as posed:

- H_01 : Teaching accounting ethics as a stand-alone course does not significantly impact ethical decision-making by accounting students.
- H_a1 : Teaching accounting ethics as a standalone course does significantly impact ethical decision-making by accounting students.
- H_02 : Teaching accounting ethics as an integrated course does not significantly impact ethical decision-making by accounting students.
- H_a2 : Teaching accounting ethics as an integrated course does significantly impact ethical decision-making by accounting students.

Research Design

The research design is the fundamental of all research studies and acts as the glue that not only holds the various components of the research together, but must be central to advancing the

study, and addressing the research question. Regardless of which methodological approach (quantitative, qualitative, mixed method), it is imperative that the research fundamentals identify the most reliable and practical appraisal method that includes various sets of assumptions and limitations (O’Leary, 2009).

This study utilized a nonexperimental, quantitative study using a survey design which allows for a comprehensive and measurable description of the population being studied based on a random selection of participants. A quantitative research method using a survey design has been deemed appropriate for accounting research and has been used by numerous researchers in accounting studies (DiGabriele & Huber, 2015; Richardson, 2015). The quantitative research method was utilized for this study due to its quantifiable characteristics, and its potential reduction of biases associated with individual interpretation or responses (Bowers, 2017). Based on the subjectivity of the qualitative method, its potential biases in text interpretations from participants, and lack of numeric measurement, a qualitative method was deemed inappropriate for the current study (Allwood, 2012).

Quantitative research method involves the use of statistical data and software to manipulate raw data gathered for analysis effectively. The current accounting study involves the use of numerical data and descriptive statistical data to test and analyze the hypotheses and research questions. Evidence supports the use of quantitative research method using statistical analyses to determine the significance of the relationship between the independent variables and the dependent variable (Alshaik, Elian, & Tahat, 2013; Lock & Seele, 2015; Sigurjonsson, Vaiman, & Arnardottir, 2014). This is consistent with the current study’s research question, the purpose of the study, data collected, and the hypotheses posed. As stated, a survey approach was utilized to collect numeric data. This survey approach when properly constructed and effectively

administered is a great source of high-quality and large-scale data gathering that is cost-effective. However, Van der Stede, Young, and Chen (2005) argued that survey method is the most criticized research method used in management accounting researchers. The assertion by Van der Stede et al. (2005) on the survey critics was based on the assumption that the deployment and administering of the survey may not be properly vetted. This study used an existing survey of Defining Issues Test 2 (DIT-2) which showed an acceptable validity and reliability.

Target Population and Sample

This quantitative research study presents a discussion of the target population and sample. Also, included under this section of the study are the following sub-headings: power analysis, procedures regarding sampling, participants selection, protection of participants, data collection, data analysis, the measurement instrument, ethical considerations, and the chapter summary.

Population

The target population for this study included undergraduate, graduate, online, and on-campus registered accounting students in the Southwestern United States comprising Utah, Nevada, Colorado, New Mexico, Arizona, and California. The database used for this study was obtained from an online survey provider, Peanut Labs, a subsidiary of ResearchNow. According to Peanut Labs, they maintain an extensive database of survey participants including accounting students in their database. Peanut Labs maintain over 1 million participants in their database. The population helped in the generalization of the result of the study (Sekaran & Bougie, 2013). Peanut Labs directory employs and maintains extensive research team that administers and collects data. The age range of the students used for this study were students 18 years of age and

above, and no special consideration was given regarding gender, and ethnicity/race, or socioeconomic status.

Sample

The sample for this nonexperimental quantitative survey research study was selected randomly to represent the characteristics of the population being studied for generalization. This research study's sample frame consisted of a Peanut Lab audience meeting the specified criteria: registered accounting students, 18 years of age and above, the Southwestern United States comprising of Utah, Nevada, Colorado, New Mexico, Arizona, and California, and must have access to a computerized system. Additional criteria stipulated that the survey must be completed within a 14-day window. The period allowed to complete the survey was considered significant because schools were reaching the end of the term at the time of the survey. The limitation experienced in using Peanut Labs was that their platform was not set up to track the academic level measured in terms of grade point levels of students responding to the survey.

Sampling and size are a vital part of a quantitative study in social sciences. Vogt (2007) argued that a bigger sample mitigates sampling error and enhances statistical power of the research. Evidence supports that having a larger sample not only foster generalization and validity but also, helps reduce the risk of Type II error; failing to detect an actual relationship in a population of interest (Byrne, 2001; Koumbiadis & Pandit, 2014).

Power Analysis

A sample size enables a researcher to make the unambiguous judgment that a statistical result is correct or is representative of the population being studied to a certain degree (Malone, Nicholl, & Coyne, 2016). A power analysis was performed using the following input parameters in G*Power 3.1.9.2 (Faul et al., 2009) to achieve the representative sample suitable for the study.

Obtaining an appropriate sample size through a statistical tool helps eliminate problems associated with estimation (Mertler & Vannatta, 2013). The minimum sample size for this study was determined to be 107 participating accounting students in the US. This study's sample size was obtained using a Cronbach's α of .05, a medium effect size of 0.15, and Power (1- β error prob) of .95% to reduce the likelihood of Type II errors. However, the survey received a high response of 232 participants out of 265 initial solicitations, representing 87.55% of the survey administered. This initial response rate includes all participants that accessed the hyperlink in the recruitment email leading to the questionnaire, regardless of whether or not the respondent completed the survey. Out of the 232 respondents, 144 participants passed the reliability checks, which exceeded the minimum sample requirement of 107, and was used as the sample for the study. The reliability checks included checking for inconsistencies in responses, any missing data, and outliers.

Procedures

With regards to sampling procedures, researchers using survey design commonly used either probability or non-probability samples which include random sampling, stratified, systematic, and cluster probability sample. Surveys are needed to obtain generalizable data about the population and topic being studied (Asan, & Ayhan, 2013). For generalization and repeatability purpose, probability random samples have been commonly accepted and used by many researchers (Suhonen, Stolt, Katajisto, & Leino-Kilpi, 2015). For this study, the primary objective was to provide a generalizable result, and as such, a random sample approach was utilized. This approach allows for equal probability of each member of the population being selected, as well as, eliminating possible bias that can occur when a member of the population is systematically overrepresented (Vogt, 2007).

Participant Selection

The participant for the online survey was selected from Peanut Labs database. Participants selected for this quantitative research study had to meet both inclusive and exclusive criteria and must sign the approved Capella University's Informed Consent form in order to be eligible for participation in the study. Email invitations were generated and sent to 265 accounting students meeting the required criteria of the study through their Research Now's panel called Simplify. Participants for the study were selected randomly, and the participants who met the criteria completed the DIT-2 online scenario-based questions. The permission to use the DIT-2 was obtained from the Center for the Study of Ethical Development at the University of Minnesota. If the participant did not meet the criteria, the survey ended, and the ineligible participant and their data were not included in the data used for the study. A URL link to the survey provided by Peanut Labs was included in the email sent.

Protection of Participants

According to Creswell (2014), researchers must protect the research participants, promote the integrity of research, guard against misconduct and impropriety that might reflect on the study, and exhibit proper disclosure. All participant's identifying information was eliminated, and data collected were password protected and were locked in a file cabinet for seven years. The primary principal building block for this research is respect for persons or participants including autonomy, and protection of participants (Wester, 2011). The principle of respect for persons is in agreement with The Belmont principles of research which includes respect for persons, beneficence, and justice (Gyure et al., 2014).

Data Collection

The data for this study was collected using a questionnaire developed at The Center for the Study of Ethical Development (CSED) at the University of Minnesota known as the Defining Issues Test 2 (DIT-2). The permission to use the DIT-2 was obtained from The CSED and submitted to the school's IRB before being administered to survey participants. DIT-2 has been used for over 25 years for ethics studies and was presented to the participants in the form of a Likert-Type scale, an open-ended questionnaire (Rest et al., 1999). Evidence shows that DIT-2 is an effective and valid instrument for collecting and measuring moral comprehension of what is wrong, right or good, prosocial behavior, and professional decision-making including accounting students (Cooper & Schwartz, 2007; Craig & Oja, 2013).

Participants in the study were given 14 days to complete the survey, and at the end of the 14th day, the link was made inactive to avoid oversampling. All participants completed the demographic sheet included with the survey. Responses collected via Peanut Labs were downloaded into both Microsoft Excel Professional 2016 and IBM SPSS 24 software and provided to The Center for the Study of Ethical Development (CSED) for scoring based on the agreement established between the researcher and CSED before using the DIT-2. Incomplete or responses with errors were removed, and 144 actual responses were completed correctly and received on time. The reliability checks were performed during the scoring process by The Center for the Study of Ethical Development as part of the paid permission to use the DIT-2. The reliability checks included checking for inconsistency in responses, missing data, and outliers.

Data Analysis

To avoid the unreliability of a study, a thorough analysis of the data collected were performed during the research. It is vital that a researcher interpret usable data along with the

demographic information collected to maintain the integrity of the study (Aigner, Rind, & Hoffmann, 2012). All data collected were screened for any missing data, and entry errors were properly coded to show only the numerical values as needed for statistical software analysis using Statistical Package for the Social Sciences (IBM SPSS 24). For instance, demographic questions such as age (scale), gender, and sex (male = 1, female = 2) were numerically coded to quantify responses used on a Likert-Type scale. This formatting is necessary for the measurements of the independent variables (IV's) and dependent variable (DV) based on the DIT-2 collection instrument.

The online survey company, Peanut Labs, captured the data through an online survey, emailed the results of the survey from their platform to the researcher. The researcher uploaded the raw data into IBM SPSS 24 and emailed the data to The Center for the Study of Ethical Development (CSED) at the University of Minnesota for scoring. Based on the existing agreement, the researcher paid for the permission to use the DIT-2 for this study including The CSED scoring of the data (P-score, mean, and so forth) for input into the independent sample *t*-test analysis to compare and analyze population sample means. The CSED also provided basic descriptive statistics and moral reasoning scores in an electronic format to the researcher. The score assisted in determining student's ethical sensitivity when performing the relationship between ethical delivery method and ethical decision-making of the accounting students (Shawver & Sennetti, 2009).

Descriptive Statistics Analysis

Prior to addressing the research questions of the study, descriptive statistics (e.g., percentage, frequency, mean, and standard deviation) were calculated for the data of each of the study variables used in this research. Study variables that are continuous measured were

summarized using central tendency measures of mean, standard deviation, and minimum and maximum values. On the other hand, study variables that are categorically measured were summarized using frequency and percentage summaries.

Parametric Statistical Analysis Assumption Testing

IBM SPSS 24 and visual inspection was used to screen and identify any anomalies (Ho, & Yu, 2015; Mertler & Vannatta, 2013). Various statistical and inferential statistical analyses were performed using IBM SPSS 24 to test the different assumptions required by the parametric statistical analysis of independent sample *t*-test. The tests included normality (an assumption that all variables and their linearity were normally distributed), homoscedasticity/homogeneity of variance, as well as tested for outliers for cases or responses with extreme values. A test for linearity and normality were performed using scatterplots and histograms, respectively. Homoscedasticity/Homogeneity of variance was tested using Levene's test.

Hypothesis Testing

An independent sample *t*-test was conducted to determine the impact of teaching accounting ethics as a stand-alone or discrete course and teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students. The independent sample *t*-test was conducted since the dependent variable of ethical decision-making of accounting students is a continuous measure (Rietveld & Van Hout, 2015) while the independent variable is a categorical measure with binary categories. An independent sample *t*-test was conducted to determine whether the values of the dependent variable is significantly different across differences of the two groupings of the independent variables of teaching accounting ethics as a stand-alone or discrete course (Yes or No) and teaching accounting ethics as an integrated course in the curriculum (Yes or No). The *t*-statistic is used to determine if the

independent variable significantly impacted the dependent variable (Shorten & Shorten, 2015). A Cronbach's α or level of significance of 0.05 was used to determine the significance of the impact of the independent variables on the dependent variable. The independent variables significantly impacted the dependent variable if the p -value of the t -statistic is less than or equal to the value of the level of significance. If significance is observed, the mean comparison is conducted to further determine the impact of the independent variables on the dependent variable.

DIT-2 Measurement instrument

For this study, DIT-2 was used as the measurement instrument, and permission to use the instrument was obtained from the University of Minnesota's Center for the Study of Ethical Development. The permission to use the instrument also included paying for the basic descriptive analysis and scoring of the DIT-2 (Richmond Pope, 2005). Before delivering to the participants, the permission obtained was submitted to the Institutional Review Board (IRB), and authorization to proceed with the study was granted based on meeting the IRB criteria.

To investigate the variables (integrated accounting ethics course, stand-alone accounting ethics course, and ethical decision-making), DIT-2 was utilized as the measurement instrument for this study and administered to participants through an online survey design. The DIT was developed by Rest in 1974 and has been used in hundreds of studies in ethical and moral behaviors including accounting ethics (Parker, Barnhardt, Pascarella, McCowin, 2016; Rest et al., 1999). Students' ethical behavior and reasoning has been linked to students' moral development, which has been researched, evaluated, and analyzed using DIT and DIT-2 for over 25 years (Gelerstein, Río, Nussbaum, Chiuminatto, & López, 2016; Parker et al., 2016; Peeters & Boddu, 2016). The DIT/DIT-2 allows researchers to learn about individual's specific attitude

in an ethical dilemma. The DIT was later revised to a newer version, the DIT-2 which scores reflect the relative priority respondent's places on moral schema as designed by Rest (1999).

The DIT-2 is an updated version of the original DIT and has demonstrated robust validity and reliability in hundreds of studies (Rest et al., 1999). The DIT-2 consists of five dilemma stories which include (a) a father contemplates stealing food for his starving family from the warehouse of a rich man hoarding food; (b) a newspaper reporter must decide whether to report a damaging story about a political candidate; (c) a school board chair must decide whether to hold a contentious and dangerous open meeting; (d) a doctor must decide whether to give an overdose of pain-killer to a suffering but frail patient; (e) college students demonstrate against U.S. foreign policy. Participants first choose one of three listed courses of action that follow from each story. Next, the respondents rate the level of importance of their decision by responding to 12 statements on a Likert-type scale (1= *No importance*, 2= *Little importance*, 3= *Somewhat important*, 4= *Much importance*, 5= *Great importance*). Finally, respondents rank the 12 statements in terms of importance and list their top four picks. The DIT2-taking experience was measured by a 7-point Likert scale with 1 standing for "not at all enjoyable," 4 standing for "somewhat enjoyable," and 7 standing for "extremely enjoyable." There are two main developmental indices in the DIT-2: the P score, which is the principled score, and the N2 score, which is the P score adjusted for lower stage reasoning. The N2 score has been reported to be equivalent to P score but generally outperforms the P score in construct validity on six criteria (Rest et al., 1999). A high P-score/ N2 score indicates high-level moral reasoning and decision making. In this study, both the P score and N2 score were examined.

Validity

Evidence-based research includes an application of the findings that depicts an accurate result. The evidence-based research infers that the validity of a quantitative study must validate the data collection design; survey design, and instrument of measurement used (Roberts, Priest, & Traynor, 2006). Utilizing the DIT-2 satisfies the extent to which the ethical decision-making of accounting students was measured in this quantitative study (Rest et al., 1999). Internal validity is the degree or extent to which the study design allows for valid conclusions to be drawn from a study, while external validity relates to researcher ability to draw conclusive inferences from the study utilizing the same model and data collected, and whether results may be generalized (Ihantola & Kihn, 2011). This study utilized both online survey design for data collection, and DIT-2 instrument for measurement, thereby, validated both the internal and external validity of the findings (Kim, Hornung, & Rousseau, 2011).

Reliability

The use of reputable and valid data collection method and measurement instrument was essential to obtaining reliable results in research. Both survey design and DIT-2 instrument used in this research have been tested for reliability and validity when gathering data for ethics and accounting studies (McCusker & Gunaydin, 2015; Rest et al., 1999). As noted by McGoey, Cowen, Rumrill, and Vogue (2010), reliability is a critical element of research that deals with internal stability and the consistency of measurement instrument. Hence, the study must be replicated using the same data and instrument in other to be reliable. According to Ihantola and Kihn (2011) and Roberts, Priest, and Traynor (2006), reliability is the extent to which a variable or set of constructs is consistent in what it is supposed to measure. Therefore, various measures must provide a consistent outcome. By using the quantitative research method that employed

random sampling, qualifying variables, and statistical data testing, the reliability and validity of the research findings are increased (Heale, & Twycross, 2015; Thoma, & Dong, 2014). To test for reliability, Cronbach's α is used to measure internal/homogeneity consistency (Heale & Twycross, 2015). Cronbach's α is the most commonly used test to determine the internal consistency of an instrument, and the Cronbach's α result ranges from 0 and 1, with an acceptable reliability score at 0.7 or higher (Heale & Twycross, 2015; Hurtt, 2010).

Table 1

List of Study Variables

Type of Variable	Variable Name	Type of Measure	Research Question
Dependent Variable	Post Conventional (P score)	Continuous	RQ1 and RQ2
Dependent Variable	Personal Interest (Stage 2/3)	Continuous	RQ1 and RQ2
Dependent Variable	Maintain Norms (Stage 4)	Continuous	RQ1 and RQ2
Dependent Variable	N2 score (N2 score)	Continuous	RQ1 and RQ2
Independent Variable	Teaching accounting ethics as a stand-alone or discrete course	Categorical/Dichotomous (1 - yes, 2 = no)	RQ1
Independent Variable	Teaching accounting ethics as an integrated course in the curriculum	Categorical/Dichotomous (1 - yes, 2 = no)	RQ2

Note. Depiction of the study variables used from the DIT-2 to answer the research questions RQ1 and RQ2.

Ethical Considerations

This study was conducted with the approval of the Institutional Review Board (IRB). Permission for the use of the DIT-2 was obtained from The Center for the Study of Ethical Development before data collection began. In completing ethical research, Wester (2011) emphasized that researchers must take into account the human participants and the resultant research effect on the field. For this study, ethical assurance was upheld within the five

principles of conducting ethical research involving human participants which according to Wester (2011) are: respect for persons, autonomy, protection of vulnerable, beneficence, and justice. Baykara, Demir, and Yaman (2015) and Connelly (2014) reiterated the need to provide the participants with an informed consent that participation is voluntary and that participants can withdraw from participation at will. Also, informed consent approved by Capella University's Institutional Review Board (IRB) was provided at the beginning of the survey informing the respondents on the purpose of the survey, their rights, and protection. Each participant willing to complete the survey was given the opportunity to review and accept the informed consent before completing the survey or decline by clicking the exit. Furthermore, the researcher was responsible for the protection of the participants, making sure that recruitment was without coercion, avoids conflict of interests, maintains integrity and transparency in reporting, confidentiality, and anonymity of participants information (Connelly, 2014).

Additionally, researchers must be competent to conduct the research which involves the understanding of research design, sampling, and population necessary for validity and reliability. Numerous studies emphasized the need for an appropriate sample size to avoid compromising the validity and generalization of the results (Gaskin, Lambert, Bowe, & Orellana, 2017; Heckmann, Gegg, Gegg, & Becht, 2014; Schnack, & Kahn, 2016). The researcher must make sure that in using statistical inferences that the population in the quantitative research is adequately represented (Zyphur & Pierides, 2017). Hence, proper research procedures must be developed, data and statistics reported clearly and accurately, and avoided the use of deception (Connelly, 2014; Zyphur & Pierides, 2017).

Summary

The purpose of this study was to investigate and to determine the relationship between the pedagogical delivery of ethics in accounting and its effects on ethical decision-making of accounting students (Williams & Elson, 2010). This chapter discussed content regarding the methodological approach used in this nonexperimental, quantitative study using a survey design. Cognitive moral reasoning as it relates to the decision-making of accounting students was measured using DIT-2 which was administered by a commercial, web-based survey company, Peanut Labs. The study comprised of undergraduate and graduate accounting students in the Southwestern region of the United States including California. Hence, the results of this study may not be fully generalizable to other parts of the United States or the world. Only qualified respondents that completed the survey and the demographic questionnaire was used in the study. The students were selected through a random sampling using the existing pool of potential participants in Peanut Labs database set.

Data collected from the survey were reviewed for completeness and any error identified were purged before entry into IBM SPSS 24 software for scoring. The result of the data reviewed was scored by The Center for the Study of Ethical Development. Out of the 232 respondents, 144 met the reliability check representing 62.07% of respondents used in the study analysis. Independent sample *t*-test was used to analyze and test the research questions and the hypotheses.

The researcher made every effort to maintain the integrity of the research, and to ensure participants confidentiality and anonymity. The data collected were secured in an approved lock-box/safe for seven years before being permanently destroyed. In Chapter 4, a description of the sample, hypotheses testing, and the findings will be presented, and Chapter 5 will present further

discussion of the results, limitations, conclusions based on the results, and recommendations for further research.

CHAPTER 4. RESULTS

The purpose of this quantitative research study was to investigate and determine the relationship between the pedagogical delivery of ethics in accounting and its effects on the ethical decision-making of accounting students. This chapter presents the results and findings of the quantitative analysis to address the research questions of this study. This chapter begins by discussing the description of the population and sample, and a synopsis of data collection methods. This chapter will proceed with the description of the statistics performed to test the hypotheses for the research questions. An independent sample *t*-test was conducted to address the two research questions of the study. Also, the test of the different required assumptions for the inferential statistical test of independent sample *t*-test is conducted, and the results are discussed. The chapter will conclude with a summary of the hypotheses testing and the research results from the statistical analyses performed in the study.

Description of the Sample

The sample population for this study includes undergraduate, graduate, and professional accounting students from the Southwest United States (Utah, Nevada, Colorado, New Mexico, Arizona, and California). The initial response rate achieved was 232 potential participants out of the 265 invited representing a response rate of 87.55%. Of the 265 individuals that responded, some terminated because they could not complete the survey within the allotted time frame, and some participants that accessed the hyperlink were also discarded for not meeting the qualification requirement for the study.

The sample of the study includes college or university accounting students aged 18 years old and above that are either an undergraduate or graduate student. The survey was administered to colleges and universities in the Southwest United States (Utah, Nevada, Colorado, New

Mexico, Arizona, and California). The data from 232 potential participants were entered into IBM SPSS 24 for Windows and was sent to The Center for the Study of Ethical Development for further screening for reliability check and scoring. The Center for the Study of Ethical Development determined that $N = 144$ or 62.07% of the respondents met the reliability check and was used in the scoring and study. Reliability check involves the purging of the incomplete questionnaire, missing data, and any other questionable responses. Table 2, provides details of how the participants for the study was determined by attrition and the percentage of participants.

Table 2

Sample/participants determination

Measure	N	%
Initial recruitment	265	100.00
Respondents agreeing to the inform consent	265	100.00
Respondents with anomaly	33	12.45
Potential qualifying respondents	232	87.55
Respondents with useable data	144	62.07

Note. Participants determined by attrition and shows the percentage of the participants. $N = 144$ the final total number of useable samples; 62.07% represent percentage of useable data.

Tables 3 and 4 summarized the demographic information of the 144 samples of accounting students in the U.S. For gender, it consisted of 111 females or 77.1%, and 33 males or 22.9%. The mean age of the sample of accounting students in the U.S. was 23.53 years old ($SD = 3.83$). The youngest among the sample was 18 years old while the oldest was 34 years old. For race/ethnicity, more than half of the samples were Caucasian (other than Hispanic) which consisted of 83 accounting students or 57.6%. The educational background of the sample ranges from undergraduate to graduate accounting students including profession and terminal degrees from Southwest region of the United States including California. For the number of siblings, half of the 144 samples of accounting student in the U.S. has only one sibling which consisted of 72

accounting students or 50%, 35 (24.3%) have two siblings, 16 (11.1%) have three siblings, 9 (6.3%) have four siblings, and 12 (8.3%) have five siblings. For political liberalism, half of the 144 samples of accounting student in the U.S. were either very liberal which consisted of 33 accounting students or 22.9% or somewhat liberal which consisted of 44 accounting students or 30.6%. There were 48 (33.3%) accounting student that were neither liberal nor conservative. Almost all or 140 (97.2%) out of the 144 samples of accounting student in the U.S. were U.S. Citizen. Almost all or 138 (95.8%) out of the 144 samples of accounting student in the U.S. had English as a primary language.

Table 3

Summaries of Demographic Information

	Frequency	Percent
Educational Level		
1 Grade 1-6	7	4.9
2 Grade 7-9	28	19.4
3 Grade 10-12	12	8.3
4 Voc/Tech	19	13.2
5 Jr. College	5	3.5
6 Freshman	7	4.9
7 Sophomore	14	9.7
8 Junior	31	21.5
9 Senior	11	7.6
11 MS degree	1	0.7
12 Ph.D./Ed.D	4	2.8
Other	5	3.5
Race/ethnicity		
African American or Black	29	20.1
Asian or Pacific Islander	12	8.3
Hispanic	20	13.9
American Indian/ Other Native American	5	3.5
Caucasian (other than Hispanic)	83	57.6
Other	3	2.1

Table 3 (continued)

Summaries of Demographic Information

	Frequency	Percent
Gender		
1 male	33	22.9
2 female	111	77.1
How many siblings do you have?		
1	72	50
2	35	24.3
3	16	11.1
4	9	6.3
5	12	8.3
Political Liberalism		
1 Very Liberal	33	22.9
2 Somewhat Liberal	44	30.6
3 Neither Liberal nor Conservative	48	33.3
4 Somewhat Conservative	13	9
5 Very Conservative	6	4.2
U.S. Citizen?		
1 yes	140	97.2
2 no	4	2.8
English as a primary language?		
1 yes	138	95.8
2 no	6	4.2

Note. N=144, depicts the demographic information of the participants.

Table 4

Descriptive Statistics Summaries of Age

	N	Minimum	Maximum	Mean	Std. Deviation
Age	144	18.0	34.0	23.53	3.83

Note. N=144. Shows the age range, the means, and the standard deviations of the participants.

Hypothesis Testing

Pedagogical Delivery of Ethics in Accounting. Table 5 summarized the pedagogical delivery of ethics in the accounting of the sample of accounting students in the United States.

More than half of the sample have taken an Accounting/Ethics course in their college and/or University study (89; 61.8%); had Ethics course taught as a stand-alone course (89; 61.8%). Less than half of the sample had ethics course included in the Accounting curriculum (Integrated Course) (60; 41.7%). More than half of the sample believe that their ethical decision-making has or will change due to taking an ethics class as a stand-alone course (94; 65.3%); believe that their ethical decision-making has or will change due to taking an ethics class as part of the accounting course (integrated) (83; 57.6%). Almost all (142; 98.6%) of the samples completed this questionnaire in one sitting. Less than half of the sample responded that music was playing while they completed the questionnaire (46; 31.9%); and that the TV was playing while they completed the questionnaire (58; 40.3%). Majority of the sample of accounting students in the U.S. did not receive a phone call while completing the questionnaire (122; 84.7%); made a phone call while completing the questionnaire (129; 89.6%); received emails/text messages while completing the questionnaire (97; 67.4%); responded to emails/text messages while completing the questionnaire (112; 77.8%); and stopped and talked to friends while completing the questionnaire (116; 80.6%). Compared to how the sample take surveys in the classroom, they took the survey mostly in the same way - not different at all (65; 45.1%) or About the same way – I had a minimal amount of distractions (59; 41%)

Table 5

Summaries of Responses to Pedagogical Delivery of Ethics in Accounting

	Frequency	Percent
Have you taken an Accounting/Ethics course in your college and/or University study?		
1 yes	89	61.8
2 no	55	38.2
Was the Ethics course taught as a stand-alone course?		
1 yes	89	61.8
2 no	55	38.2
Was the Ethics course included in the Accounting curriculum (Integrated Course)?		
1 yes	60	41.7
2 no	84	58.3
Do you believe that your ethical decision-making has or will change due to taking an ethics class as a stand-alone course?		
1 yes	94	65.3
2 no	50	34.7
Do you believe that your ethical decision-making has or will change due to taking an ethics class as part of the accounting course (integrated)?		
1 yes	83	57.6
2 no	61	42.4
I completed the questionnaire in one sitting.		
1 yes	142	98.6
2 no	2	1.4
Music was playing while I completed the questionnaire.		
1 yes	46	31.9
2 no	98	68.1
The TV was playing while I completed the questionnaire.		
1 yes	58	40.3
2 no	86	59.7
I received a phone call while I completed the questionnaire.		
1 Yes, more than one	9	6.3
2 Yea, just one	13	9
3 No	122	84.7
I made a phone call while I completed the questionnaire.		
1 Yes, more than one	10	6.9
2 Yea, just one	5	3.5
3 No	129	89.6

Table 5 (continued)

Summaries of Responses to Pedagogical Delivery of Ethics in Accounting

	Frequency	Percent
I received emails/text messages I while I completed the questionnaire.		
1 Yes, more than one	24	16.7
2 Yea, just one	23	16
3 No	97	67.4
I responded to emails/text messages I while I completed the questionnaire.		
1 Yes, more than one	19	13.2
2 Yea, just one	13	9
3 No	112	77.8
I stopped and talked to friends while completing the questionnaire.		
1 Yes, more than one	11	7.6
2 Yea, just one	17	11.8
3 No	116	80.6
Compared to how I take surveys in the classroom I took this questionnaire		
1 The same way - not different at all	65	45.1
2 About the same way – I had a minimal amount of distractions	59	41
3 Not the same way– I had distractions that made me stop and start the questionnaire.	14	9.7
4 Not at all the same way – I completed the questionnaire when I could while doing other things.	6	4.2

Note. $N=144$. The table depicts the summary of the participants responses.

Scores of Ethical Decision-Making of Accounting Students. Descriptive statistics were computed to summarize the different scores of the dependent variable of ethical decision-making of accounting students as measured by the DIT-2 instrument of Post Conventional, Personal Interest, Maintain Norms, and N2 score. Central tendency measures of means and standard deviations were used to summarize the score for acculturation. Table 6 summarized the scores of acculturations. The mean score of Post Conventional or the P scores was 30.16 ($SD = 13.77$). The mean score of Personal Interest was 30.12 ($SD = 13.99$). The mean score of Maintain Norms

was 26.77 ($SD = 11.90$). The mean N2 score was 26.07 ($SD = 12.50$).

Table 6

Descriptive Statistic Summaries of Scores of Different Measure of Ethical Decision-Making of Accounting Students

	N	Minimum	Maximum	Mean	Std. Deviation
Post Conventional (P score)	144	2	74	30.16	13.77
Personal Interest (Stage 2/3)	144	0	68	30.12	13.99
Maintain Norms (Stage 4)	144	0	62	26.77	11.90
N2 score (N2 score)	144	-0.83	71.29	26.07	12.50

Note. $N=144$. Shows the number of the participants, the mean, and the standard deviation of different measure of ethical decision-making of accounting students using the DIT-2 scores.

Normality Testing of Variables. Before conducting the independent sample t -test to address the objectives of the study, the assumption of normal distribution of the different study variable should be first tested. Normality is a required assumption of the parametric statistical analysis to be conducted. Normality testing was conducted by investigation of the histogram to check the distribution of data of the different measures of ethical decision-making of accounting students as measured by the DIT-2 instrument scores of Post Conventional, Personal Interest, Maintain Norms, and N2 score. The different histograms shown in Figures 4 to 7 showed a bell-shaped curve representing a normal distribution were exhibited in the different plots for scores of Post Conventional, Personal Interest, Maintain Norms, and N2 score. With these results, the data of all measures of the dependent variable of ethical decision-making of accounting students did not violate the normality assumption.

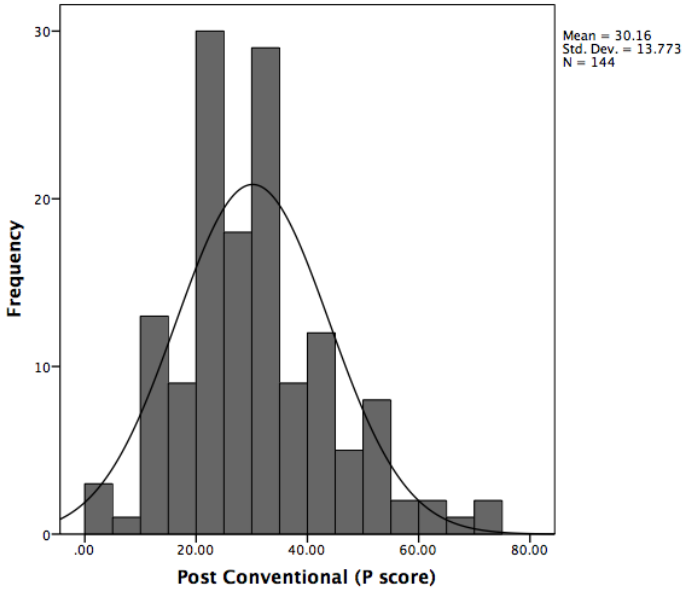


Figure 4. Histogram Distribution of Scores of Post-Convention. The histogram showed that scores of Post-Convention followed normal distribution.

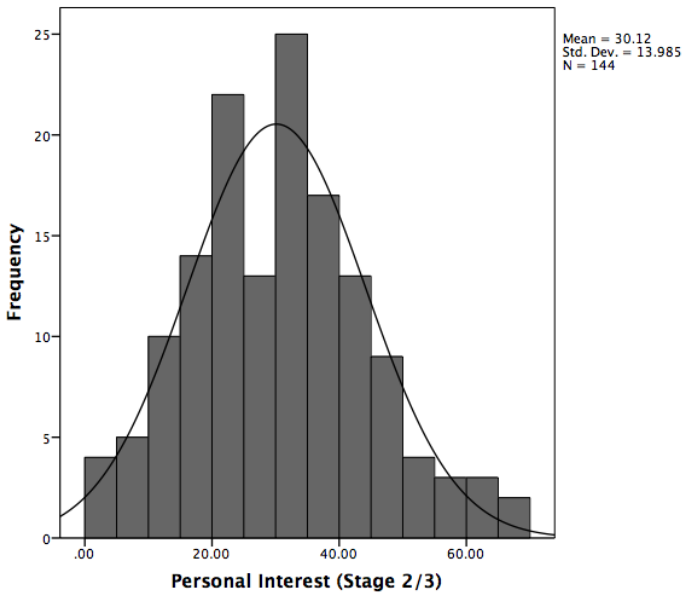


Figure 5. Histogram Distribution of Scores of Personal Interest. The histogram showed that scores of Personal Interest followed normal distribution.

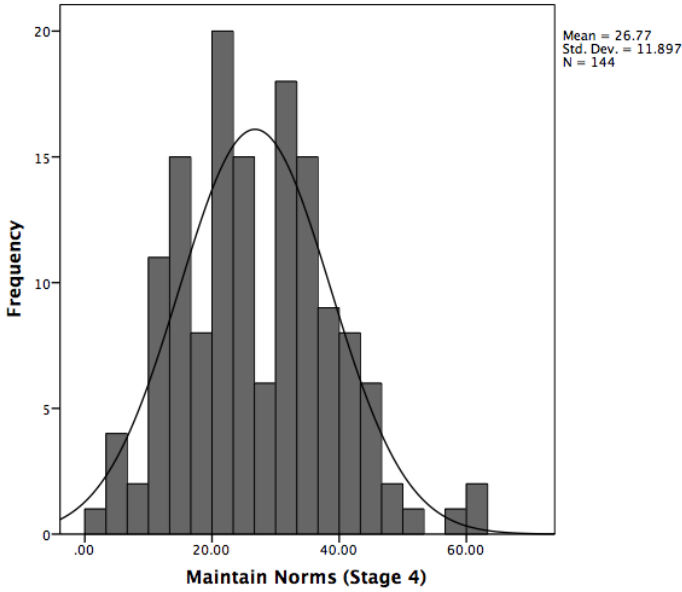


Figure 6. Histogram Distribution of Scores of Maintain Norms. The histogram showed that scores of maintain norms followed normal distribution.

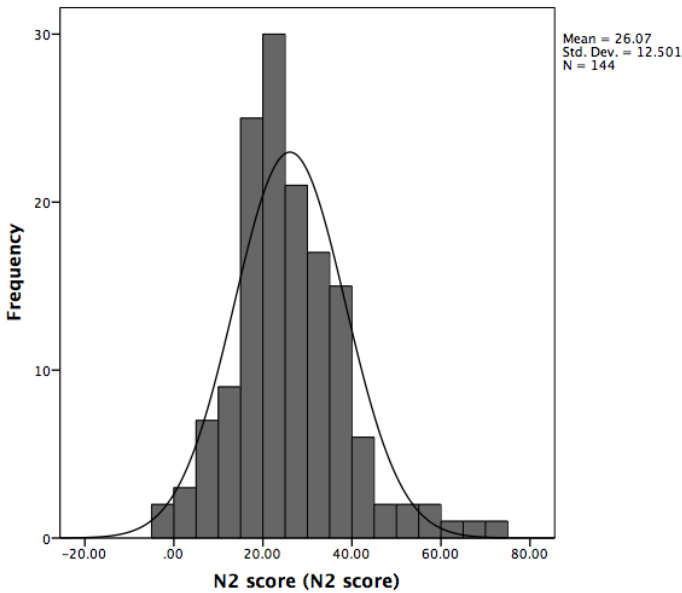


Figure 7. Histogram Distribution of N2 Scores. The histogram showed that N2 scores followed normal distribution.

Outlier Investigation. The next test was to identify the presence of outliers. Scatterplots were created in Figure 8 thru 11 to check the presence of outliers in each of the measures of ethical decision-making of accounting students of scores in Post Conventional, Personal Interest, Maintain Norms, and N2 score. The scatterplots showed no presence of outliers in each of the

figures. Thus, there were no outliers present in the dataset of the four measures of the dependent variable of ethical decision-making of accounting students.

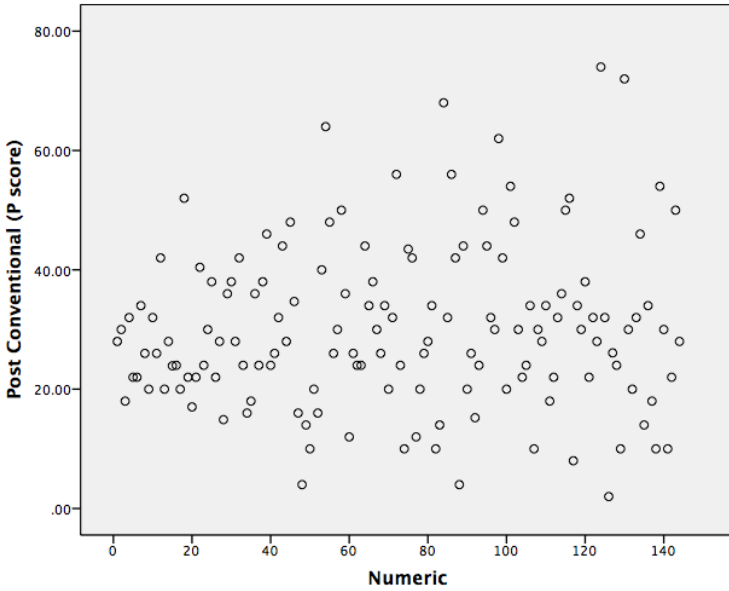


Figure 8. Scatterplot of Scores of Post-Convention. The scatterplot showed that there were no outliers in the data of scores of Post-Convention.

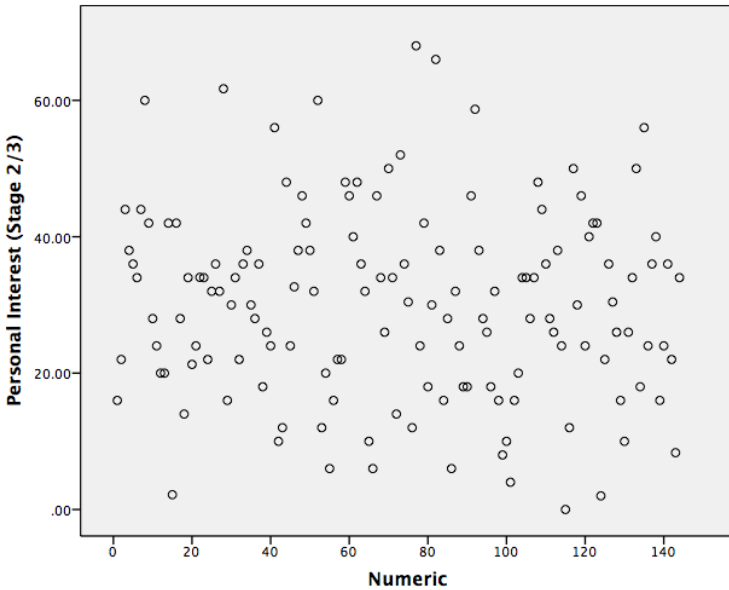


Figure 9. Scatterplot of Scores of Personal Interest. The scatterplot showed that there were no outliers in the data of scores of Personal Interest.

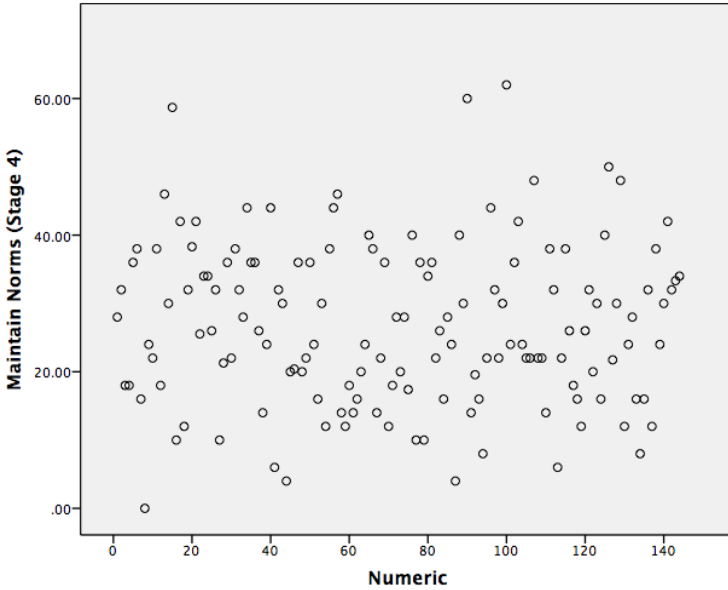


Figure 10. Scatterplot of Scores of Maintain Norms. The scatterplot showed that there were no outliers in the data of scores of maintain norms.

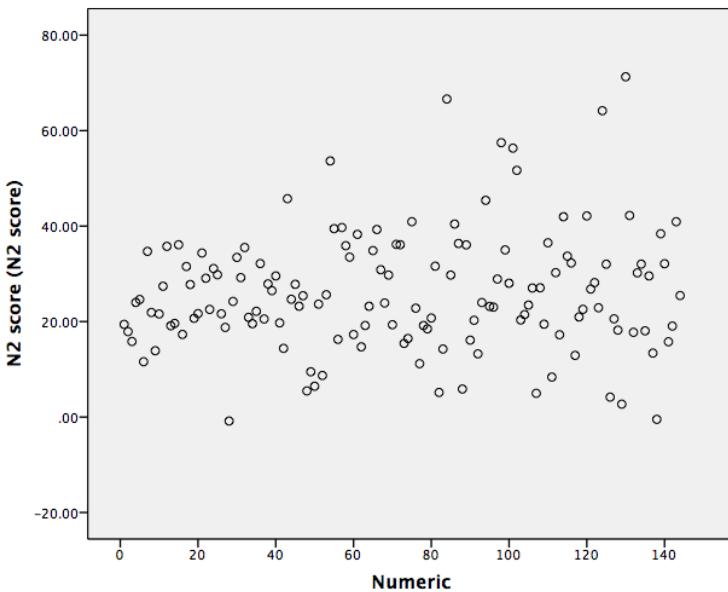


Figure 11. Scatterplot of Scores of N2 Score. The scatterplot showed that there were no outliers in the data of N2 scores.

Homogeneity of Variance. The last assumption tested is that the data needs to show homoscedasticity, which means that the variances of the different measures of the dependent variable of ethical decision-making of accounting students of Post Conventional,

Personal Interest, Maintain Norms, and N2 score should be homogenous across the two categories of the independent variables of teaching accounting ethics as a stand-alone or discrete course and teaching accounting ethics as an integrated course in the curriculum. A Levene's test of equality of variance was conducted to test this assumption. The results are presented in Tables 6 and 7. Results in Table 7 showed that the variances of scores of Post Conventional ($F = 0.23, p = 0.64$), Personal Interest ($F = 0.04, p = 0.85$), Maintain Norms ($F = 0.03, p = 0.87$), and N2 score ($F = 0.01, p = 0.92$) showed homoscedasticity across the different categories of teaching accounting ethics as a stand-alone or discrete course. Results in Table 7 showed that the variances of scores of Post Conventional ($F = 0.00, p = 0.97$), Personal Interest ($F = 0.14, p = 0.71$), Maintain Norms ($F = 0.72, p = 0.40$), and N2 score ($F = 0.44, p = 0.51$) showed homoscedasticity across the different categories of teaching accounting ethics as an integrated course in the curriculum. These were because the p -values were greater than the level of significant value. Thus, the assumption of Homoscedasticity was not violated.

Table 7

Results of Levene's Test of Equality of Variance of Different Score Measures of Ethical Decision-Making of Accounting Students by Groupings of Teaching Accounting Ethics as a Stand-Alone Course

		Levene's Test for Equality of Variances	
		F	Sig.
Post Conventional (P score)	Equal variances assumed	0.23	0.64
Personal Interest (Stage 2/3)	Equal variances assumed	0.04	0.85
Maintain Norms (Stage 4)	Equal variances assumed	0.03	0.87
N2 score (N2 score)	Equal variances assumed	0.01	0.92

Note: All dependent variables have equal or homogenous variance across the independent variable.

Table 8

Results of Levene's Test of Equality of Variance of Different Score Measures of Ethical Decision-Making of Accounting Students by Groupings of Teaching Accounting Ethics as an Integrated Course

		Levene's Test for Equality of Variances	
		F	Sig.
Post Conventional (P score)	Equal variances assumed	0.00	0.97
Personal Interest (Stage 2/3)	Equal variances assumed	0.14	0.71
Maintain Norms (Stage 4)	Equal variances assumed	0.72	0.40
N2 score (N2 score)	Equal variances assumed	0.44	0.51

Note: All dependent variables have equal or homogenous variance across the independent variable.

Independent Sample *t*-test Results. To address research questions one and two, an independent sample *t*-test was conducted to determine the impact of teaching accounting ethics as a stand-alone or discrete course and teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students. A level of significance of 0.05 was used. Independent variables have a significant impact on the dependent variable if the *p*-value is less than or equal to the level of significant value. Tables 9 and 10 summarized the results of the independent samples *t*-test.

Results for Research Question One. The results of Table 9 addressed research question one to determine the effectiveness of teaching accounting ethics as a stand-alone or discrete course on the ethical decision-making of accounting students. Independent sample *t*-test results showed that impact of teaching accounting ethics as a stand-alone or discrete course did not significantly impact the ethical decision-making of accounting students as measured by the DIT-

2 instrument scores of Post Conventional ($t(142) = 0.01, p = 1.00$), Personal Interest ($t(142) = -0.65, p = 0.52$), Maintain Norms ($t(142) = 0.03, p = 0.98$), and N2 score ($t(142) = -0.52, p = 0.61$). There was no significant impact since all the p -values were greater than the level of significance value. With these results, the null hypothesis for research question one that “Teaching accounting ethics as a stand-alone course does not significantly impact ethical decision-making by accounting students” was not rejected. Results of the independent sample t -test showed that there was no significant evidence to prove the effectiveness of teaching accounting ethics as a stand-alone or discrete course on the ethical decision-making of accounting students.

Table 9

Independent Sample t-test Results of Impact of Teaching Accounting Ethics as a Stand-Alone Course on Different Score Measures of Ethical Decision-Making of Accounting Students

	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Post Conventional (P score)	0.01	142	1.00	0.01	2.37	-4.68	4.70
Personal Interest (Stage 2/3)	-0.65	142	0.52	-1.55	2.4	-6.30	3.20
Maintain Norms (Stage 4)	0.03	142	0.98	0.05	2.05	-3.99	4.10
N2 score (N2 score)	-0.52	142	0.61	-1.11	2.15	-5.36	3.14

Note: All dependent variables have insignificant difference across the independent variable.

Results for Research Question Two. The results of Table 10 addressed research question two to determine the effectiveness of teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students. Independent sample t -test results showed that impact of teaching accounting ethics as an integrated course in the curriculum did not significantly impacted the ethical decision-making of accounting students as

measured by the DIT-2 instrument scores of Post Conventional ($t(142) = 0.75, p = 0.46$), Personal Interest ($t(142) = -0.49, p = 0.62$), Maintain Norms ($t(142) = -0.62, p = 0.54$), and N2 score ($t(142) = -0.47, p = 0.64$). There was no significant impact since all the p -values were greater than the level of significant value. With these results, the null hypothesis for research question two that “Teaching accounting ethics as an integrated course in the curriculum does not significantly impact ethical decision-making by accounting students” was not rejected. Results of the independent sample t -test showed that there was no significant evidence to demonstrate the effectiveness of teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students.

Table 10

Independent Sample t-test Results of Impact of Teaching Accounting Ethics as an Integrated Course on Different Score Measures of Ethical Decision-Making of Accounting Students

	t	df	t-test for Equality of Means			95% Confidence Interval of the Difference	
			Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Post Conventional (P score)	0.75	142	0.46	1.74	2.33	-2.87	6.35
Personal Interest (Stage 2/3)	-0.49	142	0.62	-1.16	2.37	-5.85	3.52
Maintain Norms (Stage 4)	-0.62	142	0.54	-1.24	2.02	-5.23	2.74
N2 score (N2 score)	-0.47	142	0.64	-0.99	2.12	-5.18	3.20

Note: All dependent variables have insignificant difference across the independent variable.

Summary of the Hypothesis Testing

The summary of the hypothesis testing using the independent sample t -test analysis were as follows:

- 1. Hypothesis (or research question) one results.** The null hypothesis for research question one that “there was no significant evidence to prove the effectiveness of teaching

accounting ethics as a stand-alone or discrete course on the ethical decision-making of accounting students” was not rejected.

2. Hypothesis (or research question) two results. The null hypothesis for research question two that “there was no significant evidence to demonstrate the effectiveness of teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students” was not rejected.

Summary

The purpose of this nonexperimental, quantitative study using a survey design was to investigate and determine whether there was a relationship between the pedagogical delivery of ethics in accounting and its effects on the ethical decision-making of accounting students. Chapter Four presented an in-depth analysis of the results of the methodological approach used and presented an examination of the relationship between the independent variables and the dependent variable in addressing the research questions. For research question one, results of the independent sample *t*-test showed that teaching accounting ethics as a stand-alone course does not significantly impact ethical decision-making by accounting students. The results of the independent sample *t*-test mean that teaching accounting ethics as a stand-alone or discrete course do not have an effect on ethical decision-making of accounting students. For research question two, results of the independent sample *t*-test showed that teaching accounting ethics as an integrated course in the curriculum does not significantly impact ethical decision-making by accounting students. The results of the independent sample *t*-test mean that teaching accounting ethics as an integrated course do not have an effect on ethical decision-making of accounting students. Chapter 5 includes further discussion of the results presented in this chapter. Each of the

results of the different statistical analysis will be reviewed, and the potential implications for each of the results of the analysis will be discussed in the succeeding chapter.

CHAPTER 5. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS

Accounting ethics education is considered integral to the accounting curriculum within training institutions to produce new accountants in the field possessing strong ethics and moral behavior. However, existing literature was inconclusive and insufficient on how accounting ethics education should be taught at the university level. Lack of consensus on how accounting ethics should be taught led to the problem of accounting ethics not being taught optimally. Specifically, it is unknown which of the two methods could be the most effective and efficient in teaching accounting ethics education: integration of the accounting ethics education into the overall curriculum or teaching accounting ethics through a stand-alone ethics course (Williams & Elson, 2010). This problem was deemed necessary to be addressed because unless a consensus is arrived at, current and incoming accounting students will receive varying types of ethics education, leading to varying levels of understanding, applications, and effectiveness when they graduate. Worse, because of the lack of standardization and optimization of accounting ethics course delivery, the risk of schools producing future accountants with questionable ethics and morals is high. With this in mind, the researcher conducted this study.

Summary of the Results

The purpose of this quantitative study using a survey design was to investigate and determine the relationship between the pedagogical delivery of ethics in accounting and its effects on the ethical decision-making of accounting students (Williams & Elson, 2010). Through the study of moral training and a review of the existing literature on cognitive moral capability, the present study's goal was to understand the effects of teaching accounting ethics as a stand-alone or discrete course and as an integrated course in the curriculum on accounting students' ethical decision-making. The study specifically examined the moral awareness and

moral reasoning of accounting students and their ethical decision-making via the Defining Issues Test-2 (DIT-2), administered online to accounting students (Rest et al., 1999).

The researcher perceived that this study was timely and essential because of the increase in corporate scandals and frauds in the recent years. These cases highlighted the failures of accounting schools as well as accounting firms to provide adequate training on accounting ethics. With studies highlighting the link of corporate scandal cases to low levels of moral education, reasoning, as well as judgement (Bridgman, 2010; Enofe, 2010; Thomas, 2012), it is now crucial to conduct further research into the significant effect of the accounting ethics teaching method (Brenner et al., 2012; Hakan Özkan, 2013; Williams & Elson, 2010), which the current study was designed to do.

Administering the Defining Issues Test 2 (Rest et al., 1999) to accounting students of different educational levels (undergraduate, graduate, Ph.D. level, and professional degrees) and employing statistical analysis, the researcher has arrived at important findings for the following two research questions.

RQ1: What is the effectiveness of teaching accounting ethics as a stand-alone or discrete course on the ethical decision-making of accounting students?

H_0 1. Teaching accounting ethics as a stand-alone course does not significantly impact ethical decision-making by accounting students.

H_a 1. Teaching accounting ethics as a standalone course does significantly impact ethical decision-making by accounting students.

An independent sample *t*-test was carried out to answer this first research question, where a level of 0.05 significance was used. Results showed that teaching accounting ethics as a stand-alone course did not significantly affect the ethical decision-making of accounting students, as

measured by their DIT-2 instrument scores. Thus, the null hypothesis cannot be rejected, which also means that it cannot be said that teaching accounting ethics as a stand-alone course significantly impact the ethical and moral values that accounting students need when making ethical decisions. The alternative hypothesis, which states that “Teaching accounting ethics as a standalone course does significantly impact ethical decision-making by accounting students” can be rejected.

RQ2: What is the effectiveness of teaching accounting ethics as an integrated course in the curriculum on the ethical decision-making of accounting students?

H_02 . Teaching accounting ethics as an integrated course does not significantly impact ethical decision-making by accounting students.

H_a2 . Teaching accounting ethics as an integrated course does significantly impact ethical decision-making by accounting students.

An independent sample t -test was carried out to answer this second research question, where a level of 0.05 significance was used. This independent sample t -test results also showed that teaching accounting ethics by integrating it in the curriculum did not also lead to significant effects on the ethical decision-making of the accounting students, as measured by their DIT-2 scores. Like teaching accounting ethics through a stand-alone course, teaching accounting ethics through integration in the accounting curriculum does not impact ethical decision-making of accounting students. Therefore, the null hypothesis cannot be rejected. The alternative hypothesis, which states that “Teaching accounting ethics as an integrated course does significantly impact ethical decision-making by accounting students” can be rejected.

Discussion of the Results

Hypothesis 1

The first null hypothesis states that teaching accounting ethics either as a stand-alone or discrete course does not significantly impact ethical decision-making of accounting students. The null hypothesis was accepted and the alternative hypothesis, which states that “Teaching accounting ethics as a standalone course does significantly impact ethical decision-making by accounting students” was rejected.

This finding disconfirmed the assertions made by Bean and Bernardi (2007). Bean and Bernardi (2007) argued that the stand-alone ethics course in accounting should be supported by institutions preparing students for careers in accounting. In making this argument, Bean and Bernardi (2007) presented the shortfalls of teaching accounting ethics across the curriculum. The researchers also presented a semester listing of course topics that a stand-alone accounting course should be composed of. However, the researchers did not test their assertions for their significant impact on accounting students’ ethical decision-making. As such, Bean and Bernardi (2007) did not see that ultimately, a stand-alone course might not have made a significant difference on the moral and ethical decision-making of the accounting students.

Hypothesis 2

The second null hypothesis states that teaching accounting ethics as an integrated course does not significantly impact ethical decision-making of accounting students. This hypothesis was accepted while the alternative hypothesis, which states “Teaching accounting ethics as an integrated course does significantly impact ethical decision-making by accounting students” was rejected.

If a stand-alone course was not found effective per the first null hypothesis, the researcher had expected that the results would be different for the students who learned about accounting ethics in an ethics-integrated accounting curriculum. However, the researcher also surprisingly found that integration of accounting ethics education across the curriculum did not also provide a significant impact on accounting student's ethical decision-making. There was an expectation that one or the other between the methods of teaching accounting ethics would show significant effects on the ethical decision-making of the accounting students. However, the findings did not meet this expectation which was generated by past literature.

For instance, in the study by Bampton and Cowton (2002), results showed that accounting instructors prefer to teach accounting ethics if this is integrated across the curriculum. Given that the findings showed that teachers preferred this approach, the current researcher had anticipated that if the stand-alone course would not produce any significant effect on the students' ethical decision-making, then certainly integration would be revealed as the more effective method. However, the results of the current study refuted this expectation. Still, it could also be said that the current findings of no significant impact were not surprising despite the support of instructors as found by Bampton and Cowton (2002). Bampton and Cowton (2002) did not strive to measure the effectiveness of the teaching methods but rather concentrated on the instructors preferred teaching approach. According to Bampton and Cowton (2002), instructors preferred accounting ethics integration because this was simpler and believed to be more effective.

Els (2009) as well, provided support for accounting ethics integration. In an empirical study that the researcher conducted with a group of accounting students enrolled in a renowned university in South Africa, Els argued against the offering of stand-alone accounting ethics courses, no matter the upward trending towards this approach. Els (2009) in his study gathered

the insights of final-year undergraduate students at this university on what could improve their ethical decision-making. Results showed that students could not agree on whether changes were necessary and what could be done to improve the current teaching and learning model employed by their institution regarding teaching accounting ethics.

However, Els (2009), in the course of his study, has discussed numerous literature (Kenny & Eining, 1996; Nelson & Wittmer, 2001; Shaub, 1991; St. Pierre, Nelson, & Gabbin, 1990), that made him criticize the idea of having isolated accounting ethics courses. According to Els (2009), stand-alone accounting ethics courses are not likely to have a significant effect on the moral development, judgment, and reasoning of accounting students. While these statements have been confirmed by the current study, Els' (2009) assertion that an ethics-integrated curriculum might have these effects have not been supported by the current findings. It must be noted that Els did not conclude in concrete terms that the assertions he made regarding accounting ethics integration would be better. Instead, what the researcher claimed was that by espousing knowledge and skills across subject matter of how to conduct oneself ethically, of how to make ethical decisions, and of how important ethics is could increase students' awareness of these (Els, 2009).

Tweedie et al. (2013) also asserted that integrating accounting ethics within the curriculum would have some important, positive effects. The researchers specifically claimed that a thematic approach could be effective because this can reconcile two competing principles regarding accounting ethics: accounting education with global ethical standards and ethics than highlighted ethical tradition and practices with cultural diversities (Tweedie et al., 2013). In agreement with other research studies that supported teaching ethics by integrating accounting ethics courses into the accounting curricula (Els, 2009; Kenny & Eining, 1996; Nelson & Wittmer, 2001; Shaub,

1991; St. Pierre, Nelson, & Gabbin, 1990), Tweedie et al. (2013) concluded that the multidimensional characteristics of ethical decision-making could be achieved by integration and not by offering of stand-alone courses. They explained that integration would be less costly, less space-consuming, and less intrusive or bothersome for the accounting instructors (Tweedie et al., 2013). The current study, in looking at the effects of integration on accounting students' decision-making skills based on DIT-2 could not agree with Tweedie et al. that claimed integration is better than offering stand-alone courses or even vice versa. However, Tweedie et al. (2013) had acknowledged that since difficulties may exist with integration, such as lack of depth and diverse ethical knowledge, adequate resources, and teaching strategies, they could not state conclusively that integration can be 100% effective either. The current findings could be explained by these negative factors provided by Tweedie et al. (2013).

The results of the study showed that either method of teaching accounting ethics (stand-alone or integrated), despite the support and criticisms for either, can be described as having a significant impact on the ethical decision-making of accounting students, based on statistical evidence. Past studies have argued for and against either method without conclusive statistical analysis of their effects. By closing this gap, the researcher has found that neither methods can significantly impact accounting students' ethical decision-making, which is quite surprising given the strength of arguments given by their respective cohorts. The findings have disconfirmed several past researchers' assertions about either of the methods.

Conclusions Based on the Results

Comparison of the Findings with Theoretical Framework and Previous Literature

The first null hypothesis states that teaching accounting ethics either as a stand-alone or discrete course does not significantly impact ethical decision-making of accounting students. The

null hypothesis was accepted and the alternative hypothesis, which states that “Teaching accounting ethics as a standalone course does significantly impact ethical decision-making by accounting students” was rejected.

This finding disconfirmed the assertions made by Bean and Bernardi (2007). Bean and Bernardi (2007) argued that the stand-alone ethics course in accounting should be supported by institutions preparing students for careers in accounting. In making this argument, Bean and Bernardi (2007) presented the shortfalls of teaching accounting ethics across the curriculum. The researchers also presented a semester listing of course topics that a stand-alone accounting course should be composed of. However, Bean and Bernardi (2007) did not test their assertions for their significant impact on accounting students’ ethical decision-making. As such, Bean and Bernardi (2007) did not see that ultimately, a stand-alone course might not have made a significant difference on the moral and ethical decision-making of the accounting students.

The second null hypothesis states that teaching accounting ethics as an integrated course does not significantly impact ethical decision-making of accounting students. This hypothesis was accepted while the alternative hypothesis, which states “Teaching accounting ethics as an integrated course does significantly impact ethical decision-making by accounting students” was rejected. However, the findings did not meet this expectation which was generated by past literature.

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Interpretation of the Findings

The findings of the study satisfied the null hypotheses even though they disconfirmed the assertions of past studies. None of the two methods or curriculum showed significant impact on accounting ethics of the students. However, the researcher believes that there is a reason for these findings. The current study only looked at the effectiveness of either teaching methods on the ethical decision-making of accounting students, which include how they make their ethical reasoning. However, the current study was not designed to address whether either of the methods (stand-alone or integrated) can lead to improving students' ethical sensitivity. Ethical sensitivity is important because it can affect how a student can recognize an ethical dilemma (Martinov-Bennie, & Mladenovic, 2015). If students are not equipped with ethical sensitivity, they are likely to overlook an ethical dilemma that has already occurred. Even with great ethical decision-making or reasoning skills, an individual who is not able to recognize an ethical dilemma when it occurred, may not be able to apply ethical and moral standards. For an ethical dilemma to be identified, an individual must first be sensitive to the possible effects of the dilemma and its resolution to the welfare of others. The researcher also did not consider any school-specific or student-specific factors in assessing the effects of accounting ethics education, such as whether participants have already taken accounting ethics courses in the past. If this has been considered, there could be other explanations for why the current courses did not produce a significant impact.

Limitations

From a theoretical framework perspective, the use of Kohlberg (1969) theory has been criticized as being bias towards female gender, and as such, may not accurately measure a female's level of moral development and decision-making abilities. However, this limitation was

refuted by Dellaportas (2006) in his review of 56 studies that examined gender and moral development using DIT P-scores. Dellaportas performed an independent sample *t*-test and found no statistically significant difference between the male and female level of moral reasoning.

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Another limitation of this study is the reliance on Rest's Defining Issues Test (DIT-2) to gauge accounting students' ethical reasoning or ethical decision-making capacities. While the researcher could not rule out the null hypothesis of no statistical significance as measured by DIT-2, there exist some effectiveness of accounting ethics educational interventions. However, DIT-2 which was utilized in this current study has been criticized for its reliability, and as a measure of one's intentions and not their deeds towards the ethical dilemma (Dellaportas, 2006). For instance, Dellaportas's study claimed that DIT/DIT-2 only assesses ethical reasoning capability but not the propensity towards actual behavior showing good ethical reasoning or

decision-making. Therefore, ethics interventions and subsequent increases in the DIT-2 P-scores should not be automatically assumed to result in improved ethical behavior (Dellaportas, 2006).

The study's sample only covered accounting students from colleges and universities in the Southwestern United States including California region. Findings of this study regarding either the effectiveness of integration or effectiveness of stand-alone courses cannot, therefore, be generalized to the overall accounting ethics education employed across the nation's accounting programs or training, more so across the globe. The researcher also did not consider any school-specific or student-specific factors in assessing the effects of accounting ethics education, such as whether participants have already taken accounting ethics courses in the past. If this has been taken into account, there could be other explanations for why the current courses did not produce significant impact.

Current research utilization of Peanut Labs for data collection for this study was considered as a limitation. A further limitation of this study is the assumption made that participants selected were all accounting students who have the goals of entering the profession one day and therefore, have a genuine interest in practicing their work ethically. Lastly, the use of self-reporting and web-based survey approach also put certain limits on the reliability of these findings. The use of online survey may have as well presented a limitation on possible verification of participants. There could also be a chance that participants did not understand or misunderstood the scenarios presented to them in the DIT-2 questionnaire (Bebeau & Thoma, 2003). Being faced with actual dilemma may have resulted in a different approach and outcome, and this may require a different research design.

Implications for Practice

The current findings have several implications. Despite the unexpected findings of neither method of teaching accounting ethics having a statistical Significant, there are many possible reasons. For instance, the findings could imply that professors must teach multiple models because each one on its own is either deficient or relies on the understanding of the other models as well. As such, both in tandem would be much better than choosing only one. Accounting ethics cannot be misconstrued as a static field of knowledge, as discoveries about it are constantly being made, including new theories and models (Jonson, McGuire, & O'Neill, 2015). Also, the complex incongruence that can be observed among the existing models and findings of different research studies about accounting ethics suggests the need for the mastery of all different models. Students should be equipped with an understanding of all these models, which would then provide them with a more robust toolkit to use for ethical reasoning and decision-making. Having an understanding or even mastery of all these ethical models can enable the accounting student to recognize the appropriate applicability of each of the model when they entered their professions and faced with all kinds of ethical dilemmas.

The implications of this study contribute to the fields of both accounting and accounting education because recommendations to not just companies and management can be made, but also to schools offering accounting education. Because of the findings showing problems with both integrated and stand-alone ethics courses, there must be more effort to look for newer and better pedagogical practices, preferably those that incorporate the benefits associated with stand-alone courses and those associated with integration. In addition, instead of just debating which methods could be better, maybe the current findings showing neither producing significant impact warrant the question, why? Why are stand-alone or discrete accounting ethics courses not

effective? Why is the integration of accounting ethics courses not effective? Could there be something wrong or lacking with the content of these courses or topics being covered? Are accounting ethics topics being covered in other courses when these are integrated into the curriculum?

Literature supports the need to conduct more case studies of accounting ethics to improve how it is being taught. Some studies have evaluated business ethics courses and found that there is a lack of extensive case studies about accounting ethics (Arfaoui, Damak-Ayadi, Ghram, & Bouchekoua, 2016; Rendtorff, 2015). Business ethics materials also tend to frame ethical issues from the reference points of managers and CEOs, and rarely from the point of views of accountants, thereby creating a vulnerable situation that makes it difficult to train accounting managers on the basic ethics and professional integrity (Arfaoui et al., 2016).

The findings of the study also implied that deciding or choosing which means of instruction is better is very challenging and cannot be done just straightforwardly as it has been done in the current study. The subject area of accounting students can be described as too broad such that either stand-alone courses or integration can be too difficult to implement, especially when most accounting programs do not have a historical precedent for the subject matter to include as topics to be covered by either method.

Also, it may be too simplistic just to compare which teaching method is better, whether case studies, standalone or integration (Rendtorff, 2015). Instead, it must be either content or actual instructor techniques employed in classes that must be evaluated. Lectures, debates, and role-playing are some of the typical methods used in the past in ethics courses, but maybe they are not best for teaching accounting ethics. Additionally, researchers have found that most teachers of ethics courses rank group case studies and group presentations as effective techniques

when content is of greater emphasis (Rendtorff, 2015). However, regardless if these techniques are employed in stand-alone courses or in a curriculum that has integrated accounting ethics education, these techniques may not have significant effects on individual students' ethical reasoning and decision-making. These techniques must be the ones assessed and not the pedagogical method.

The study's findings can also be used for making positive social changes regarding improving accounting ethics education, whether it be provided through stand-alone courses, integration into the curriculum, or both. These findings have already implied that as it currently stands, none of the methods (stand-alone or integrated) that were compared in this study could be considered effective in improving accounting students' ethical decision-making. Schools with accounting programs should look for the reasons why and make the necessary changes. Past studies have gathered the perceptions of teachers and even students about which methods they preferred and what they perceived as the benefits with each method, but none of them looked at what should be done to ensure that they would achieve their intended purposes. School programs who have stand-alone ethics courses should strive to improve them first instead of changing to integration.

For instance, school accounting programs should make sure that their stand-alone accounting ethics courses have mechanisms employed to measure changes in their students' reasoning capabilities over time. Most stand-alone courses do not have these, instead just focusing on imparting knowledge and discussing topics through lectures and subjecting the students to tests that would measure their knowledge. If the accounting programs can regularly measure students' change in ethical reasoning capabilities over time, they can know for sure whether the pedagogical method is significantly impacting decision-making.

Recommendations for Future Research

The findings of the study are important because it offers some useful statistical data about the progress of students subjected to either of the two teaching methods of accounting ethics. In the past, there had only been attempts to gauge instructor's perceived effectiveness of accounting ethics courses, but none has been statistically done regarding the actual statistical impact or effect of the teaching method. However, the surprising results of this study just confirmed that more research is necessary for this area before any definitive conclusions, as well as recommendations, can be provided.

Future researchers should address the same topic but delineate between undergraduate, graduate, PhD and professional school students. The approaches and models of accounting ethics taught to each level could be different, as such producing a differing impact on their DIT-2 scores. Future researchers should also differentiate between boys' and girls' scores because a range of studies done on business ethics have shown gender disparities when it comes to making ethical decisions (Juujärvi, Myyry, & Pessa, 2010). The same gender disparities might be found with regards to the accounting ethics education and accounting students' ethical decision-making as noted by Juujärvi et al. (2010) in the explanation of the morality of justice, more typical for men, and morality of care, centered on the relationship, and more typical for women.

The study's findings also implied that maybe more than just how accounting ethics education is delivered or taught, researchers should also look at student-related factors that can affect the effectiveness of ethical decision-making. Ethical issues held in greater importance by a person will generate a greater motivation to make the more ethical decisions. It is reasonable to say that for some students, how they make ethical decisions depend on their social identity and what effects they perceive certain decisions can have over their standing (Pearce, 2013; Sheehan

& Schmidt, 2015). More than how courses are delivered, the question may be, what student factors can make accounting ethics education and decision-making of accounting students more effective when faced with ethical dilemmas.

Conclusion

The purpose of this quantitative survey study was to investigate and determine the relationship between the pedagogical delivery of ethics in accounting and its effects on the ethical decision-making of accounting students (Williams & Elson, 2010). Through the study of moral training and a review of the existing literature on cognitive moral capability, the present study's goal was to understand the effects of teaching accounting ethics as an integrated or as a discrete course on accounting students' ethical decision-making. The study specifically examined the moral awareness and moral reasoning of accounting students and their ethical decision-making via the Defining Issues Test-2 (DIT-2), administered online to accounting students (Rest et al., 1999).

Surprisingly, despite literature showing that each kind of accounting ethics education and delivery/teaching method has its cohorts, the current findings revealed that both have no significant effect on the students' ethical decision-making. Within the context of this study, it means that neither method has been effective in making an impact on the values and ethics of the accounting students, however, from a wider perspective, it is too early to make this conclusion.

The researcher believes that this is because accounting students' ethical decision making was operationalized too narrowly. Ethical sensitivity was not considered even though it is a factor that could affect how a student can recognize an ethical dilemma. If the participants were not equipped with ethical sensitivity in the first place, they would have overlooked an ethical dilemma that has already occurred. The researcher did not also consider any school-specific or

student-specific factors in assessing the effects of accounting ethics education, such as whether participants have already taken accounting ethics courses previously. Had these factors been considered, there could be other explanations for why the current courses did not produce significant impact.

The findings also imply that more than just determining which delivery method is better or more effective, it is much better to understand how to improve both. Schools that have stand-alone courses do not necessarily have to make the change towards integration, but they can decide how to improve their stand-alone courses best first so that positive impact can be observed. The same can be said of schools with ethics education integrated into their accounting curriculum. The result of this current study also indicates the potential for research in other areas of accounting ethics education and varying teaching methods that will continue to expand the scope of knowledge in moral and sensitivity. It is recommended that the variables be operationalized in a broader manner or a qualitative method be used to understand the how and why of the issue as well, how a curriculum approach can affect students' ethical decision making or why an approach is or is not effective.

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STATEMENT OF ORIGINAL WORK

Academic Honesty Policy

Capella University's Academic Honesty Policy ([3.01.01](#)) holds learners accountable for the integrity of work they submit, which includes but is not limited to discussion postings, assignments, comprehensive exams, and the dissertation or capstone project.

Established in the Policy are the expectations for original work, rationale for the policy, definition of terms that pertain to academic honesty and original work, and disciplinary consequences of academic dishonesty. Also, stated in the Policy is the expectation that learners will follow APA rules for citing another person's ideas or works.

The following standards for original work and definition of *plagiarism* are discussed in the Policy:

Learners are expected to be the sole authors of their work and to acknowledge the authorship of others' work through proper citation and reference. Use of another person's ideas, including another learner's, without proper reference or citation constitutes plagiarism and academic dishonesty and is prohibited conduct. (p. 1)

Plagiarism is one example of academic dishonesty. Plagiarism is presenting someone else's ideas or work as your own. Plagiarism also includes copying verbatim or rephrasing ideas without properly acknowledging the source by author, date, and publication medium. (p. 2)

Capella University's Research Misconduct Policy ([3.03.06](#)) holds learners accountable for research integrity. What constitutes research misconduct is discussed in the Policy:

Research misconduct includes but is not limited to falsification, fabrication, plagiarism, misappropriation, or other practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reviewing research, or in reporting research results. (p. 1)

Learners failing to abide by these policies are subject to consequences, including but not limited to dismissal or revocation of the degree.

Statement of Original Work and Signature

I have read, understood, and abided by Capella University's Academic Honesty Policy ([3.01.01](#)) and Research Misconduct Policy ([3.03.06](#)), including Policy Statements, Rationale, and Definitions.

I attest that this dissertation or capstone project is my own work. Where I have used the ideas or words of others, I have paraphrased, summarized, or used direct quotes following the guidelines set forth in the APA *Publication Manual*.

Learner name
and date Victor C. I. Ifeadi, Jr., 09/14/2018