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Ethical Attitudes of Accounting Faculty and Public Accountants

James Karan

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James Karan

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Student Name: James Karan Student ID#: 1924081

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Approval Signatures:

David Tucker Date 08-11-2021
Chair

Dr. David Tucker, PhD.
Chair (print)

Chengping Zhang Date 8/11/2021
Member

Dr. Chengping Zhang, PhD.
Member (print)

Debby Thomas Date 8/17/2021
Interim Program Director, Debby Thomas

Abstract

Ethics plays a significant role in the field of public accounting. When lapses in ethical judgment lead to high-profile business failures, such as the fall of Enron and Arthur Andersen, tens of thousands of individuals can be negatively affected. From lost jobs to lost investments, significant harm can stem from ethical failures of public accountants. Over time, such shortcomings have resulted in calls for reform in the public accounting arena. Considered the safeguards of reliable public information, public accountants often take the blame, rightfully or not, for such events and are called upon to prevent future failures. With an increase in ethical attitudes as a goal, accounting faculty in higher education are often tasked with incorporating more and more effective ethics content into the curriculum of accounting students. However, it is unknown if the ethical attitudes of accounting faculty differ from public accountants. If not, why should people expect accounting faculty to mold more ethical future public accountants if accounting faculty believe public accountants' current ethical beliefs are sufficient? This study sought to investigate possible ethical attitude differences between public accountants and accounting faculty in higher education. A survey instrument was provided to these two groups that measured ethical attitudes by inquiring about the acceptability of ethical dilemmas. Potential differences were explored in the answers of these two groups, as well as differences and correlations based on other collected demographic data. Noteworthy findings include a lack of differences between how acceptable the ethical dilemmas were to public accountants and accounting faculty, a lack of differences in how acceptable the ethical dilemmas were to licensed CPAs and unlicensed individuals, and a small but significant negative correlation in responses based on age (older individuals found the ethical dilemmas less acceptable than younger individuals).

Keywords: business ethics, accounting ethics, ethical attitudes, public accounting, accounting faculty, accounting higher education

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Chapter 1 – Introduction

Statement of the Research Problem

Ethics plays a significant role in accounting research, especially since the major accounting scandals of the late 1990s and early 2000s. With the fall of companies like Enron, WorldCom, and Arthur Andersen, new emphasis was placed on the ethical standards of business professionals and accountants as well as on the ethics curriculum within business schools and accounting programs. A growing amount of research has been done exploring (a) what accounting or business ethics curriculum should include, (b) how much ethics coverage should be incorporated (i.e., number of contact hours), and (c) how such incorporation should occur (i.e., stand-alone course or integration within other courses). There is also growing research analyzing ethical perceptions in businesses and public accounting firms (Conroy, Emerson, & Pons, 2010), as well as among accounting and business students (Fiolleau & Kaplan, 2017). But is there a self-reflective look at the ethical attitudes of accounting faculty themselves and how faculty attitudes compare to those of practicing accountants?

After the high-profile scandals at the turn of the century, academics and the general public sought to answer how such scandals could take place, which has led to an increased focus on ethics in accounting. Much of this research is focused on the ethics of business professionals, public accountants, students, and accounting curriculum—including limited research attempting to address how and when ethics should be taught from a faculty opinion perspective (Armitage & Poyzer, 2010; Blanthorne et al., 2007; Bryan & Smith, 1997; Dean & Beggs, 2006).

While not specific to accounting students, or even business students, research has elucidated the effect faculty members can have on molding students (Astin & Astin, 2010; Emmanuel & Delaney, 2014). Faculty do not simply teach accounting standards, economic theory, or marketing strategy to their students. They also influence the development of students' ethical beliefs. Further, the influence on a students' belief systems does not just emanate from the teaching of ethics theory, covering ethical dilemmas, and examining ethical responses. Faculty's own belief systems stimulate the formation of values in their students (Astin & Astin, 2010).

Some interesting research compares the ethical perceptions of students to practitioners. These studies often start with some presumption that students will exhibit greater ethical behavior due to the quantity and/or recency of ethics education (Cole & Smith, 1995; Fiolleau & Kaplan, 2017; Fischer & Rosenzweig, 1995). Such assumptions presume the ethics taught and learned differ from those practiced by business professionals. Further, if student belief systems are significantly influenced by the belief systems of their faculty (Astin & Astin, 2010), it presumes faculty possess greater ethical norms than those of practitioners. These are not assumptions that should simply be made; they should be investigated themselves. Specifically, this study proposes to explore the ethical attitudes of faculty and public accountants, and if there are any differences between these two groups.

Research Questions

Is there a significant difference in ethical attitudes between accounting faculty and public accountants? Information gathered from ethical attitude scores relative to collected demographic information, specifically faculty versus public accountants, could shed some light on the issue. As expressed in this paper, ethical lapses among professional accountants are a recurring issue,

one often accompanied by the proposed solution of increased ethical education in college curriculum. However, if those tasked with educating accounting students on accounting ethics share the same ethical attitudes as public accountants, and faculty beliefs translate to students (Astin & Astin, 2010), why should anyone expect this solution to solve anything? If a lack of ethical attitude differences exists, this could help explain the long-term, repeating lapses in ethical actions and signal a need to identify new solutions.

The gathered demographic information allows for additional analysis as well. For instance, does the age of an individual affect ethical attitudes? Such a correlation was identified by Conroy et al. (Conroy et al., 2010). Do years of experience in public accounting affect ethical attitudes? Again, this was tested by Conroy et al. and was found to have no correlation. However, the information gathered in this study should allow more detailed analysis by investigating how age and experience affect the ethical attitudes of public accountants and accounting faculty. Lastly, public accounting licensure requires continuing education in ethics. Therefore, another question explored revolves around ethical attitudes and the significance of possessing a Certified Public Accountant license. The information to be gathered allows for a robust evaluation of potential connections between ethical attitudes and various demographical categories.

Definitions of Terms

While some of the terms below may be straightforward or commonly known, especially for those in accounting or accounting-related fields, they all possess a specific meaning in the context of the research problem presented. First are the terms Certified Public Accountant (CPA), public accountant, and accounting faculty. A CPA in the United States is a person who holds a license issued by a state or U.S. territory after passing the CPA exam and meeting any

other state requirements, often related to work experience. This license authorizes some accounting activities—such as signing off on audits—and also lends credibility to an individual in the field of accounting. Public accountants, in the context presented, are those currently working in public accounting in any public accounting capacity, such as tax, audit, or bookkeeping. Accounting faculty specifically represents those currently engaged in teaching accounting courses in higher education full or part-time or have done so in the past five years.

Within public accounting, employees are divided by rank. While there is some variation, typical ranks, from the lowest level to the highest level, include staff, senior, manager, and partner. Seniors are often referred to as supervisors and would be lumped together in the ranking of public accounting employees. Many firms also include a level between manager and partner, a senior manager or director, and would be placed in the manager rank. Partners may also be called principles and would be combined with that category.

Within the hypotheses listed later, experience, educational background, and type of employing institution will be utilized as distinctions between respondents and used to observe potential ethical attitude differences between various groups. In the context of this research, experience refers to the profession in which respondents work. This experience could be public accounting, accounting higher education, or a combination of the two. Educational background refers to the highest degree conferred to the respondent (high school, bachelor's, master's, doctoral, or other). The type of educational institution taught at refers to public institutions, private non-profit institutions, and private for-profit institutions.

Lastly, some clarification is needed with regard to teaching activities. As will be discussed later, an emphasis will be placed on individuals not only teaching in accounting but teaching ethics. Teaching ethics is defined as either teaching a dedicated ethics or accounting

ethics course or incorporating ethics into a non-ethics-based accounting course, as self-identified by surveyed individuals. The distinction between teaching ethics and not teaching ethics will be important to the data analysis.

Significance of the Study

This study serves a long-existing purpose in the field of public accounting. When thinking of ethical lapses in accounting today, many jump to examples from the turn of the century (i.e., Enron and Tyco) and the 2008 financial crisis. However, this is not a twenty-year-old problem. In the United States, the first major accounting body was the American Association of Public Accountants, formed in 1887, and the first legislation recognizing the designation Certified Public Accountant passed in 1896 (Zeff, 2003a). The first major accounting-related crisis then becomes the 1929 stock market crash, and subsequent legislation represents the first response to lapses in accounting rules and ethics. Subsequent to the stock market crash, professional accountants spent the next two decades rising in prominence and respectability. However, scandal struck again in the 1960s with events such as Westec and National Student Marketing collapsing as well as the bankruptcy of Penn Central and Four Seasons Nursing Centers. Despite regulatory responses, the early 1970s generated increased concern over the profession as the likes of Equity Funding and Stirling Homex collapsed.

Investigations into the scandals of the 1960s and 70s found issues familiar to more contemporary scandals— a lack of independence, corruption in standard-setting, and consulting services (Zeff, 2003a). Under threat of significant government oversight, standard-setting bodies implemented increased reforms to address the rash of accounting scandals. Despite the ethical dilemmas revolving around these issues, increased public and governmental attention, and

standard-setting reforms, public accounting firms continued and expanded ethically dubious activities such as consulting services with conflicts of interest (Zeff, 2003b).

The 1980s did not fare better than prior decades, as public accounting came under scrutiny again (Zeff, 2003b). The decade saw not only potential audit fraud related to Wedtech Corp and ZZZZ Best, but also the rash of savings and loan bank failures. Again, despite the onslaught of negative headlines, the public accounting industry continued a drive towards growth and profitability over ethical reforms, eventually leading to the more contemporary scandals of the 21st century.

Beyond but related to the stream of accounting scandals over the past century, the accounting profession acts as a trusted safeguard to the economy and investors. Through accountants within firms and external auditors, investors and the public gain confidence in the information reported by companies. This public trust in accountants creates an ethical imperative to make ethically sound decisions in order to advance and secure the growth of a nation's economy. Research has shown that nations with stronger, more developed professional accountancy organizations with investigative and disciplinary mechanisms, as well as greater educational requirements, positively correlate with more developed stock markets (Huang et al., 2019). This effect is even greater in the presence of increased ethical development of a nation's professional accountants.

This study is relevant not only because of recent history but because public accounting appears stuck in a loop – scandal, outrage, reform. No reform seems to stop the next scandal. Instead, it creates the need for public accountants to find new ways to maximize profits for their clients and themselves due to an inherent conflict of interest. This conflict arises because public accountants are expected to serve as a safeguard for the public, they also are expected to best

serve their clients and enhance the profits of their own business. In response, accounting researchers focused their attention on studying what to teach and how to teach as it relates to ethics in accounting curriculum. But researchers failed to consider who is teaching. Are accounting faculty equipped with the ethical attitudes to mold more ethical future accountants? While the American Institute of Certified Public Accountants (AICPA) recently moved to expand their heavily rules-based code of conduct to incorporate increased ethical sensitivity and more principles-based decisions (Spalding & Lawrie, 2019), are faculty equipped to prepare future accountants to engage in such practices? This study investigates the ethical attitudes of public accountants and accounting faculty, and the potential differences between them.

Chapter 2 – Literature Review

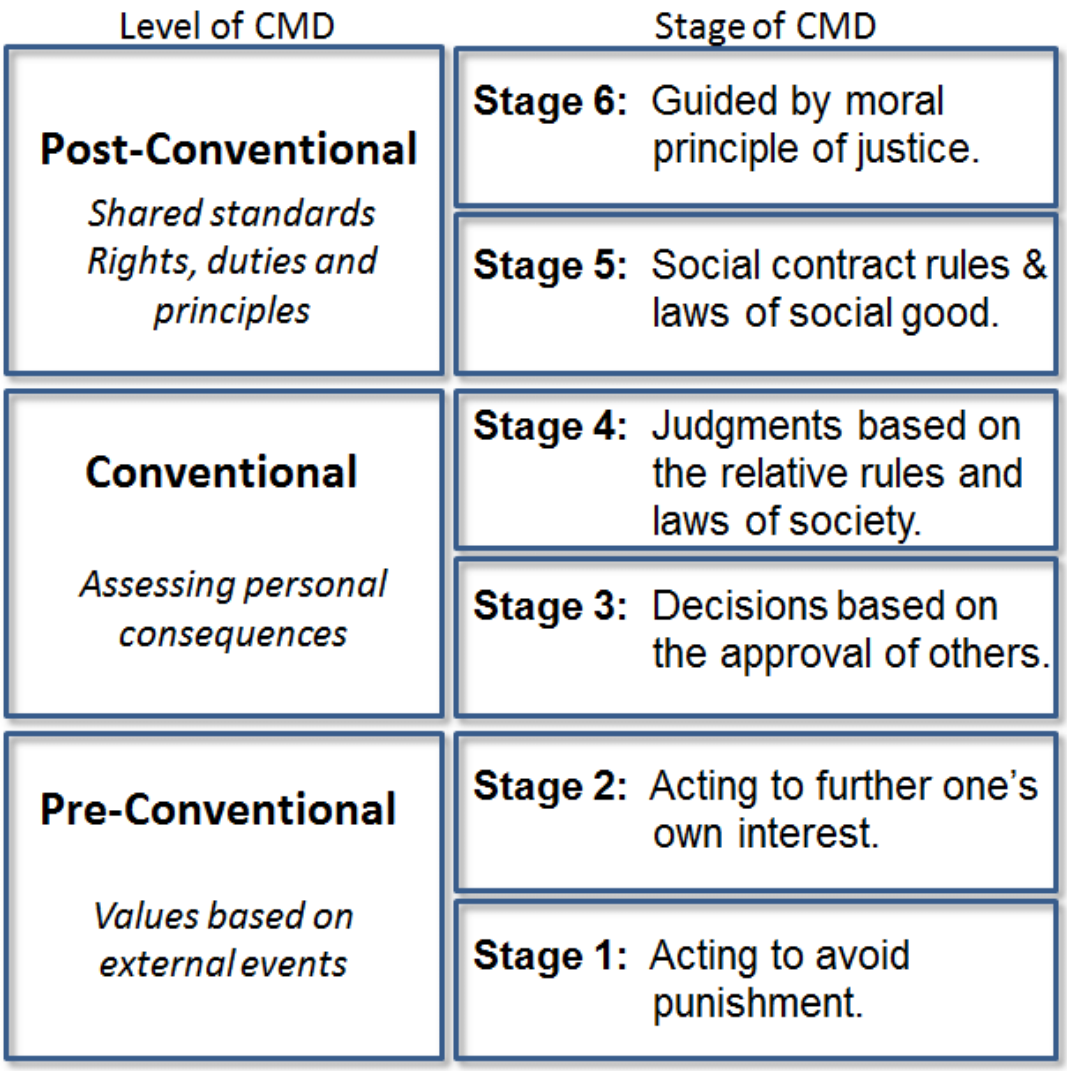
Ethics Background

Ethics research, in general, is not new, and there exists a large body of research exploring the topic. As noted by Ponemon (1992), research into moral reasoning traces back to the work of Jean Paiget and his 1932 work, *The Moral Judgment of the Child*. However, more contemporary ethics research, including ethics measurement tools, dates to the works of Lawrence Kohlberg. As Ponemon (1990) notes, Kohlberg's studies in cognitive moral development began in 1958 in his dissertation for the University of Chicago. This work led to early iterations of the now well-known Kohlberg's six stages of moral development (Kohlberg, 1969).

As shown in Figure 1, Kohlberg's six stages are broken into pairs of stages fitting within three levels (Kohlberg & Hersh, 1977). The third or highest level, the post-conventional level, contains the highest two stages of moral development. In the sixth stage, universal-ethical-principle orientation, right and wrong is determined by the individual conscience in accordance with self-chosen ethical principles. Decision-making at this stage utilizes fewer set-in-stone rules and more adherence to broader principles, such as various ethical theories (deontology, utilitarianism, theory of justice, etc.). Under stage five, social-contract orientation, determination of right action is based on ideas of individual rights and societal standards. This stage begins to incorporate values and opinions into moral decision-making. As Kohlberg describes it, at this stage individuals largely follow laws, as in stage four, but also incorporate the notion of changing laws to make them more just.

Figure 1

Cognitive Moral Development. Levels and Stages



Note. Bazzetta, 2015

Moving down in moral development, the conventional level contains stages three and four (Kohlberg & Hersh, 1977). At stage four, law and order orientation, rules dictated by authorities determine moral judgments. Stage three, interpersonal concordance orientation, states right and wrong are based on the approval of others. The lowest level of moral development, the

pre-conventional level, contains the first two stages. In stage two, instrumental-relativist orientation, right and wrong are largely based on the decision maker's needs. While care for others exists, it exists only in the context of reciprocity. In the lowest stage of moral development, punishment-and-obedience orientation, right and wrong are determined based on the physical consequences to the decision-maker.

Building upon his six stages, Kohlberg began developing a measurement tool to determine the ethical norms of an individual (Kohlberg, 1981). This test, the Moral Judgment Interview (MJI), would be further refined in conjunction with Colby (Colby & Kohlberg, 1987). To administer the MJI, a series of ethical dilemmas are presented to a subject along with open-ended questions (Elm & Weber, 1994). The answers are examined and scored through a 17-step process to determine the subject's moral reasoning.

Based on Kohlberg's work, James Rest developed a second test to measure moral reasoning, the Defining Issues Test (DIT) (Rest, 1979). As a significant change, Rest created a measurement tool that did not rely on interviews (Elm & Weber, 1994). Rest's DIT contained six ethical dilemmas (three in a condensed version) designed to determine the subject's moral reasoning skills. Responses are measured through the rating and ranking of a series of statements crafted around Kohlberg's six stages of moral development. A weighted index is then used to score moral reasoning.

Most significant to this paper among foundational materials are the ethics models of Rest (1986) and Jones (1991). Rest's model established four distinctly different components of ethical decision-making (1986). Successful ethical decision-making relies on completing each of the four components. The first component is simply recognizing a moral issue exists, a component that by itself is often used to test ethical perceptions in accounting ethics research. The second

component of Rest's model is the determination of a moral judgment. The third is to prioritize moral concerns above other concerns, and the fourth is to act on those moral concerns. The Rest model lays a framework for the ethical decision-making process. Without successful completion of each step, an ethical action is not taken.

The Jones model expands on the Rest model. Jones created a new measure, called moral intensity, which incorporates a new set of variables affecting the four components of Rest's model (Jones, 1991). The core concept behind Jones' addition to the Rest model is the belief that moral issues are dependent on moral intensity, or in other words, ethics is dependent on situational variables. With these new variables, moral intensity measures the moral imperative of a situation, acknowledging not only a moral issue existing but the degree of importance placed on the moral issue.

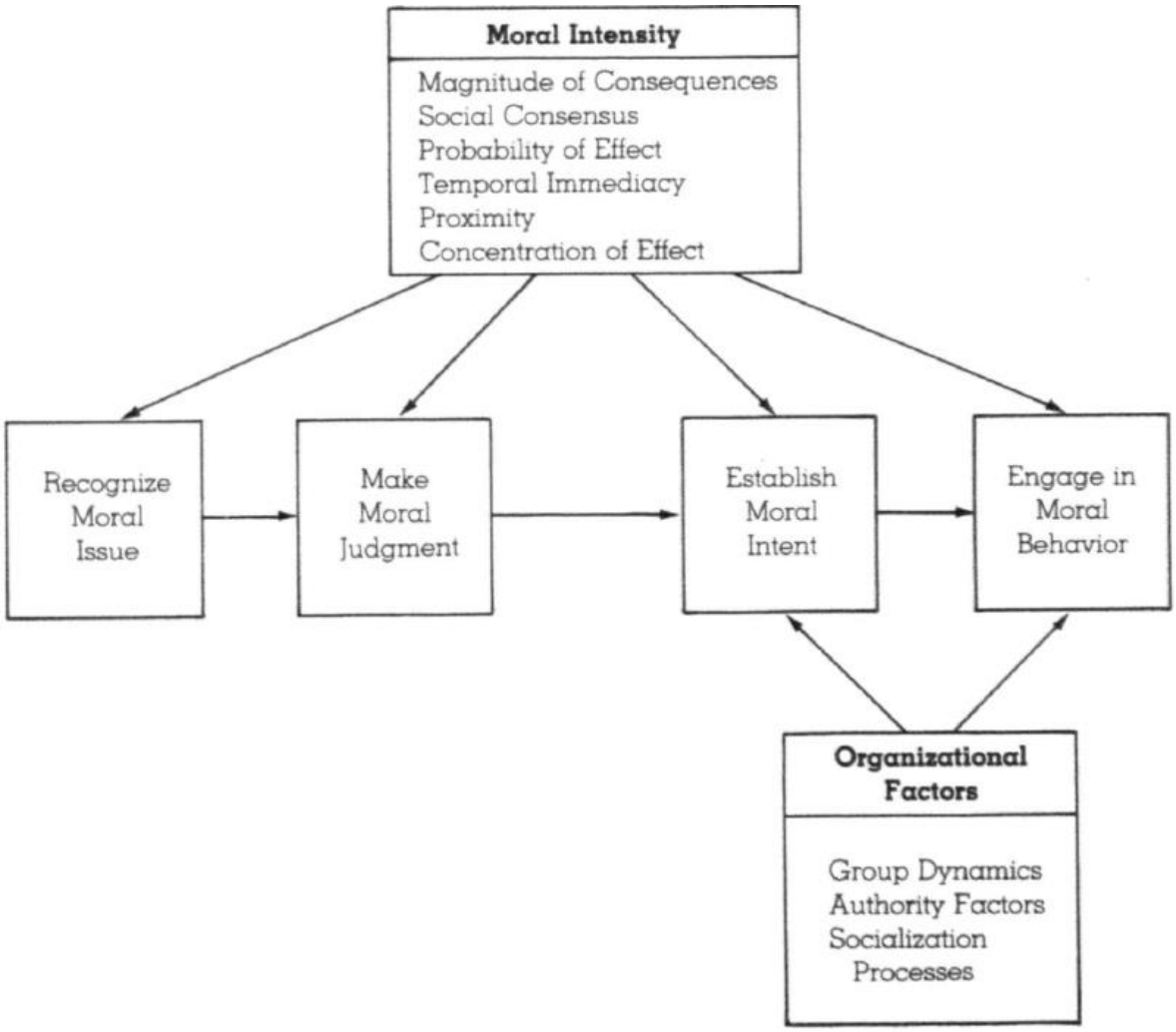
Jones derived moral intensity from five issues (Jones, 1991). The type of goodness or evil involved and the urgency of the situation contributes to moral intensity. The level of certainty attributed to the effects of a situation impacts moral intensity. The extent of the moral agent's influence on events also plays a role, with the moral agent being defined as one who makes a moral decision whether or not that person recognizes a moral issue existing. Lastly, the availability of alternative means is important to moral intensity. With these five issues in mind, Jones derived six variables.

There are six variables comprising moral intensity (Jones, 1991). The first variable is the magnitude of consequences, or the sum of harms/benefits done to others. The second variable is social consensus, the degree of social agreement that a particular act is either good or evil. Probability of effect is the third variable, defined as the chance an act will happen and actually cause harm/good. The fourth variable is the time between the present and the start of expected

consequences, temporal immediacy. Fifth, proximity contributes to moral intensity, meaning the "feeling of nearness" a decision-maker has for the victims/beneficiaries. Lastly, Jones incorporates the concentration of effect variable. This variable is an "inverse function of the number of people affected by an act of given magnitude" (Jones, 1991, p. 377) For example, cheating a few individuals out of a sum of money has a greater concentrated effect than cheating a large corporation out of the same amount of money.

Figure 2

An Issue-Contingent Model of Ethical Decision Making in Organizations



Note. Jones, 1991, pg. 379

Tying these models and accounting ethics research together is the work of Cohen and Bennie (2006). In this study, the authors tested the applicability of the Jones model to accounting ethics research. In doing so, they first tested that the Jones theory's six factors of moral intensity applied to Rest's four components of ethical decision-making. Cohen and Bennie found that all six moral intensity factors were vital to the four components. The authors also found support for Jones's contention that ethical perceptions are situation dependent. Finally, the authors found the Jones model relevant to accounting research by applying these tests within the auditing context and by utilizing audit professionals. With the Rest and Jones model established and supported, accounting researchers such as Fiolleau and Kaplan (2017) could rely on these frameworks in exploring various ethical issues in the accounting field.

Practitioner Ethics

With ethical measurement tools in place, accounting researchers began investigating the ethical attitudes of accounting practitioners, especially in comparison of different hierarchical positions and between students and practitioners. Early research by Ponemon suggested ethical reasoning differs between staff, seniors, supervisors, managers, and partners (Ponemon, 1990). Using the MJI and an audit-role conflict resolution case study, Ponemon found an inverse relationship between ethical reasoning and hierarchical position. While managers received lower scores than staff, seniors, and supervisors, partners scored even lower than managers. Ponemon replicated these results utilizing the DIT a few years later (Ponemon, 1992), with others finding similar results (Shaub, 1994).

Other than investigating hierarchical differences, researchers also investigated ethical differences between types of accountants (Eynon et al., 1997) and between accountants and various types of non-accountants. One study found similarly educated non-accountants have

lower moral reasoning than their counterparts (M. Armstrong, 1987). Another study found auditors to possess lower moral reasoning skills than other professionals and the average college graduate (Lampe & Finn, 1992). West evaluated the ethical dilemmas of tax avoidance in Multinational Corporations through the lens of multiple ethics philosophies (West, 2018). A common comparison group to accountants in ethics research is students, with studies finding various levels of students possessing greater ethical attitudes than practicing accountants (Fiolleau & Kaplan, 2017; Lampe & Finn, 1992; Shaub, 1994). Researchers also began looking at the ethical attitudes of those working in specific areas of accounting, such as tax (Alm & Torgler, 2011; Blanthorne & Kaplan, 2008; Bobek et al., 2013; Brink & White, 2015). Moving beyond practitioners' ethical attitudes, researchers also investigated how one's environment affects ethical attitudes in accounting.

Environmental effects

A component of ethical behavior in the business world has long been exemplified by the phrase "tone at the top." The implication of this and similar clichés is that the environment which one works in affects ethical perceptions and actions. This suggests the same person in two different workplace environments could make two different ethical decisions regarding the same scenario. Research into this phenomenon has been conducted by business and accounting academics to replicate such suggestions.

In 2004, Elias explored possible ethical perception differences among CPAs within different accounting environments (Elias, 2004). Specifically, Elias tested the ethical perception of managers in industry versus public accounting and further segregating public accounting into large firms and small firms. The study found heightened ethical perceptions among public accountants relative to industry accountants. Additionally, CPAs at large public accounting firms

appeared to have higher ethical perceptions than those at small public accounting firms. These results would later be echoed in a very similar study (Bobek et al., 2017), finding CPAs at public accounting firms to have higher ethical perceptions than those in industry, and those at the big four public accounting firms have higher ethical perceptions than those at non-big four accounting firms.

Environment already exists within the factors of moral decision-making outlined by Rest (1986) and Jones (1991). Workplace environments provide a more specific set of variables interplaying with ethical perceptions (Bobek et al., 2017; Elias, 2004). Even results looking at hierarchical differences (Ponemon, 1990, 1992) and differences by profession (M. Armstrong, 1987; Lampe & Finn, 1992) suggest environmental differences could play a role in one's moral decision-making. "Tone at the top" affects how employees perceive moral situations. Similarly, faculty and the educational environment should also play a role in developing the ethical belief systems of accounting students, a notion explored in a broader sense by researchers.

Development of Student Beliefs

Some research has found a link between the beliefs of faculty and their students. Using psychology research as a base, Emmanuel and Delaney investigated if and how faculty beliefs, values, and attitudes (BVA) translated to their students (Emmanuel & Delaney, 2014). By pulling together existing research, the authors suggest that the inherent power differential between professors and students plays a significant role in BVA development in students. Therefore, faculty beliefs can translate to students.

Another study, applied to the growth of spiritual qualities among students, can be adapted to an ethics standpoint. Astin and Astin (2010) engaged in a longitudinal study to determine how student spirituality grew during their time as college students. One key area of focus was on the

ethic of caring, or the "degree of commitment to values such as helping others in difficulty, reducing pain and suffering in the world, and making the world a better place" (Astin & Astin, 2010, p. 4). The authors found that faculty members had a clear effect on student spiritual growth, including this ethic of caring. Students were most likely to have positive growth in spirituality when taking faculty members encouraging these values, and this faculty encouragement was most likely to occur when faculty shared such personal beliefs. The study also found pedagogical style, major, and leadership training had significant effects. Applying the Astin and Astin study to the realm of business or accounting ethics, one could suggest the ethical and moral beliefs of the faculty members teaching ethics is at least partially responsible for the ethical growth, or lack of ethical growth, of accounting students.

While Emmanuel and Delaney and Astin and Astin support the idea that faculty beliefs influence student beliefs, another study indirectly contradicts the notion. Costa et al. (2016) looked at factors and personality traits affecting the ethical perceptions of accounting students in Portugal. The results showed that attendance in ethics classes was not significant in decision-making. Physical attendance is a primary method of imparting a faculty member's beliefs on students, which could imply faculty values are not translated to students. However, faculty morals could also translate outside of physical class meetings, making this study only a weak contradiction. Additional recent research has continued to support the notion that, with the correct methods, student ethical decision-making can be enhanced through ethics coverage in accounting curriculum (Christensen et al., 2018). Further, a recent study found priming tax professionals with a refresher of various ethical standards affected the advice they gave to clients (Fatemi et al., 2020). While not from the world of higher education, this case exemplifies the ability to alter ethical decision-making through ethics education.

Faculty Views on Ethics Education

Regardless of their personal ethical beliefs, what are faculty's views on ethics curriculum in business and accounting programs? Should specific ethics coursework be added to the general accounting curriculum? If so, how should those courses be implemented and what should be covered? In the wake of high-profile accounting scandals, there is no lack of research placing blame on ethics education in accounting programs (Bean & Bernardi, 2005; Cole & Smith, 1995; Luthar & Karri, 2005; Williams & Elson, 2010). In response, much research has focused on faculty members' views on ethics education. Generally speaking, accounting and business faculty agree with the necessity to cover ethics in the curriculum in some way (Adkins & Radtke, 2004; Blanthorne et al., 2007; Dean & Beggs, 2006; Madison & Schmidt, 2006; McNair & Milam, 1993). The how, what, and where questions also create some consensus.

Accounting faculty do not seem to desire outsourcing ethics education to other college and university departments. While Cohen and Pant found accounting faculty saw little financial incentive to teach ethics (Cohen & Pant, 1989), the consensus over time of business and accounting faculty has been to keep ethics education in-house (Blanthorne et al., 2007; Cohen & Pant, 1989; McNair & Milam, 1993). Faculty also largely favor a focus on practical applications with the utilization of article discussions and cases over the coverage of broader ethics theory (Blanthorne et al., 2007; Dean & Beggs, 2006; McNair & Milam, 1993). There is also a preference to embed accounting ethics into other accounting courses instead of creating stand-alone courses (Ghaffari et al., 2008; McNair & Milam, 1993), with some evidence of greater success with this method (Christensen et al., 2016). Finally, despite the increase in ethics coverage over time, faculty and researchers continue to feel an increase in coverage is necessary

(Blanthorne et al., 2007; Gunz, 1998; Madison & Schmidt, 2006; McNair & Milam, 1993; Miller & Shawver, 2018).

While faculty seem to share opinions on teaching ethics in accounting, their opinions may differ from practitioners. Armitage and Poyzer (2010) found that audit faculty ranked ethics coverage as the 10th most important topic for students' first auditing class, while practitioners ranked ethics coverage 2nd. This is not much improved from before the major scandals at the turn of the century, when a similar study found faculty ranked ethics coverage as just the 13th most important topic of an auditing class (Bryan & Smith, 1997). Even though these studies were limited to auditing courses, they should represent a random sampling of accounting students. Further, these findings epitomize a significant issue in accounting ethics education. How are students expected to have higher ethical perceptions than practitioners, as some studies assume, if students' value systems are affected by their faculty's value systems and faculty value ethics less than the practitioners?

Faculty also express various impediments to successfully delivering ethics education to their accounting and business students. While faculty stated a preference to integrate ethics into existing accounting curriculum, a common complaint about not doing so is a lack of time to add new material to those courses (McNair & Milam, 1993). Survey results also found a belief that there were insufficient desirable materials available to teach ethics, primarily case studies. On a more cynical note, another study found a majority of faculty do not believe they can change a student's ethical behavior (Dean & Beggs, 2006). However, that study also found faculty generally do not teach using the same methods supposedly preferred. Instead of using article discussions and case studies, most use lectures. Further, instead of trying to develop ethical

codes, which faculty claim to desire, they focus on teaching and following laws set by others. These potentially portray an insincerity among accounting faculty.

Gunz and McCutcheon (1998) investigated how accounting faculty altered their ethics teaching after new reports and materials had been produced. A primary constraint faculty complained of was a lack of materials. Yet, after significant new materials were created and made available, very few faculty members adopted their use. While some of this lack of adoption can be attributed to an insufficient focus on certain aspects of accounting, the lack of utilization indicates a lack of useable materials may not have been a true impediment to ethics inclusion in accounting curriculum.

Surveys from the late 1900s into the 2000s show fairly constant faculty views on ethics education. Most faculty view the topic as important to the curriculum, should be taught with regards to practical application, and should be integrated into existing accounting courses. To what degree does this already exist, and has the degree of coverage changed over time?

Degree of Implementation

Several surveys over time paint a picture of how ethics has been incorporated into accounting curriculum and if it has changed. In 1989, Cohen and Pant surveyed accounting faculty and found auditing was the only course that included significant ethics coverage (Cohen & Pant, 1989). While audit had the most coverage, with a mean score of 5.3 on a 7-point scale (with 7 being the greatest degree of coverage), tax had the second most coverage with a mean score of 3.3. None of the other seven courses surveyed received a mean response above a 3, with accounting information systems receiving the lowest score (2.2). However, about a third of respondents indicated ethics was included in other non-accounting curricula.

Later, McNair and Milam (1993) found a majority of accounting faculty claim to incorporate ethics into the curriculum, and more recent studies identified incorporation of ethics into accounting curriculum as well (Ghaffari et al., 2008; Madison & Schmidt, 2006). The Madison and Schmidt (2006) study focused on contact hours instead of specific accounting courses, finding an average of 25 hours of class time was devoted to ethics coverage throughout the entire accounting curricular program. While this represented an increase from two decades prior, the authors suggested a bump to 28 hours of coverage, or the equivalent of half of a three-credit hour course. However, this contradicts the recommendations of NASBA, which in 2005 suggested incorporating a full six credit hours of ethics education. Another study split the difference, suggesting a three-credit-hour course (Hurtt & Thomas, 2008). While disagreement on the degree of coverage exists, there is still consensus on the need for ethics education.

Ethics in the Curriculum

Faculty acknowledge the necessity of ethics education and increasingly incorporate it into accounting curriculum. But what exactly is being taught? Are students learning to be more ethical? Ideally, students would gain a moral mindset and develop skills for identifying, interpreting, and responding to ethical situations. Students themselves believe this to be a vitally important part of their education (Adkins & Radtke, 2004; Hindman, 2002). In fact, Adkins and Radtke (2004) found students believe accounting ethics education to be more important than their professors. Unfortunately, both old and new studies express concern over the overreliance on teaching rules and a need for greater focus on moral reasoning (Armstrong et al., 2003; Cameron & O'Leary, 2015; Miller & Shawver, 2018; Shaub, 1994). A more recent study by Cameron and O'Leary (2015) suggests that these goals are not being attained through accounting ethics education. The authors found students are not learning to be more ethical but instead

learning to follow ethics rules. The study broke situations into moral only issues, legal only issues, and a combination of the two. Students were asked to react to a situation, were given follow-up instruction, and then asked again. Legal only and moral/legal situation responses improved after instruction, but moral only situation responses showed no improvement. Students did not become more moral; they learned new rules to follow.

The Cameron and O'Leary study raises a question; do accounting faculty teach codes of conduct or actual ethics? If the former is the case, is it because faculty do not possess the personal codes or knowledge of ethics necessary to teach ethics and morality? Or do faculty simply know and disseminate codes of conduct? Despite the abundance of ethics research in accounting, one angle not yet investigated is the moral reasoning skills and ethical attitudes of accounting faculty themselves. Mintz, Dang, and Savage (2013) suggest there may be a gap in assumed ethical knowledge or perceptions among accounting faculty, especially less experienced faculty. To paraphrase the authors, can we expect accounting faculty to properly teach ethics if they do not recognize ethical violations themselves? To that end, this paper proposes to explore the ethical perceptions of accounting faculty through a comparison between faculty and public accountants via the following hypothesis:

H1 – Accounting faculty do not have a significantly different ethical perception than public accountants

Chapter 3 – Methodology

Vignettes

This study utilizes a survey instrument created by Conroy et al. (2010). The survey uses a multiple-vignettes approach, specifically 30 short vignettes, to calculate the ethical attitudes of respondents. While developed by the authors, they drew heavily from existing instruments created by Clark (Clark, 1966), Harris (Harris, 1991), Longenecker et al. (Longenecker et al., 1989), and Fritzsche and Becker (Fritzsche & Becker, 1982). Doing so allowed Conroy et al. to increase the reliability of their results while also employing an ethics measurement instrument with a focus on various business and accounting scenarios. Despite the somewhat longer survey instrument, the authors still elicited a 10.4% survey response when sent as an anonymous survey to 5,000 American Institute of Certified Public Accountants (AICPA) members.

This survey uses vignettes as a measurement tool. It is acknowledged that vignettes are not universally accepted as a valid and reliable measurement tool. However, research has shown the validity of such instruments provided the situations represent real-world situations (Cavanaugh & Fritzsche, 1985; Evans et al., 2015). Further, the Conroy team found a Cronbach alpha of 0.883 with regards to their survey (2010), a level sufficient to support the validity of the instrument (Cortina, 1993).

Often, ethics research in which moral or ethical behaviors need measurement utilizes either the Defining Issues Test (DIT) or Moral Judgment Interview (MJI). These instruments derive from Kohlberg's theories of cognitive development (Kohlberg, 1984) and attempt to measure moral behaviors, similar to what this study attempts to perform. However, like Conroy et al., the DIT and MJI are deemed to be of inferior fit to this study than the multiple vignettes developed for the Conroy et al. study for several reasons. Specifically with regards to the MJI,

the interview process is overly time-consuming and results in narrower samples (Conroy et al., 2010). Further, both the MJI and DIT are narrow in scope, only incorporating a few scenarios. Additionally, neither the MJI nor DIT lend themselves to detailed analysis with regard to demographic data. By utilizing the Conroy survey instrument, a more business and accounting-centric moral attitude can be measured, and more detailed demographic analysis can take place by sending surveys to much larger and varied groups of individuals.

Population

The population for this study consists of accounting higher education instructors and public accountants. Both represent common research participants in the field of accounting and accounting research, as displayed throughout the explored literature. With the goal of determining potential ethical attitude differences between public accountants and accounting faculty, the target population includes faculty teaching accounting and/or accounting ethics, either full-time or part-time, or who have taught either within the past five years. Public accountants in the population consist of those currently working in any public accounting capacity (i.e., tax, audit, and bookkeeping). Overlap is expected between public accountants and accounting faculty, with many part-time accounting instructors working full-time in public accounting, as well as many full-time accounting instructors coming from public accounting backgrounds. Information addressing this overlap is to be collected, as discussed in the below under procedures.

As discussed in Conroy et al. (2010), response rates within similar populations typically range from 13 to 16% (M. Armstrong, 1987; Elias, 2002; Eynon et al., 1997). However, with a procedure and population more in line with the Conroy et al. study, a response rate of approximately 10%, at a minimum, is expected from the procedure discussed below. In the

Conroy et al. study, 5,000 AICPA members were sent the survey (2010). 10.4% of those survey responded, with useable responses from 195 individuals, or approximately 4% of those surveyed. It is believed that this study, with the timed and more targeted procedure discussed below, will not suffer from a lack of useable responses.

Research Design and Rationale

This study represents a quantitative analysis of gathered data related to the ethical attitudes of accounting faculty and public accountants. As discussed in the data analysis section below, the primary analysis tools utilized are t-tests and Pearson correlation. T-tests allow for the analysis of any differences in measured ethical attitudes between two groups (Hyman & Sierra, 2016), while correlation analysis primarily explores the potential correlation between demographic data collected and ethical attitude scores. The data collection takes place through the dissemination of the survey developed by Conroy et al. (2010) along with demographic information collection via an online survey tool. The survey availability dates and e-mail requests will be timed to maximize response rates.

Participants and Site

Survey participants come from two pools of individuals. The first is actively practicing public accountants. Public accounting includes a variety of fields, such as taxation, auditing, bookkeeping, consulting, information systems support, and other activities provided by public accountants. While respondents will be asked if they possess a CPA license, it is not a requirement to be included as a public accountant in this study. The second pool of individuals includes accounting faculty. Accounting faculty is comprised of both full-time and part-time faculty teaching accounting and/or accounting ethics. This pool includes faculty both currently teaching or having taught in the prior five years. While desiring to obtain as current as possible

ethical attitudes, with a much smaller potential pool of faculty relative to public accountants expanding to current and recent faculty provides a larger pool from which to draw respondents. Additionally, with the significant crossover of public accountants and accounting faculty, it is important to identify accounting faculty who may have been practicing public accountants in the recent past and vice versa. Limiting inactivity in teaching or practicing to five years should still maintain the collection of current attitudes while providing the flexibility to ensure sufficient responses.

As discussed in greater detail below in the procedures section, an online survey tool such as Survey Monkey will be used to administer the survey, with links sent via e-mail. Faculty will be reached via the Hasselback Faculty Directory (Hasselback, n.d.), and public accountants will be reached via contacts at many public accounting firms.

Measures

The closest study to the proposed research question was published by Conroy et al. (2010). The authors investigated ethical attitude differences between different ranks of public accountants, specifically between high ranking (partner/manager) and low ranking (staff/senior) employees. While many studies focused on individual stages of the Rest (1986) and Jones (1991) models, especially recognition, the authors sought a more comprehensive ethical attitude measure that was not constrained to a single stage. To do so, they created a survey consisting of multiple vignettes providing a business focus, unlike previously existing ethical measurement tools like the MJI and DIT. The survey instrument used in this study contains 30 short vignettes found in Conroy et al. (2010) with responses measured on a Likert scale of 1 to 7, with 1 representing a situation that is never acceptable, and 7 a situation that is always acceptable. Beyond vignette responses, demographic information such as age, gender, professional

experience, and teaching experience will be collected and analyzed against the ethical attitude scores.

While the Conroy et al. study largely failed to find significant ethical differences between high and low-ranking practitioners, there were some relevant findings (2010). Age appeared to be a significant indicator of ethical attitudes of accountants, though experience was not tested. This study and the supporting literature discussed generate the following additional hypotheses.

H2 – Age positively correlates with greater ethical attitudes.

H3 – Experience does not correlate with ethical attitudes.

H4 – Length of experience as a public accountant does not correlate with ethical attitudes.

H5 – Length of experience as an accounting educator does not correlate with ethical attitudes .

H6 – There is no difference in ethical attitudes between genders.

H7 – There is no difference in ethical attitudes based on the highest degree conferred.

H8 – There is no difference in ethical attitudes based on the type of institution at which faculty have taught.

H2 predicts a positive correlation between age and ethical attitudes due to the results of the Conroy et al. study (2010). H3, H4, and H5 are all presented in the null as no research currently suggests such relationships. However, one may suspect working in public accounting versus higher education, or the length of time working in either could possess a correlation with ethical attitudes. H3 simply mimics H1 through correlation (Pearson correlation) instead of differences (t-test). Regarding H4, one could expect that covering ethics in accounting higher education courses could, over time, enhance the ethical attitudes of instructors. Similarly, if the public accounting environment does something to enhance or diminish ethical attitudes, the

length of time spent in public accounting should correlate with ethical attitudes. Unless graduating accounting majors select to follow public accounting or higher education paths based on their different ethical attitudes at the time, any difference between these two could relate to their time working in higher education (H4) or public accounting (H5). Regarding H6, while much research already suggests women possess greater ethics than men (Sikula & Costa, 1994; Suar & Gochhayat, 2016), there is enough conflicting research that suggests no difference between genders (Roxas & Stoneback, 2004) or even men possessing greater ethics (Phau & Kea, 2007) to keep this presented in the null. Finally, H7 and H8 are also represented in the null due to no existing research suggesting such relationships. However, regarding H7, one may expect that those with higher degrees were exposed to more ethics coverage in their education and therefore may possess greater ethical attitudes. Further, with the expectation that accounting faculty disproportionately possess doctorates relative to public accountants, exploring potential differences between these two groups requires exploring possible differences based on the highest degree conferred. Additionally, different types of institutions often place greater emphasis on liberal arts and/or ethics education relative to a more professional skills preparation focus. This leads to H8 and the potential that those teaching at different types of institutions (private non-profit, public non-profit, private for-profit) may possess different ethical attitudes. These eight presented hypotheses, along with other potential testing surrounding collected demographic information, represent the proposed research.

Procedure

The proposed study represents a quantitative study of survey results, specifically a distribution of multiple vignettes. The survey instrument utilized is that of the Conroy et al. study (2010), which consists of 30 vignettes measuring responses on a 1 – 7 Likert scale. As previously

stated, the population will consist of public accountants and accounting faculty in higher education. The instrument was conducted via SurveyMonkey, with links and explanations distributed via e-mail through two separate sources. The first is an email list taken from the Hasselback Faculty Directory, a listing of accounting faculty across the country and their contact information (Hasselback, n.d.). This email list was the primary contact tool to reach accounting professors. However, known omissions were added. The second source, used to reach public accountants, was personal contacts within public accounting firms. It was believed the response rate from utilizing personal contacts would avoid the potentially low response rate observed in the Conroy et al. study (2010). Public accounting firms ranged from small local firms to Big four firms located across the United States. It was hoped that this would provide significantly increased response rates relative to cold emailing accountants through a mailing list, such as the AICPA mailing list, while still allowing for generalizability within the United States.

Knowing that some accounting faculty may be employees at public accounting firms, and some public accountants surveyed may also be teaching, the survey asked respondents to self-identify their primary profession. Additionally, both public accountants and accounting faculty face several busy seasons to avoid when sending surveys. The initial survey window took place between November 1 and December 30 to minimize conflicts with accounting-related deadlines such as tax return due dates. A secondary window was available between June 1 and August 1 but may be less conducive to faculty responses.

Beyond the multiple vignettes, demographic information was collected. Age and gender was collected, along with what field of public accounting, if any, the respondent primarily works in. Respondents were also asked to identify their primary field, whether public accounting or academic teaching. Rank was collected for public accountants. Those teaching, even if not their

primary field, were asked if they teach full or part-time, if they teach ethics, and the type of institution they teach at (public or private, non-profit or for-profit). Respondents were asked for years of experience, both teaching and in practice, if they currently teach or have taught in the past five years, if they currently work in public accounting or have in the past five years, and if they possess a CPA license.

Data Analysis

Upon collection of data, two primary quantitative tests will be run. First, a t-test was utilized to explore the potential differences between samples, specifically between those who identify their primary field as accounting faculty and public accounting. A t-test was used to examine mean differences between two groups (Hyman & Sierra, 2016), with the two groups of this study again being public accountants and accounting faculty. Generally speaking, t-tests are not applicable when exploring differences between small samples (de Winter, 2013). Siegel, in his oft-cited 1956 work "Nonparametric statistics for the behavioral sciences," determines that small samples do not allow for a reliable t-test. Though de Winter suggests that the test may be reliable, if not optimal, with extremely small samples (sample size below 5). However, the intention of this study is to collect information from significantly larger samples than those described by de Winter and within the realm of reliability expressed by Siegel and more recent publications (Pashler & Harris, 2012).

The second quantitative measure performed was a correlation analysis between various demographic characteristics and ethical attitude scores. Specifically related to H2 through H5, a Pearson correlation was run regarding age and ethical attitude, as well as experience and ethical attitude. Correlation analysis identifies the degree to which two variables move in relation to each other (Hyman & Sierra, 2016). It is important to note that this test represents correlation,

not causation, and this study only purports to examine potential correlations between various demographics and ethical attitudes. Lastly, additional correlation analysis was run involving other collected demographic information and ethical attitude scores.

While primarily utilizing t-tests and Pearson correlation, additional analysis tools were utilized as needed. For instance, one-way ANOVA testing was required when exploring the differences between more than two groups. Regression and other analyses were utilized to adjust for demographic inconsistencies between samples.

Assumptions, Limitations, and Delimitations

First and foremost, it is important to identify what the proposed question is not meant to answer. The research question centers around ethical attitude differences between accounting faculty and public accountants, as defined. Industry experience is certainly relevant and part of the questions to be asked, but the target population is not the entirety of accounting-related individuals. This question is also not intended to answer questions surrounding what is or should be taught in the accounting curriculum, nor how or how much.

There are several limitations to the proposal, also related to sample size. As will be discussed later, the instrument of this study is a vignette sent via survey. The survey was distributed to faculty through a mailing list, which would generate expectedly low response rates. Additionally, the faculty-related mailing list was not comprehensive and was three years out of date. Public accountants were reached via professional contacts at public accounting firms, which should have enhanced response rates. While this generated concerns of limited geographic distribution, there was sufficient variation in the location of public accounting firms within the United States to mitigate this risk.

Chapter 4 – Results

In this chapter, the results of the survey instrument will be presented. Conclusions and discussion of the results will be presented in the following chapter. The survey instrument was submitted to both public accountants and accounting faculty via Survey Monkey, with a total of 452 responses. Sixty-six respondents did not complete the survey due to not currently residing in or working for an employer in the United States. After additional eliminations for incomplete survey results, a total of 293 useable responses were collected between all identified professions.

Accounting faculty were identified through the Hasselback list (Hasselback, n.d.), with known omissions added. Email addresses were uploaded to Survey Monkey, and the survey was sent through Survey Monkey's emailing service. Approximately 6,700 faculty email addresses were included. After Survey Monkey eliminated addresses associated with opt-outs (faculty who have requested not to receive Survey Monkey emails), just under 5,500 faculty received the survey. In total, 223 useable responses were collected from accounting faculty in higher education, providing a useable response rate of approximately 4% for accounting faculty.

Public accountants were reached through various personal and professional contacts at public accounting firms. Firms reached were of all sizes, from individual practices to the Big 4. Firms were also located across the United States, including but not limited to Ohio, Minnesota, Virginia, West Virginia, Florida, New York, Illinois, and Texas. While an exact number of recipients is unknown due to the nature of dissemination (contacts at firms forwarding the survey link to offices, departments, and team members), at least several hundred public accounting professionals received the survey link. After eliminations for incomplete surveys, 60 useable responses from public accountants were collected, with an estimated useable response rate between 20% and 30%.

Finally, an additional 10 useable responses were obtained from those identifying their primary careers as something other than a current accounting instructor in higher education or a current public accountant. Most of these individuals were recently left accounting higher education. Several professors recently retired. A few professors recently left accounting higher education to work in non-public accounting business fields or higher education administration. Additionally, a couple professors taught in business-related fields such as law. These 10 individuals, along with the 60 public accountants and 223 accounting professors made up the 293 useable results.

The remainder of this chapter will review the results of the collected survey responses. A demographic breakdown will be presented first, followed by analysis results.

Demographic Data

Along with the ethical attitudes survey, respondents were asked to provide a variety of demographic data. This included data related to gender, age, race/ethnicity, highest degree held, years of experience in public accounting and accounting higher education, recency of experience in these two fields, holding a CPA license, the size of public accounting firm worked at, the type of institution taught at, and the rank held at a public accounting firm. Table 1 summarizes some of the demographic information for public accountants and accounting faculty members.

Table 1

Entire Sample Descriptive Statistics

	n = 293	
	n	% of total
Age		
20 to 30	27	9.2
31 to 40	32	10.9
41 to 50	44	15.1
51 to 60	77	26.2
61-70	86	29.4
70+	27	9.2
Gender		
Male	165	56.3
Female	127	43.3
Other	1	0.3
Race		
Black	3	1
White	270	92.2
Asian	4	1.4
Latin American	4	1.4
Middle Eastern	3	1
Native American	2	0.7
Other	7	2.4

	n	% of total
Highest Degree		
High School	0	0
Bachelor's	38	13
Master's	60	20.5
Doctorate	193	65.9
Other	2	0.7
Primary Profession		
Public Accounting	60	20.5
Accounting Higher Education	223	76.1
Other	10	3.4
CPA License		
Yes	200	68.3
No	93	31.7

While there were significantly more responses from accounting faculty than public accountants, the demographic breakdown of each group is relatively similar with regards to gender and race/ethnicity. The public accountant sample was split almost evenly with regards to gender, while the accounting faculty sample was split 57% men, 42% women. Both groups were over 90% white, non-Hispanic or euro-American.

As would be expected, the accounting faculty group tended to have a higher degree earned. While only one public accountant (1.67%) possessed a doctorate, 86% of accounting

faculty held a doctorate degree. Interestingly, a greater percentage of accounting faculty held a CPA license (73%) than public accountants (58%). This probably relates to the age discrepancy, as the average age of public accountants was approximately 38 years old (median 34), while the average age of accounting faculty was approximately 58 years old (median 60). Both samples possessed a range of ages from 20-somethings to seniors, but 40% of public accountants were under 30 years old, while just 1 (0.4%) accounting faculty member was under 30. On the other hand, only 17% of public accountants were over 60, while 54% of accounting faculty were over 60 years old. Of the various differences between the two samples, this represents the largest potential issue as Conroy et al. (2010) identified age as being correlated with responses. This discrepancy between samples is discussed later when reviewing results by profession.

With regards to the accounting specialization of respondents, public accountants were skewed towards tax while accounting faculty were more evenly split. 50% of public accountants identified as specializing in tax, with another 30% and 25% specializing in auditing/assurance services and accounting & advisory services, respectively. Among accounting faculty, only 21% specialized in tax, while 24% and 30% specialized in auditing/assurance services and accounting & advisory services, respectively. Another 10% specialized in information systems, 9% said they had no specialty area, and 13% identified another specialty area (financial accounting, managerial accounting, governmental accounting, and more). This difference in specialties should be expected given the nature of the two populations. While public accountants tend to specialize in one area, often audit or tax, accounting faculty would be tasked with covering all aspects of accounting at their institutions.

Among respondents, there was also a difference in the length of experience within the two career paths. Those with experience in public accounting worked an average of 10.7 years in

the field. On the other hand, those with experience in accounting higher education had an average of 23 years of experience. Additionally, crossover between public accounting and accounting higher education was a potential concern (many in higher education previously worked in public accounting, and some in public accounting also teach in higher education). However, this did not prove to be a major issue among recent experience in the collected sample. Just nine public accountants had taught an accounting course in the past five years (15%), and about 12.5% of accounting faculty worked in public accounting within the last five years. On the other hand, almost 30% of accounting faculty had ever worked in public accounting, while just 16.7% of public accountants had ever taught accounting in higher education.

Not many respondents had taught a standalone ethics course in the past five years, just shy of 20%. However, 71% felt they had incorporated ethics into non-ethics courses in the past five years. Further, when isolating just accounting faculty, 87% identified as incorporating ethics into a non-ethics course within the past five years. With respect to the type of institution at which respondents taught, the clear majority were from public, non-profit institutions (50%, 148 respondents). Almost 29%, or 85 respondents, were from private non-profit institutions, while just under 4% taught at private for-profit schools. Only 18% of the sample had not taught at any type of institution.

Regarding public accounting rank, it was fairly evenly split. Staff made up 11.5% of the sample, 11% seniors/supervisors, 10% managers/senior managers, and 9% partners. In raw numbers, that equates to 34, 32, 30, and 27 respondents in those groups, respectively. The majority of the sample had no experience in public accounting; therefore, over 50% had no rank in public accounting. Public accountants were also fairly evenly split with regard to the type of firm at which they worked. Twenty-six respondents worked at the Big 4, another 14 worked at

large regional/international firms, 29 worked at mid/small-sized regional firms, an additional 29 worked at local firms, and 21 ran personal practices. (9%, 5%, 10%, 10%, and 7%, respectively).

Results by Profession

Responses to the 30 vignettes were analyzed with respect to respondents' self-identified primary profession, public accounting and accounting higher education. Given the nature of the survey (30 independent vignettes), results are not distilled into a single ethical score. Instead, responses to each of the vignettes were evaluated separately, resulting in the following tests being performed 30 times, with separate results for each vignette. The primary analysis of this research is to determine if an ethical attitude difference exists among those practicing accounting and those teaching accounting—public accountants and accounting faculty respectively. Due to the expected crossover between public accountants and accounting faculty, all respondents were asked how long they had worked in each field within the past five years and if they had ever worked in each field. The comparison between the two samples, those identifying as public accountants and those identifying as accounting faculty, was run three times. The first comparison was simply based on respondents' self-identified career with no regard for experience in the other field (self-identified accounting faculty without regard to experience in public accounting, and vice versa). In the second comparison, public accountants who had taught within the last five years, and accounting faculty who had worked in public accounting within the past five years, were removed from their samples. This represents samples without recent experience in the other field. Lastly, a third test was run where public accountants who had ever taught, and accounting faculty who had ever worked in public accounting, were removed from their respective samples. This third test created the purest public accountant versus accounting faculty comparison.

A t-test was run to examine potential differences between samples. The first t-test was run based on the self-identified career without respect to experience in the other field. Under these circumstances, seven of the 30 vignettes contained statistically relevant differences between samples. Further, in all but one case, accounting faculty viewed the vignette as less acceptable than public accountants. However, this test included the greatest disparity in sample size (60 public accountants to 224 accounting faculty).

Differences in scores were identified in vignettes 1, 3, 8, 19, 25, 27, and 30. See Table 2 below for the full wording of these vignettes (reference Appendix A for full vignette scenarios and numbering).

Table 2

Wording of significant vignettes

Vignette Number	Vignette Text
1	An executive earning $100,000 a year padded his expense account about $3,000 a year.
3	Because of pressure from his brokerage firm, a stockbroker recommended a type of stock that he did not consider to be a good investment.
8	A highway-building contractor deplored the chaotic bidding situation and cutthroat competition in his industry. He therefore reached an understanding with the other major contractors to permit bidding which would provide them with a reasonable profit.

An owner of a small business firm obtained a free copy of a copyrighted computer
19 software program from a business friend rather than spending $500 to obtain his own program from the software dealer.

Dean is a purchasing agent who has the final say on which suppliers his firm will buy
25 from. Dean let it be known that when price and other things were equal, his purchasing decisions could be swayed by receipt of an "appropriate" gift.

The board of directors of TTT, Inc. recently approved policy earmarking 7.5 percent of
27 its profits for corporate giving. The funds will come directly out of retained earnings and thereby reduce the payout of dividends to the stockholders of the firm.

John Maynard, CPA, a staff auditor with ABC & Associates, A CPA firm, goes into the
30 office on the weekend to use the firm's tax software to prepare the tax returns for his parents and several of his relatives.

Based on a Levene's Test for Equality for Variances, equal variances are assumed for vignettes 8 and 30. Vignettes 1, 3, 19, 25, and 27 do not assume equal variances. See Table 3 below for summarized results. For vignette 1, public accountants reported the vignette as more acceptable (*M= 1.6500, SD= .56815*) than accounting faculty (*M= 1.1339, SD= .56815*), $t(66.008) = 3.188$, $p < .01$. In vignette 3, public accountants reported the vignette as more acceptable (*M= 1.9167, SD 1.21141*) than accounting faculty (*M= 1.4063, SD= .85241*), $t(75.337) = 3.067$, $p < .01$. Regarding vignette 8, public accountants reported the situation as

more acceptable (*M=3.0833, SD= 1.66001*) than accounting faculty (*M= 2.3661, SD= 1.70725*), *t*(282) = 2.907, p< .01. Additionally, in vignette 19 public accountants reported the situation as more acceptable (*M= 2.7500, SD= 1.80042*) than accounting faculty (*M= 1.9821, SD= 1.42673*), *t*(79.919)= 3.056, p< .01.

In vignette 25, public accountants viewed the scenario as more acceptable (*M= 1.7167, SD= 1.29001*) than public accountants (*M= 1.2946, SD= .83787*), *t*(72.841) = 2.402, p< .05. Vignette 27 represents the only reversal from the result of faculty viewing scenarios as less ethical. In vignette 27, public accountants felt the scenario was less acceptable (*M= 4.2000, SD= 2.22314*) than public accountants (*M= 5.4286, SD= 1.97388*), *t*(85.538) = -3.890, p< .01. Lastly, public accountants viewed vignette 30 as more acceptable (*M= 4.3000, SD= 1.95110*) than accounting faculty (*M= 3.7188, SD= 1.91674*), *t*(282) = 2.078, p< .05.

Table 3

Significant t-test results, public accountant vs accounting educator

	Public Accountant		Accounting Educator		
Vignette	*M*	*SD*	*M*	*SD*	*M Difference*
1	1.6500	0.56815	1.1339	0.56815	.5161
3	1.9167	1.21141	1.4063	0.85241	.5104
8	3.0833	1.66001	2.3661	1.70725	.7172
19	2.7500	1.80042	1.9821	1.42673	.7679
25	1.7167	1.29001	1.2946	0.83787	.4221
27	4.2000	2.22314	5.4286	1.97388	-1.2286
30	4.3000	1.95110	3.7188	1.91674	.5812

Testing for differences between the two samples took place a second time after removing recent experience in the non-primary career. This means the two samples in this second round of testing included self-identified public accountants who had not taught accounting courses in higher education in the past five years (reduced sample size from 60 to 51) and self-identified accounting faculty who had not worked in public accounting in the past five years (reduced sample size from 224 to 197). This distinction was made to see if recent experience in the other career field affected responses to the vignettes. Results of the t-test returned the same seven vignettes as possessing statistically significant differences between public accountants and accounting faculty. However, in all but one vignette the mean difference in responses increased. In vignettes 1, 3, 8, 19, 27, and 30, the mean difference increased by between .00575 and .13696. In vignette 25, the mean difference shrank by .04907.

A third round of testing was performed after removing any respondents who ever worked in the other career field. This created two samples, public accountants who had never taught in higher education and accounting faculty who had never worked in public accounting. This generated two samples of similar size, with public accountants being reduced to a sample of 50 and accounting faculty reduced to a sample of 66. Representing the purest test of public accounting versus accounting faculty as neither had experience working in the other field, any potential influence the career field itself may generate in how respondents viewed the vignettes was minimized. This time not only did the results show a statistically significant difference in the same seven vignettes as the first two tests, but vignettes 21 and 22 also displayed statistically significant differences. See Table 4 below for details of vignettes 21 and 22.

Table 4

Wording of significant vignettes

Vignette Number	Vignette Text
21	Management of LMN Lenders, Inc., a loan company, makes a nonrecourse loan to a customer, who, in turn, makes a nonrecourse loan to a third party. The third party uses the loan to buy real estate from the loan company at a price that is twice the appraised value of the property.
22	An electricity producer decided not to upgrade a smokestack scrubber since its releases are still within the legal limits and the upgrade would reduce profits by 10 percent.

Based on a Levene's Test for Equality of Variances, vignette 21 did not assume equal variances, while vignette 22 did assume equal variances. See Table 5 for summarized additional significant results. In vignette 21, public accountants viewed the scenario as more acceptable (*M= 2.1000, SD= 1.63195*) than accounting faculty (*M= 1.5000, SD= .99615*), $t(76.001) = 2.296$, $p < .05$. Regarding vignette 22, public accountants viewed the scenario as more acceptable (*M= 5.0000, SD= 1.42857*) than accounting faculty (*M= 4.3636, SD= 1.76841*), $t(114) = 2.081$, $p < .05$. When comparing the seven vignettes with differences in the initial test to this test, six of the seven mean differences increased (vignette 27 mean difference decreased by .05039).

Table 5

Additional significant t-test results, public accountant vs accounting educator no non-primary experience

	Public Accountant		Accounting Educator		
Vignette	*M*	*SD*	*M*	*SD*	*M Difference*
21	2.1000	1.63195	1.5000	0.99615	.6000
22	5.0000	1.42857	4.3636	1.76841	.6364

As an alternative way to explore the relationship between profession and survey responses, a Pearson correlation was run on each vignette against the profession variable (where 1 = public accounting, 2 = accounting faculty). As one would expect, results largely resembled those of the t-test. Nine of the 30 vignettes showed a correlation between profession and responses (see Table 6 below). The only differences between the Pearson correlation and the first t-test were vignettes four and 20 showed a statistically significant correlation in the Pearson test but did not show a statistically significant difference in the t-test.

Table 6

Correlations for Profession (N = 293)

	1	3	4	8	19	20	25	27	30
Profession	-.264**	-.180**	-.122*	-.194**	-.230**	-.136*	-.182**	.187**	-.129*

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

These results largely mirror the t-test. With a weak negative correlation in all but one vignette, public accountants viewed these scenarios as more acceptable than accounting faculty. The lone exception, vignette 27, was also the lone exception in the t-tests.

Looking at professions through a different lens, the length of time spent in a profession was analyzed for correlation with responses to the vignettes. Instead of exploring potential differences between public accountants and accounting faculty, potential correlations between length of time in a profession and responses to the vignettes were investigated utilizing a Pearson correlation. As seen in Table 7 below, there was almost no correlation between years of experience in public accounting and responses to vignettes, with just a weak positive correlation with two of the 30 vignettes. On the other hand, six vignettes correlated with years of experience teaching in higher education, predominantly with a negative correlation, as seen in Table 8 below.

Table 7

Correlations for experience public accounting (N = 293)

	15	28
Yrs. of experience/public accounting	.128*	.119*

Note. *Correlation is statistically significant at the .05 level

Table 8

Correlations for experience teaching (N = 293)

	1	3	8	15	19	25
Yrs. of experience/teaching	-.223**	-.204**	-.192**	.126*	-.149*	-.186**

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Results by Other Demographics

Other than looking for potential differences between public accountants and accounting faculty, the collected demographic data was utilized to test for other differences between samples and potential correlations. While initially intended, comparisons based on CPA firm size and race/ethnicity were not run due to insufficient sample sizes. However, tests for differences and correlations were done related to gender, age, degree, and a variety of other factors related to teaching accounting in higher education or working in public accounting.

As previously discussed, research is mixed on whether gender is related to ethical attitudes. While some research identifies women as more ethical (Sikula & Costa, 1994; Suar & Gochhayat, 2016), other research has found no difference (Roxas & Stoneback, 2004) or that men are more ethical (Phau & Kea, 2007). Therefore, this study examines if a difference in responses to the 30 vignettes exists related to gender. The sample consisted of 167 men and 127 women. A T-test was run on each of the vignettes to compare the Likert-scale responses of respondents. Of the 30 vignettes, five displayed a statistically significant difference (vignettes 13, 18, 24, 26, and 28). See Table 9 below for a summary of significant results.

In vignette 13, men viewed the scenario as more acceptable (*M= 3.3772, SD= 2.05238*) than women (*M= 2.9134, SD= 1.79958*), $t(292) = 2.023$, $p < .05$. Vignette 18 also showed men to view the scenario as more acceptable (*M= 2.5629, SD= 1.78867*) than women (*M= 2.1102, SD= 1.56463*), $t(292) = 2.267$, $p < .05$. Results were similar for the other three vignettes as well. Men viewed vignette 24 as more acceptable (*M= 5.8204, SD= 1.83443*) than women (*M= 5.1496, SD= 2.00031*), $t(292) = 2.986$, $p < .01$, vignette 26 more acceptable (*M= 1.6168, SD= 1.07958*) than women (*M= 1.2756, SD= .67468)*, $t(292) = 3.127$, $p < .01$, and vignette 28 as more

acceptable (*M= 2.7186, SD= 1.71417*) than women (*M= 2.1181, SD= 1.40641*), *t*(292) = 3.210, p< .01.

Table 9

Significant t-test results by gender

	Male		Female		
Vignette	*M*	*SD*	*M*	*SD*	*M Difference*
13	3.3772	2.05238	2.9134	1.79958	0.4638
18	2.5629	1.78867	2.1102	1.56463	0.4527
24	5.8204	1.83443	5.1496	2.00031	0.6708
26	1.6168	1.07958	1.2756	0.67468	0.3412
28	2.7186	1.71417	2.1181	1.40641	0.6005

Age represents one of the most important demographics for several reasons. When Conroy et al. utilized this survey previously (2010), they found age to correlate with ethical attitudes. In this study, there is a large age discrepancy between surveyed public accountants and accounting educators. This represents a potential problem, especially if age shows to correlate with ethical attitudes again in this study. However, the issue is addressed later through additional procedures. In this study, age correlated with the responses to seven vignettes (vignettes 1, 3, 6, 8, 15, 19, and 25). As seen in Table 10 below, age possessed a weak, negative correlation with five of the seven vignettes. Vignette 15 represented the only departure, with a weak positive correlation.

Table 10

Correlations for Age (N = 293)

	1	3	6	8	15	19	25
Age	-.312**	-.220**	-.183**	-.199**	.140*	-.249**	-.173**

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Another important factor due to the differences in samples is highest degree conferred. As one might expect, accounting faculty were much more likely to hold a doctorate degree, while public accountants typically held bachelor's or master's degrees. Like age, this difference between samples is addressed later. Looking at highest degree conferred in isolation, a one-way ANOVA was run to test for differences in answers to the various scenarios. In total, just five vignettes displayed statistically significant differences based on degree conferred (vignettes 1, 8, 24, 25, and 27). See Table 11 below for a summary of significant results. Due to the statistical significance of a Leven's test, vignettes 1 and 25 required a Welch ANOVA and Games-Howell post-hoc. Vignette one displayed a statistically significant difference between groups, $F(2, 290) = 16.384$, $p < .01$. Post hoc testing revealed those with a bachelor's were more likely to view the scenario as acceptable ($M = 1.8684$, $SD = 1.39828$) than those with a master's ($M = 1.1167$, $SD = .45442$) or doctorate degree ($M = 1.1487$, $SD = .60363$). Vignette 25 displayed similar results, with a statistically significant difference between groups, $F(2, 290) = 6.973$, $p < .01$. Post hoc testing revealed those with a bachelor's were more likely to view the scenario as acceptable ($M = 1.8947$, $SD = 1.48487$) than those with a doctorate ($M = 1.2769$, $SD = .77008$).

Vignette 8 had a statistically significant difference between groups, $F(2, 190) = 5.425$, $p < .01$, with similar results to the prior two vignettes. Post hoc testing revealed respondents with a bachelor's degree found the scenario more acceptable ($M = 3.3158$, $SD = 1.49061$) than those with a master's ($M = 2.4833$, $SD = 1.72216$) or doctorate degree ($M = 2.3333$, $SD = 1.70739$). However, vignettes 24 and 27 displayed opposite results. Statistically significant differences were found in vignette 24, $F(2, 290)$, $p < .05$, with post hoc testing revealing those with a bachelor's degree found the scenario less acceptable ($M = 4.7368$, $SD = 2.20177$) than those with a master's ($M = 5.7000$, $SD = 1.85308$) or doctorate degree ($M = 5.6205$, $SD = 1.87759$). Vignette 27 also showed statistically significant differences, $F(2, 290) = 4.718$, $p < .01$, with respondents possessing a bachelor's finding the scenario less acceptable ($M = 4.2368$, $SD = 2.37594$) than those with a doctorate ($M = 5.3590$, $SD = 2.02417$).

Table 11

Significant ANOVA results by degree

	Bachelor's		Master's		Doctorate	
Vignette	*M*	*SD*	*M*	*SD*	*M*	*SD*
1	1.8684*	1.39828	1.1167	0.45442	1.1487	0.60363
8	3.3158*	1.49061	2.4833	1.72216	2.3333	1.70739
24	4.7368*	2.20177	5.7000	1.85308	5.6205	1.87759
25	1.8947	1.48487	-	-	1.2769	0.77008
27	54.2368	2.37594	5.3590	2.02417	-	-

Note: *Statistically relevant difference between bachelor's and Master's as well as bachelor's and Doctorate

Gathered information included whether a respondent held a CPA license or not. Given the emphasis on ethics placed on license holders and continuing education, it makes sense to question if there is a difference in responses to these ethical dilemmas between those with and without a CPA license. A t-test was run on all 30 vignettes, but only four reported statistically significant differences. See Table 12 below for a summary of significant results. For vignette 1, those with a license reported the vignette as less acceptable (*M= 1.0195, SD= .53662*) than those without a license (*M= 1.5000, SD= 1.06509*), *t*(293) = 3.034, p< .01. Vignette 15 also displayed a significant difference. However, those with a license found the scenario more acceptable (*M= 2.2040, SD= 1.63499*) than those without a license (*M= 1.6383, SD= 1.12500*), *t*(293) = 3.034, p< .01. Similarly, in vignette 21 those with a license found the scenario more acceptable (*M= 1.9552, SD= 1.*60093) than those without a license (*M= 1.6170, SD= 1.*04836), *t*(293) = 2.163, p< .05, and vignette 30 saw those with a license found the scenario more acceptable (*M= 4.0100, SD= 1.92611*) than those without a license (*M= 3.4255, SD= 1.89220*), *t*(293) = 2.442, p< .05.

Table 12

Significant t-test results by CPA license status

	CPA		Non-CPA		
Vignette	*M*	*SD*	*M*	*SD*	*M Difference*
1	1.0195	0.53662	1.5000	1.06509	-0.4805
15	2.2040	1.63499	1.6383	1.12500	0.5657
21	1.9552	1.60093	1.6170	1.04836	0.3382
30	4.0100	1.92611	3.4255	1.89220	0.5845

Given the focus on ethics, respondents were asked if they had ever incorporated ethics into an accounting course or taught a stand-alone ethics course. To test for potential effects teaching ethics may have on responses, a t-test was run looking for differences between those who had incorporated ethics or taught an ethics course versus those who had not. There was virtually no difference between those who had incorporated ethics into an accounting course and those who had not, with only one vignette displaying a statistically significant difference (see Appendix J). There was, similarly, little difference between those who had taught a stand-alone ethics course and those who had not, though there was an increase to three of the 30 vignettes (see Appendix K). Vignette 13 showed a statistically significant difference in both of these tests, while vignettes 7 and 8 showed a difference only when comparing those who taught stand-alone ethics courses and those who had not. While there are not many differences to report, it is worth noting that the four identified differences all resulted in those who had incorporated ethics or taught a stand-alone ethics course finding the relevant vignette to be less acceptable than those who had not.

Two final tests were run related to collected demographics and specific to each of the two professions. The first was an examination of possible differences based on the rank public accountants held; something explored using this survey instrument in the Conroy et al. study (2010). The second relates to potential differences based on the type of institution at which accounting faculty taught.

In examining potential differences in survey responses based on the rank of a public accountant, seven vignettes displayed statistically significant differences. Vignettes 1, 5, 8, 11, 12, 15, and 28 showed statistically significant differences after conducting a one-way ANOVA.

Due to the statistical significance of a Leven's test, vignettes 1, 15, and 28 required a Welch ANOVA and Games-Howell post-hoc. See Table 13 below for a summary of significant results.

Vignette 5 showed a statistically significant difference between groups, $F(3, 118) = 3.245$, $p < .05$. Post hoc testing revealed staff were more likely to view the scenario as acceptable ($M = 2.8824$, $SD = 1.85480$) than partners ($M = 1.7037$, $SD = 1.29540$). Vignette 8 showed a statistically significant difference between groups, $F(3, 118) = 3.143$, $p < .05$. Post hoc testing revealed managers were more likely to view the scenario as acceptable ($M = 3.4667$, $SD = 1.94286$) than partners ($M = 2.0741$, $SD = 1.23805$). Vignette 11 displayed a statistically significant difference between groups, $F(3, 118) = 2.845$, $p < .05$. Post hoc testing revealed staff were less likely to view the scenario as acceptable ($M = 2.3548$, $SD = 1.35520$) than managers ($M = 3.4000$, $SD = 1.88643$). Similarly, vignette 12 displayed a statistically significant difference between groups, $F(3, 118) = 4.334$, $p < .01$. Post hoc testing revealed mangers were more likely to find the scenario acceptable ($M = 4.4333$, $SD = 2.07918$) than staff ($M = 2.9032$, $SD = 2.05515$) and partners ($M = 2.7407$, $SD = 1.91337$).

Vignettes 1, 15 and 28 required a Welch ANOVA and Games-Howell post-hoc. Differences between ranks continued similar trends as above. Vignette 1 showed a statistically significant difference between groups, $F(3, 118) = 34.143$, $p < .01$. Post hoc testing revealed staff were more likely to view the scenario as acceptable ($M = 1.8235$, $SD = 1.35893$) than partners ($M = 1.1111$, $SD = .57735$). In vignette 15, a statistically significant difference was found between groups, $F(3, 118) = 4.865$, $p < .01$. Post hoc testing revealed that staff ($M = 1.4118$, $SD = 1.04787$) and seniors ($M = 1.6452$, $SD = 1.01812$) were less likely to view the scenario as acceptable than managers ($M = 2.7333$, $SD = 1.96404$). Similarly, vignette 28 displayed a statistically significant difference between groups, $F(3, 118) = 4.797$, $p < .01$. Post hoc testing

revealed that staff were less likely to view the scenario as acceptable (*M* = 1.7059, *SD* = 1.14228) than managers (*M* = 3.1333, *SD* = 1.69651).

Table 13

Significant ANOVA results by public accounting rank

	Staff		Seniors		Manager		Partner	
Vignette	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
1	1.8235	1.35893	-	-	-	-	1.1111	0.57735
5	2.8824	1.85480	-	-	-	-	1.7037	1.29540
8	-	-	-	-	3.4667	1.94286	2.0741	1.23805
11	2.3548	1.35520	-	-	3.4000	1.88643	-	-
12	2.9032	2.05515	-	-	4.4333*	2.07918	2.7407	1.91337
15	1.4118	1.04787	1.64520	1.01812	2.7333**	1.96404	-	-
28	1.7059	1.14228	-	-	3.1333	1.6951	-	-

Note: *Statistically relevant difference between managers and staff as well as managers and partners

**Statistically relevant difference between managers and staff as well as managers and seniors

Finally, differences were evaluated based on the type of institutions at which accounting faculty taught. Due to the lack of respondents at private for-profit institutions, a t-test was run just comparing those at public institutions and those at private non-profit institutions. Just a single vignette, vignette 12, displayed a statistically significant difference between groups (see Table 14 below). In vignette 12, those teaching at public institutions reported the vignette as

more acceptable (*M= 3.3401, SD= 1.90708*) than accounting faculty (*M= 4.0000, SD= 2.03626*), *t*(228) = -2.459, p< .05.

Table 14

Significant t-test results by type of institution

	Public Non-profit		Private Non-profit		
Vignette	*M*	*SD*	*M*	*SD*	*M Difference*
12	3.3470	1.90708	4.0000	2.03626	-0.6530

As mentioned earlier, when exploring differences between public accountants and accounting faculty, two significant differences between samples needed addressing. Some vignettes displayed a statistically significant difference in responses based on profession. However, age also displayed a correlation with responses in many of these vignettes. Further, statistically significant differences in responses were found based on the degree conferred. The accounting faculty sample was much older than public accountants, and accounting faculty tended to possess a higher level of degree (almost entirely doctorates). This calls into question what the t-test of professions truly measured.

To address this issue, an ordinal logit regression was run on vignettes where at least two of the three tests displayed a difference (age, profession, or degree). The Likert-scale responses served as the dependent variable, while profession, age, and degree served as independent variables. The only variable to display a correlation with survey responses in any of the vignettes was age. In fact, an additional two vignettes (20 and 27) displayed a significant correlation between age and responses on top of those identified by the earlier Pearson Correlation test.

A similar issue existed when evaluating differences based on rank at a CPA firm. Those holding higher ranks were generally older. With age representing a possible indicator of ethical attitudes, the same ordinal logit regression was run as above but with age and rank. As discussed above, a one-way ANOVA analysis identified differences in seven of the vignettes based on rank. Three of these differences held up under this further analysis (1, 15, and 28). However, the other four differences proved to simply be capturing the correlation with age. The results of these ordinal logit regressions are significant results with regards to interpreting the findings of multiple tests, which will be the focus of the following chapter.

Chapter 5 – Discussion

The final chapter of this study will take the findings of chapter 4 and interpret those results, exploring noteworthy findings. This section of the paper will be organized by hypothesis. Following these interpretations by hypothesis will be a discussion of the significance of the findings to academia and the profession of public accounting and areas for future research. Finally, the conclusions suggest the goals of ethics education in accounting may not be realized, at least in part due to a lack of ethical attitude differences between the public accountants viewed as lacking ethics and the accounting faculty tasked with molding more ethical future public accountants.

Hypothesis 1

H1 – Accounting faculty do not have a significantly different ethical perception than public accountants. This hypothesis represents the core, never investigated in existing literature, question of this study. With ethics playing such a key role in public accounting after decades of scandals, calls for reform from regulators and the general public largely fall to continuing education for public accountants and accounting curriculum in higher education. However, no one has asked if accounting faculty possess different ethical attitudes than current public accountants. If not, why should it be expected that accounting faculty would mold more ethical future public accountants?

Collected responses were broken into two samples, respondents identifying as primarily public accountants and respondents identifying as primarily accounting faculty. Differences were then explored utilizing a t-test. Due to the common crossover between fields, with accounting faculty often having worked in public accounting, and to a lesser extent, public accountants having taught in higher education, the samples were then modified to exclude respondents with

recent experience in the other field. This second round of t-tests removed public accountants who had taught accounting in higher education in the past five years and accounting educators who had worked in public accounting in the past five years. Lastly, the t-test was run a third time removing respondents who had ever worked in the other field.

The first two rounds of t-tests found statistically significant differences between public accountants and accounting faculty in seven of the 30 vignettes. Further, in the "purest" test of differences between public accountants and accounting faculty, the third round of t-tests added an additional two vignettes with statistically significant differences, bringing the total up to nine of 30 vignettes. Of the nine vignettes with differences, eight showed public accountants viewed the scenario as more acceptable than accounting faculty, or in other words, accounting faculty displayed greater ethical attitudes.

Initially, these results could potentially have been explained by the differences in professions. Public accountants may have identified with the relationships with clients or workplace experiences more than accounting faculty. Vignette 1 described an executive padding their expense account by $3,000, something a public accountant's client may be doing, or even doing themselves. However, accounting faculty could have experience with departmental budgets and a possible perceived need to utilize the entire budget to prevent losing it in the future. Further investigation would be required to determine if differences in these professions lead to different ethical perceptions surrounding padding budgets. Vignette 3 talked about an employee being pressured into pushing what they believed to be a bad investment on clients. Public accountants are probably much more familiar with and accepting of being pressured by their superiors or clients to do things they do not agree with than accounting faculty. In vignette 8, a contractor colluded with other contractors to only make bids with reasonable profits, while

in vignette 19, a small business owner obtained a free copy of $500 software from a friend instead of buying it for themselves. In both cases, a public accountant would probably identify more with the trials and tribulations of the business owner as they either serve small business owners or are small business owners themselves.

Vignette 22 involves a business legally choosing to skip environmentally friendly upgrades to preserve higher profits. Why public accountants appear more accepting of such actions is a potential area of future research. Vignette 30 describes a CPA using the firm's tax software on the weekend to prepare tax returns for friends and family. This is not an uncommon practice in public accounting, especially for tax accountants. It is also often something an accounting firm allows its employees to do. An accounting faculty without such knowledge may presume this is something the employer may not allow and therefore find it less acceptable. Vignette 21 describes a lender providing a nonrecourse loan to a customer who uses the funds to provide a nonrecourse loan to a third party, which finally uses the funds to purchase property from the original lender at twice its value. This seemingly borders on fraudulent activity, and while both groups found the scenario mostly unacceptable, why public accountants found it slightly more acceptable is another area of future research. The single vignette where accounting faculty viewed the scenario as more ethical involved a company's board legally deciding to set aside profits to give to charity at the expense of shareholder profits.

T-test findings show accounting faculty largely believe these ethics scenarios to be less acceptable than public accountants. While there is no line of distinction on how many vignettes are required to determine a more generalized meaningful difference, these t-tests represent some evidence of a difference between samples. However, there was a problematic demographic difference between samples that required adjustments.

The sample of public accountants was significantly younger than the sample of accounting faculty. Public accountant respondents averaged 38 years old, with a median age of just 34. Accounting faculty, on the other hand, averaged 58 years old, with a median age of 60. Prior research with this survey instrument showed a possible correlation between age and responses, questioning the ability to attribute t-test results to the difference in profession. Additionally, 86% of accounting faculty possessed a doctorate degree, compared to just a single public accountant. The difference in typical highest degree attained also represented a potential problem as there was some evidence of a correlation between degree earned and survey responses, as discussed later in the analysis of H7. To compensate, an ordinal logit regression was run utilizing profession, age, and degree conferred simultaneously.

Setting the Likert-scale responses as the dependent variable and profession, age, and degree conferred as the independent variables, an ordinal logit regression was run on vignettes with statistically significant differences between professions. There were zero tested vignettes in which profession or highest degree conferred correlated with survey responses. Only age correlated with responses. Further, the differences by profession were in the same direction as you would expect based on the age correlation. Generally speaking, in certain vignettes (discussed in greater detail in the below discussion of H2), age negatively correlated with survey responses. The older a respondent, the less acceptable they found the vignette to be. When looking at differences by profession, as already discussed in this section in certain vignettes, accounting faculty (older) found the scenario less acceptable than public accountants (younger). This implies the differences by profession identified in the t-tests were actually picking up differences caused by age.

H1 questioned if there was an ethical attitude difference between accounting faculty and public accountants. Despite initial results suggesting there could be, further analysis negated the t-test results. Thus, the evidence suggests supporting H1. This research does not find a statistically significant difference in ethical perception between accounting faculty and public accountants.

Hypothesis 2

H2 – Age positively correlates with greater ethical attitudes. Using this survey, Conroy et al. (2010) identified age as potentially being correlated with ethical perceptions. Having collected age information from respondents, this study tested if those results would be replicated.

Based on a Pearson correlation analysis and ordinal logit regression, age correlated with nine of the 30 vignettes. Specifically, age correlated weakly and, with one exception, negatively. As just discussed, early tests related to profession and highest degree conferred showing statistically significant results appear to have simply found a correlation between age and responses due to the different demographics between the two samples. These vignettes displaying correlation followed the same general themes as those discussed above. Older individuals found scenarios where a superior pressured an employee to engage in potentially unethical actions or created a pressure that induced an employee to commit an illegal act less acceptable than younger individuals. Older individuals also were more inclined to find requesting what amount to bribes or colluding with other business owners more unethical. Surprisingly, older individuals found acts of utilizing company software for personal reasons less acceptable than younger individuals. Often this is perfectly acceptable practice in a company, a perk of working there. However, this is a firm-to-firm decision, and it is unknown what the company practice was at respondents' places of work.

These findings are consistent with prior research, specifically the Conroy et al. study (2010). This study found age to correlate with responses in nine of the 30 vignettes. Given the findings of this study and agreement with existing literature, the findings here support H2.

Hypothesis 3

H3 – Experience does not correlate with ethical attitudes. This hypothesis is a slightly different way of viewing H1. Instead of looking for a difference (t-test) between how public accountants and accounting faculty viewed the vignettes, this test looks for a correlation (Pearson correlation) between vignette answers and the primary profession of respondents.

Initial results appeared to support the findings of the t-test. There was significant overlap between the t-test and Pearson correlation findings. Vignettes 1, 3, 4, 8, 19, 25, 27, and 30 were all identified as having a statistically significant difference in responses between public accountants and accounting faculty, as well as a correlation between survey responses and profession. In addition to these, vignettes 4 and 20 were identified as having a correlation between responses and profession. The negative correlation in all vignettes except 27 matched the difference findings from the t-test. Just like the initial results for H1, the results here in testing H3 showed accounting faculty found scenarios involving a superior pressuring a subordinate to perform ethically questionable acts or making the subordinate feel a need to engage in illegal activity as less ethical than public accountants. Faculty felt business owners requesting bribes or colluding with other business owners as less ethical than public accountants. And the utilization of software by employees for personal use was found to be less ethical by accounting faculty than public accountants. Further, the positive correlation in vignette 27 matched the difference findings from the t-test. This scenario involved a company legally putting altruism above maximizing shareholder profits, which accounting faculty found more acceptable

than public accountants. However, as discussed in the evaluation of H1, due to the demographic differences between the two samples, an ordinal logit regression was run to determine if these findings were related to profession or age, and it was determined only age correlated with survey responses. Therefore, H3 is supported, and this research does not support the notion that experience is a significant indicator of differences in ethical attitudes.

Hypothesis 4

H4 – Length of experience as a public accountant does not correlate with ethical attitudes. H4 attempts to explore if the length of time spent in public accounting affects ethical attitudes. This is also explored in a different way later when looking at rank.

In just two of the 30 vignettes was a correlation found between years of experience in public accounting and responses, both with a positive correlation. The first of these vignettes involved hiring a man over a woman when both were equally qualified, but there were concerns employees would resent being supervised by a woman. The second scenario involved producing a product more cheaply but with a higher risk of failure that could cause injury to children. In those two vignettes, the more experience a respondent had in public accounting, the greater the tolerance was for the behavior. These are not related vignettes, and the results do not line up with the expectations based on age. Generally speaking, more experienced individuals are older individuals, and age seems to correlate positively with ethical attitudes. There is no obvious reason why in these two scenarios, the expected trend reverses as it relates to age. Something in the experiences of public accounting may make these scenarios appear more acceptable. The reason for these correlations is an area for future research. Therefore, H4 is supported, and this research does not support the notion that length of experience as a public accountant is a significant indicator of the ethical attitudes of public accountants.

Hypothesis 5

H5 – Length of experience as an accounting educator does not correlate with ethical attitudes. H5 attempts to explore the same thing as H4, but with respect to accounting higher education. Three times as many vignettes displayed a correlation with regards to accounting education than public accounting. Length of time working in accounting higher education correlated with responses in six of the 30 vignettes. Similar to prior hypotheses, the significant vignettes involved superiors pressuring subordinates, requesting bribes, colluding with other business owners, utilizing company software for personal use, and hiring a man over a woman to prevent resentment among employees. In all these cases, more experience in accounting higher education correlated with less acceptance of the scenario. Or in other words, those with more experience in accounting higher education possessed greater ethical attitudes. However, given the correlation discovered with age and responses, and the fact that those with more experience tend to skew older, an ordinal logit regression was run to confirm these correlations related to experience were not simply picking up the correlation with age. Like the differences between professions found, the ordinal logit regression identified that only age was correlated with responses. None of the correlations identified in the Pearson correlation tests related to experience held up under ordinal logit regression testing. Given the correlation with age, it may have been expected that a similar number of significant results would have been found in testing H4 and the correlation between experience in public accounting and vignette responses. The lack of findings in regard to H4 relative to H5 may have to do with sample size. There were only 60 public accountants relative to the over 200 accounting faculty. The more robust sample size may have aided in discovering more correlations. Taking the results of the ordinal logit regression into account, it is determined that overall experience in accounting higher education did not

correlate with responses. In terms of H5, H5 is supported, and this study does not support the notion that length of experience as an accounting educator is a significant indicator of the ethical attitudes of accounting educators.

Hypothesis 6

H6 – There is no difference in ethical attitudes between genders. Gender's relationship with ethics is well researched but with conflicting results. As presented earlier in this paper, research has shown women to be more ethical than men, men to be more ethical than women, and no difference at all. Therefore, the hypothesis coming into this research was that there would be no difference in survey responses related to gender.

A potential difference in survey responses was explored with a t-test. Just five of the 30 vignettes possessed a statistically significant difference, though all five showed men viewed the scenario as more acceptable than women. In other words, five vignettes showed women to possess greater ethical perceptions than men. Interestingly, the vignettes displaying statistical significance are largely not those previously identified in other testing. In reviewing an off-balance sheet financing situation similar to Enron, men found the act more acceptable. Women found it less acceptable to hire consultants to show pollution levels are safe at higher levels than currently believed. Women also found it less acceptable to donate obsolete computer inventory to a school, take a tax deduction, and improve their image on social responsibility. Men were more accepting of violating company policy to buy a gift for a potential client, and women were less accepting of saving money by producing a product more likely to injure children than if more money were invested in the product. While women found all of these as less ethical than men, there is no consistent theme in these vignettes.

While the results of these five are consistent with the Conroy et al. study (2010), Conroy found this result in twice as many vignettes. This is where the downside of the survey instrument presents itself. How many vignettes are required before determining a more generalized meaningful difference exists? Conroy et al. believed a third of vignettes possessing a difference was meaningful. However, just a sixth of vignettes showed a statistically significant difference between men and women in this study. Therefore, while this study weakly supports existing literature finding women to be more ethical than men, these findings alone are not sufficient to make the broad determination that there is a difference in survey responses based on gender. This research does not find support for the notion that there is a difference in ethical attitudes based on gender.

Hypothesis 7

H7 – There is no difference in ethical attitudes based on the highest degree conferred. As with several previous hypotheses, H7 explored the difference between demographics (educational background) and survey responses. While there were four levels of highest degree conferred (high school, bachelor's, master's, doctorate), there were virtually no respondents possessing just a high school degree. Therefore, that degree was removed from the analysis. The remaining three were tested for differences in survey responses to each of the 30 vignettes utilizing a one-way ANOVA analysis.

As discussed in chapter 4, the initial results indicated five vignettes possessed statistically significant differences. Those with higher degrees conferred (i.e., doctorate) possessed higher ethical attitudes than those with lower degrees conferred (i.e., bachelor's). However, like the samples created when comparing professions, the samples based on degree possessed significant differences in average age. Therefore, degree conferred was included in the ordinal logit

regression along with age and profession discussed at the end of chapter 4. Results of this regression showed that any difference the ANOVA appeared to discover based on degree was just a difference based on age. The regression showed no correlation between degree conferred and vignette responses. Therefore, H7 is supported, and this study does not find educational background to be a significant indicator of ethical attitudes.

Hypothesis 8

H8 – There is no difference in ethical attitudes based on the type of institution at which faculty have taught. This final hypothesis explored if ethical attitudes differed based on the type of institution at which the faculty member taught. Three categories of institutions were included, public non-profit, private non-profit, and private for-profit institutions. However, there was an insufficient number of respondents teaching at private for-profit institutions. Therefore, a t-test was utilized to search for differences between those teaching at public and private non-profit institutions. Just a single vignette displayed a difference between the two types of institutions. When viewing an earnings management scenario, a company legally choosing an accounting method to hide embarrassing financial information, those from private non-profit institutions found the action less acceptable than those from a public institution. Therefore, with respect to just public and private non-profit institutions, H8 is supported, and this research does not support the notion that the type of institution at which one teaches is a significant indicator of ethical attitudes of accounting faculty.

Other Findings

While not related to one of the eight hypotheses, information was gathered related to the rank held by public accountants. While only 60 respondents self-identified as primarily working in public accounting, there were 122 respondents who attained some rank in public accounting

when including those who self-identified as currently working in accounting education as their primary profession. The sample was fairly evenly split by rank. There were 34 staff, 31 seniors, 30 managers/senior managers, and 27 partners.

Initial testing via one-way ANOVA identified seven vignettes with statistically significant differences. However, as with the profession and degree conferred testing, results could be affected by the identified correlation between age and ethical attitudes. Based on further testing with an ordinal logit regression, four of the seven differences found were simply due to age differences between samples. This is consistent with the findings of Conroy et al. (2010), who found that research identifying differences by rank was most likely simply capturing differences based on age. So, while not an initial hypothesis, this study weakly supports prior studies showing rank at a CPA firm is not a significant indicator of ethical attitudes. Differences found based on rank are likely differences due to age.

One final finding of note relates to those respondents holding a CPA license. Given the emphasis on ethics in initial ethics education to sit for the certified public accountant exam and in continuing professional education (CPE), it is worthwhile exploring whether those with a license possess different ethical attitudes than those without a license. Only four of the 30 vignettes display a difference between these two samples, and those with a CPA license viewed three of the four vignettes as more acceptable than those without a license. Those with a license found an executive padding his expense account as less acceptable than those without a license. This is consistent with the age correlation as those with a license skew older. However, the other three vignettes involved hiring a man over a woman due to a fear employees would resent a female supervisor, employees utilizing firm software for personal use, and a company lending money to someone who lent that money to a third party to buy property from the company at

double its appraised value. All three scenarios were viewed as more acceptable by those with a CPA license. While the first scenario is consistent with testing surrounding time spent in public accounting, the second and third scenarios are inconsistent with the expectations based on a correlation with age. It is not a surprise that those with a CPA license would find it more acceptable for employees to utilize firm software as it is common practice licensed individuals would be familiar with. In fact, it is more surprising that age correlated the opposite way with this scenario. One would expect CPA license and age, given the older skew of licensed individuals, to share a relation with this scenario. The third scenario is the biggest surprise. While it is not blatantly illegal, the scenario could be interpreted as an earnings management activity or other sneaky action to make the company appear better financially. A licensed public accountant should be more sensitive to this possibility and find it less acceptable. These results suggest the opposite. Further research could investigate these differences and why the exist.

The results related to ethical differences of licensed and non-licensed individuals are interesting and are discussed below as an area for future research. Despite these findings, four vignettes displaying a difference are not enough to generalize that a difference exists between those with and without licenses. Therefore, the evidence does not support the idea that there is, broadly speaking, a difference in ethical attitudes between those with CPA licenses and those without CPA licenses.

Contributions to Research

While many different aspects of the respondents' profession and demographics were analyzed with respect to how they viewed ethical dilemmas, the most noteworthy findings revolve around the limited support for prior research showing age as a contributing factor to

ethical attitudes, the lack of a difference in ethical attitudes based on gender, and the lack of difference in ethical attitudes between public accountants and accounting faculty.

As discussed earlier in this paper, research related to ethics and gender has garnered mixed results. Studies suggest women are more ethical, men are more ethical, and a lack of a difference between genders. Due to this mixture of results in existing literature, this study hypothesized there would not be a difference in ethical attitudes based on gender. Based on responses to the 30 vignettes, this study found no significant support for a difference in ethical attitudes based on gender. This does not confirm or reject an existing consensus, but it does provide one more drop in the bucket supporting a lack of ethical attitude difference between genders.

Prior research, such as that conducted by Conroy et al. using this same survey, has shown a connection between age and ethical attitudes (2010). Specifically, age is negatively correlated with ethical attitudes. In the context of this survey, Conroy et al. found that older respondents found the ethical dilemmas less acceptable than their younger counterparts. This study, using the same survey instrument, tested if age correlated with ethical attitudes. While the results were not as strong as the Conroy et al. study, this study does support their finding that age negatively correlates with ethical attitudes, contributing to the existing literature on this subject.

Finally, despite a plethora of academic research on ethics in general, as well as more specifically related to accounting ethics, there is a lack of research evaluating the ethical attitudes of accounting faculty members themselves. Given faculty are often tasked with creating more ethical future public accountants, it is reasonable to question what the ethical attitudes are of their instructors and if they would impart any different attitudes than would be expected of current public accountants. Especially given the crossover between public accountants and

accounting faculty, with many faculty working or previously working in public accounting, it should not be taken for granted that accounting faculty impart greater ethical attitudes on students. Based on the results of this study, there is no support for the assumption that accounting faculty viewed these ethical dilemmas any differently than public accountants. As will be discussed later, this generates questions as to the sufficiency of current expectations that accounting faculty mold accounting students to view ethical dilemmas differently than current public accountants and what future researchers should investigate.

Contributions to the Profession

Ethical lapses have plagued the public accounting profession for almost a century. Whether truly the fault of public accountants and insufficient ethical attitudes or simply acting as the scapegoats, public accountants often take the brunt of the blame for high-profile company and economic failings and are tasked with solving the actual or perceived problems. The solutions largely revolve around ethics education in higher education and CPE. Both of these areas were explored in this study.

Accounting faculty are often tasked with molding future public accountants with higher morals than existing public accountants. However, it appears no one has asked if accounting faculty possess and would impart higher ethical standards than existing public accountants. This has been an assumption, and no existing research has explored if accounting faculty possess different ethical attitudes than existing public accountants. If faculty do not possess greater ethical perceptions, why should it be expected that they would mold future accountants with better ethical attitudes?

Based on the findings of this study, there is no statistically significant difference in ethical attitudes between accounting faculty and public accountants. Both groups viewed

business-centric ethical dilemmas similarly. If this is taken as true, the concept of relying on accounting faculty to mold more ethical future accounts needs to be revisited. With research showing faculty beliefs and attitudes translate to students (Astin & Astin, 2010; Emmanuel & Delaney, 2014), the effects of incorporating more ethics education could be blunted by faculty conveying a lack of sincere belief in what they are teaching or teaching that the current attitudes of public accountants are acceptable. If the faculty teaching students share the same ethical attitudes as current public accountants, it is reasonable to expect they will educate future accountants to share these attitudes towards business-related ethical dilemmas.

This area needs greater exploration in directions not explored by this research. As will be discussed later, perhaps accounting faculty need their own ethics education. Maybe the task of teaching ethics to accounting students needs to be taken out of the hands of accounting faculty and delivered to other departments, something most accounting faculty resist. But given the recurring failures in public accounting, the continual calls for greater ethics education, and the apparent failure of accounting faculty to mold more ethical accountants, the results here showing accounting faculty share their ethical attitudes with the perceived unethical public accountants suggests changes should be explored.

One other important note from this research for the public accounting profession is the potential lack of impact of ethics education within CPE. Those holding a CPA license are often required to take ethics education courses periodically to maintain their license. This research failed to find any significant difference in ethical attitudes related to these business-centric ethical dilemmas between those with and without a CPA license. This finding suggests the ethics requirements within CPE should potentially be reviewed. Again, not something reviewed in this

study, but the content, timing, amount, and/or some other factor(s) appear to prevent any successful increase in ethical attitudes in licensed public accountants.

This research focused on ethical attitude differences between public accountants and accounting faculty and explored other differences and correlations between, and with, other demographics. One of the most significant findings for the public accounting profession is a lack of ethical attitude difference between accounting faculty and public accountants. Additionally, it is important to note no difference in ethical attitudes was found between those holding and not holding a CPA license. These results suggest the need to further research what ethics education would work best, how to best implement it, and the best way to reinvent what is currently being delivered by both accounting faculty and continuing education providers.

Areas of Future Research

This study made several significant findings, especially related to the lack of difference in ethical attitudes between accounting faculty and public accountants. However, not only does this research suggest new areas for future research, but it also could benefit from modifications and re-exploring this same study.

This study could benefit by being replicated with two improvements. First, a larger sample size would help create more robust results. While there were 223 useable responses from accounting faculty, there were just 60 from public accountants. Second, and more importantly, this study would benefit from gathering more similar samples of public accountants and accounting faculty, both in terms of size and specific demographics. It would be beneficial for the faculty and public accountant samples to be closer in size. However, when exploring differences between the two and controlling for experience outside of their primary field, the two samples were relatively close in size. The larger issue was the significant difference in age.

Given age was the only factor to show correlation with responses, having samples of public accountants and faculty at similar average ages would be greatly beneficial. Ordinal logit regression was utilized to account for this discrepancy, but larger samples with similar ages would benefit a rerun of this study.

This study could also benefit from replication with a different survey instrument. The DIT or MJI could be used to explore ethical differences between public accountants and accounting faculty. However, while commonly utilized tests, the DIT and MJI were specifically not used in this study due to a lack of business focus. That said, a study similar to this using one of these tools would still serve to explore more general, non-business-centric ethical attitude differences. Even better would be a recreation of this study with a new survey instrument similar to the one utilized in this study, but with the ability to distill responses into a singular ethical score. One of the limitations of the survey instrument used in this study is the requirement to view each of the 30 vignettes separately and then interpret how many significant findings among the 30 are enough to represent a greater generalization. The development of a survey instrument similar to this, continuing to be business-focused but with a distilled ethical score, would be highly beneficial to this and future ethics studies in accounting and business in general.

Given the lack of difference in ethical attitudes between faculty and public accountants, future studies not only should attempt to further investigate this potential lack of difference but also re-explore how to best deliver ethics education to accounting students. As discussed earlier in this paper, prior research suggests accounting faculty prefer to deliver ethics education themselves as opposed to outsourcing it to other departments, and they prefer to integrate it into existing courses instead of creating standalone ethics courses. This may not be the most effective way to teach future accountants ethics, and faculty's own beliefs, which may not differ from the

public accountants being viewed as insufficiently ethical, may, in fact, hinder the ethics education of accounting students. It may be better to outsource ethics education to a non-business department. Or perhaps accounting faculty, if they insist on delivering ethics education, need to take some sort of ethics education themselves. Maybe the focus on case studies needs to be swapped out with a focus on more general ethics education, which again leads to the question of how equipped accounting faculty are to deliver such material. Much of the existing literature on teaching ethics to accounting students revolves around what faculty do or prefer. Perhaps new research needs to identify what would actually work best and if accounting faculty are the best equipped to deliver the most effective ethics education to accounting students.

Regarding age, while not a focal point of this research it is noteworthy that both this study and the Conroy et al. (2010) study identified age as positively correlating with ethical attitudes. The older an individual, the more likely the individual is to have a greater ethical attitude. However, this stands in stark contrast with existing literature comparing accounting students to accounting practitioners. As discussed earlier in this paper, accounting research often compares accounting students to practitioners and has largely found students to possess greater ethical attitudes than accounting practitioners (Fiolleau & Kaplan, 2017; Lampe & Finn, 1992; Shaub, 1994). Given students are generally younger than those working in accounting fields, the identified correlation with age would suggest accounting students possess lesser ethical attitudes, not greater. This study and the Conroy et al. study (2010) did not incorporate students, but those already in their professions. It is worth exploring, assuming these apparently mutually exclusive results are both true, what happens post-graduation to apparently turn more ethical students into less ethical practitioners who then regain their ethical attitudes as they age.

One final area for future research stems from the finding that those with a CPA license did not possess different ethical attitudes than those without a license. In fact, in two of the three vignettes with differences, those with a license found the ethical dilemmas more acceptable than those without. Other than ethics education for college students, CPE for licensed public accountants is where ethics education is delivered. Future studies should focus on the effectiveness of existing ethics education within CPE. The goal of improving ethical attitudes or simply making public accountants more aware of ethical dilemmas does not appear to be met through existing CPE requirements. Future research should attempt to identify better ways to deliver effective ethics education within CPE.

Conclusion

This study set out to explore the ethical attitudes of public accountants and accounting faculty in higher education. While various potential differences were investigated, the primary goal of this research was to identify any statistically meaningful differences in ethical attitudes between public accountants and accounting faculty. With public accountants often chastised for lack of ethics and blamed for high-profile failings in business, accounting faculty are called upon to enhance ethics education and mold more ethical future public accountants. This serves as the backdrop for the hypotheses in this study.

Eight hypotheses were formulated based on prior research, or in some cases, lack of prior research. Four of these hypotheses revolved around different ways to measure the effects public accounting and/or higher education may have on ethical attitudes. Potential differences were explored between public accountants and accounting faculty, re-running the test for different standards of "public accountant" and "accounting educator" based on recent experience in the other field. For instance, in the most stringent test, only public accountants with no experience

teaching accounting in higher education were compared with accounting educators with no experience working in public accounting. These different levels of testing were completed to compensate for the usual crossover within these two professions. Additionally, tests of correlation were performed with regards to survey results and type of experience (public accounting versus accounting education), length of time in public accounting, and length of time in accounting education.

The other four hypotheses revolved around prior research and other demographic data expected to be collected. The Conroy et al. study (2010) utilizing the same survey instrument found a correlation between age and ethical attitudes but no meaningful differences based on rank at a CPA firm. This study further investigated such findings. Much research has been done comparing ethical attitudes between genders, with mixed results. This study attempted to add to this literature. Finally, given the expected demographic data to be collected, potential ethical attitude differences were to be explored based on the type of institution taught at and the highest degree conferred. With ethics education generally integrated into higher education curriculums, one may expect those with higher degrees and potentially more ethics education to possess different ethical attitudes than those with lower degrees. Additionally, with different curricular focuses at different types of institutions, differences were explored between faculty teaching at different types of institutions.

To investigate the hypotheses, a survey developed by Conroy and his co-authors (2010) was sent to public accountants and accounting educators. This measurement tool utilized 30 short vignettes with a focus on business and accounting-related scenarios. Respondents rated each independent scenario on a scale of 1, never acceptable, to 7, always acceptable. Other demographic data were also collected, such as age and CPA license status. Survey responses and

demographic data were used in t-tests, Pearson correlation tests, one-way ANOVAs, and ordinal logistic regression to explore various potential differences and correlations.

While initial t-test results appeared to discover statistically significant differences between public accountants and accounting faculty, and correlation testing appeared to find a possible correlation between a degree earned and ethical attitudes, demographic differences in samples dictated additional testing. Utilizing ordinal logistic regression to simultaneously test age, degree, and profession for correlation with survey results, only age displayed a correlation. Therefore, the findings did not support a statistically significant difference between professions, nor based on degree. Age was the only factor displaying correlation with survey results, specifically a weak negative correlation. The older a respondent was, the more likely s/he was to find the various scenarios less acceptable and therefore possess a greater ethical attitude.

No difference or correlation other than age was supported from the eight hypotheses. In addition to these hypotheses, it is also worth noting that no significant difference was detected based on CPA license status. Only three of the 30 vignettes showed a statistically significant difference, and in two of those three, those with a license found the scenario more acceptable. While the evidence does not support the generalization that there is a difference based on license status, it is interesting that the few vignettes displaying a difference suggest those with a CPA license were less ethical.

This research contributes to the existing literature in several ways. First, while the findings were not as robust as the Conroy et al. study (2010), this study supports their findings that age positively correlates with ethical attitudes and that studies showing a difference in ethical attitudes based on CPA rank are most likely picking up a difference based on age. Second, the findings here add to the literature on ethics and gender. Existing literature is mixed,

with research displaying men and women do not possess different ethical attitudes, that women are more ethical, and that men are more ethical. This study contributes to the findings of no difference based on gender. Lastly, the results of this study make several contributions to the area of accounting ethics and how the business and higher education worlds expect to produce a more ethical public accounting workforce.

The task of reforming the ethical attitudes of public accountants generally falls on accounting educators and accounting CPE. This study presents problems for both arenas. Findings here suggest there is no difference in ethical attitudes between accounting faculty and public accountants. If accounting faculty hold the same ethical standards as current public accountants, should interested parties expect accounting faculty to mold new public accountants with greater ethical attitudes than they themselves possess? Despite accounting faculty largely desiring to teach ethics themselves (Blanthorne et al., 2007) by incorporating ethics into existing accounting curriculum (Ghaffari et al., 2008), these results support evaluating if accounting faculty are the best equipped to increase the ethical attitudes of accounting students. With regards to current ethics CPE, this study finds that, at best, there is no ethical attitude difference between licensed and unlicensed accountants. At worst, there is very limited support that those with a CPA license are less ethical than those without. The content and delivery of accounting ethics CPE should be evaluated for improvement if the goal is to enhance the ethical attitudes of public accountants.

Beyond an evaluation of who should be teaching what with regards to ethics in accounting curriculum and an evaluation of accounting ethics CPE, other areas for future research are presented by these findings. The survey instrument used in this study, with 30 independent vignettes, makes it difficult to generalize results. While serving a great purpose as a

business/accounting-focused ethics survey instrument, further refinement by grouping similar questions or distilling results into a singular ethics score would aid in interpretations. Exploring ethics differences within these two professions again with larger and more demographically similar samples would be beneficial, even utilizing the same survey. While not business-focused, using the DIT or MJI in a similar study could also help support or refute these results.

Ethics in public accounting represents a major issue in the field. Rightly or wrongly, it receives significant public attention and calls for reform. That reform often falls on accounting educators. This study fails to find a difference in ethical attitudes between accounting educators and the public accountants criticized for lacking ethics, calling into question the likelihood of accounting educators molding more ethical future public accountants. The lack of a difference in ethical attitudes presents a potential major problem in the assumptions of how ethics education should be delivered to accountants and who should deliver it.

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Appendices

Appendix A – Survey Vignettes

Please read each of the situations described below and <u>circle the number that reflects the degree to which you feel that they are ethically acceptable</u>.

***<u>Thank you</u>* in advance for your time.**

<u>Remember: We are interested in your personal views.</u>	*Please fill in one of the following* **Never Acceptable**			**Sometimes Acceptable**			**Always Acceptable**
1. An executive earning $100,000 a year padded his expense account by about $3,000 a year.	1	2	3	4	5	6	7
2. In order to increase profits of the firm, a general manager used a production process that exceeded legal limits for environmental pollution.	1	2	3	4	5	6	7
3. Because of pressure from his brokerage firm, a stockbroker recommended a type of stock that he did not consider to be a good investment.	1	2	3	4	5	6	7

4. A small business received one-fourth of its gross revenue in the form of cash. The owner reported only one-half of the cash receipts for income tax purposes.	1	2	3	4	5	6	7
5. A company paid a $350,000 “consulting” fee to an official of a foreign country. In return, the official promised assistance in obtaining a contract that will produce $10 million profit for the contracting company.	1	2	3	4	5	6	7
6. Sarah Jenkins, CPA, an internal auditor at Josephs Energy Company, uses the computer in her office and the company’s connection to the Internet to do so day trading in the stock market.	1	2	3	4	5	6	7
7. A company president found that a competitor had made an important scientific discovery that would sharply reduce the profits of his own company. He then hired a key employee of the competitor in an attempt to learn the details of the discovery.	1	2	3	4	5	6	7

8. A highway-building contractor deplored the chaotic bidding situation and cutthroat competition in his industry. He therefore, reached an understanding with the other major contractors to permit bidding which would provide them with a reasonable profit.	1	2	3	4	5	6	7
9. A company president recognized that sending expensive Christmas gifts to purchasing agents might compromise their positions. However, he continued the policy since it was common practice and changing it might result in a loss of business.	1	2	3	4	5	6	7
10. A corporate director learned that his company intended to announce a stock split and increase its dividend. On the basis of this information, he bought additional shares and then following the announcement sold them for a gain.	1	2	3	4	5	6	7
11. A corporate executive promoted a loyal friend and competent manager to the position of divisional vice president in preference to a better-qualified manager with whom he had no close personal ties.	1	2	3	4	5	6	7

12. A comptroller selected a legal method of financial reporting which concealed some embarrassing financial facts that would otherwise have become public knowledge.	1	2	3	4	5	6	7
13. Jones Energy, Inc. transfers an asset to an off-balance sheet entity. The entity uses the asset to obtain debt financing from a bank for 97% of the asset's fair market value. Because the bank requires a guarantee for the loan, the company's management uses the company's stock as collateral to obtain the bank financing.	1	2	3	4	5	6	7
14. An engineer discovered what he perceived to be a product design flaw that constituted a safety hazard. His company declined to correct the flaw. The engineer decided to keep quiet, rather than taking his complaint outside the company.	1	2	3	4	5	6	7
15. An employer received applications for a supervisor's position from two equally qualified applicants but hired the male applicant because he thought that some employees might resent being supervised by a female.	1	2	3	4	5	6	7

16. As part of the marketing strategy for a new product, the producer changed its color and marketed it as "new and improved," even though its other characteristics were unchanged.	1	2	3	4	5	6	7
17. In order to improve investor perception of company performance, RST Corp.'s management waits until the fourth quarter of the fiscal year to make all necessary adjusting entries. Management argues that the timing of the adjustments is irrelevant because the adjustments will be made before the annual financial statements are released.	1	2	3	4	5	6	7
18. Facing large clean-up costs, a mining company that produces arsenic as a by-product of its regular operations hired research consultants to show that the safe level of arsenic in drinking water is higher than previously believed.	1	2	3	4	5	6	7
19. An owner of a small business firm obtained a free copy of a copyrighted computer software program from a business friend rather than spending $500 to obtain his own program from the software dealer.	1	2	3	4	5	6	7

20. Jack is a used car salesman who was under pressure from his boss to increase sales in order for the company to survive. In response, he began rolling back odometers and using high-pressure sales tactics.	1	2	3	4	5	6	7
21. Management of LMN Lenders, Inc., a loan company, makes a nonrecourse loan to a customer, who, in turn, makes a nonrecourse loan to a third party. The third party uses the loan to buy real estate from the loan company at a price that is twice the appraised value of the property.	1	2	3	4	5	6	7
22. An electricity producer decided not to upgrade a smokestack scrubber since its releases are still within the legal limits and the upgrade would reduce profits by 10 percent.	1	2	3	4	5	6	7
23. Lester is editor of the Daily Paper, which was running an expose article about defective products being sold by local businesses. One of the owners of these businesses, Shoes, Inc., called Lester and threatened to pull out his advertising in the Daily Paper if the expose mentioned his story by name. Lester agreed to remove the “Shoes, Inc.” name from the article.	1	2	3	4	5	6	7

24. Pears, Inc., a large computer manufacturer recently introduced a new line of computers that made their existing line functionally obsolete. Pears, Inc. decided to donate the obsolete computer inventory to a local school district and in so doing, Pears, Inc. received a tax break and improved its image on social responsibility.	1	2	3	4	5	6	7
25. Dean is a purchasing agent who has the final say on which suppliers his firm will buy from. Dean let it be known that when price and other things were equal, his purchasing decisions could be swayed by receipt of an "appropriate" gift.	1	2	3	4	5	6	7
26. Martha is a new sales representative who is taking over a sales territory in which her firm has been unsuccessful in landing a very large client, Giant, Inc. Determined to make the sale, Martha decided to violate company policy and pay for a gift to Giant, Inc.'s manager.	1	2	3	4	5	6	7

27. The board of directors of TTT, Inc., recently approved a policy earmarking 7.5 percent of its profits for corporate giving. The funds will come directly out of retained earnings and thereby reduce the payout of dividends to the stockholders of the firm.	1	2	3	4	5	6	7
28. The design department of XYZ Child Corporation recently developed a new, lighter weight baby carrier. The new design is less expensive to manufacture, but has a slightly higher risk of handle collapse which could cause injury to children. XYZ decided to produce and market the carrier anyway.	1	2	3	4	5	6	7
29. A factory that makes very loud noise during production located next to a residential neighborhood, because land costs were lower there.	1	2	3	4	5	6	7
30. John Maynard, CPA, a staff auditor with ABC & Associates, a CPA firm, goes into the office on the weekend to use the firm's tax software to prepare the tax returns for his parents and several of his relatives.	1	2	3	4	5	6	7

Appendix B – Permission to Use Survey

James Karan <jkaran16@georgefox.edu> Thu, Apr 9, 2020, 2:29 PM

to sconroy

Hello Dr. Conroy,

My name is James Karan, and I am a doctoral student at George Fox University. I recently began the dissertation phase of my program, and believe the survey you utilized in your 2010 Journal of Business Ethics article on ethical attitudes of accounting practitioners would be an excellent instrument for my research. I was hoping you would allow me to use your survey instrument, the 30 vignettes, in my dissertation. Obviously you and your work would be cited as the source of the survey instrument. Thank you for your consideration.

Sincerely,

James Karan

jkaran16@georgefox.edu

850-345-9427

Stephen Conroy <sconroy@sandiego.edu> Thu, Apr 9, 2020, 7:12 PM

to me

Dear James,

Yes, I'm happy to assist, and I appreciate your citing our paper (Tisha Emerson and mine) in which the surveys were used and giving attribution for the instrument. I assume you're referring to our accounting practitioners survey which had about 30 questions? (We also used a more generic business ethics survey that had about 25 questions.) I've attached that here. Let me know if I can be of further assistance.

Kind regards,

Steve

Stephen J. Conroy, PhD | Associate Dean of Undergraduate Business Programs

Professor of Economics

University of San Diego School of Business

Olin Hall 111

5998 Alcalá Park

San Diego, California 92110-2492

T 619-260-7883 | F 619-260-4891

sconroy@sandiego.edu | home.sandiego.edu/~sconroy

Top-50 Undergraduate Business Program (3 Years Running!), #2 in California

Poets&Quants: 2018 - 2020 Rankings

2 Attachments

James Karan <jkaran16@georgefox.edu>

Thu, Apr 9, 2020, 7:46 PM

to Stephen

Thank you very much Dr. Conroy. This is a great help. Be well.

James

Stephen Conroy <sconroy@sandiego.edu> Thu, Apr 9, 2020, 8:09 PM

to me

Okay, you're welcome. Same to you!

Steve

Stephen J. Conroy, PhD | Associate Dean of Undergraduate Business Programs

Professor of Economics

University of San Diego School of Business

Olin Hall 111

5998 Alcalá Park

San Diego, California 92110-2492

T 619-260-7883 | F 619-260-4891

sconroy@sandiego.edu | home.sandiego.edu/~sconroy

Top-50 Undergraduate Business Program (3 Years Running!), #2 in California

Poets&Quants: 2018 - 2020 Rankings

Appendix C – IRB Approval

2201123

GEORGE FOX UNIVERSITY HSRC INITIAL REVIEW QUESTIONNAIRE Page 6

Title: Ethical Attitudes of Accounting Faculty and Public Accountants

Principal Researcher(s): James Karan

Date application completed: 11/5/2020

(The researcher needs to complete the above information on this page)

COMMITTEE FINDING: For Committee Use Only

☒ (1) The proposed research makes adequate provision for safeguarding the health and dignity of the subjects and is therefore approved.

☐ (2) Due to the assessment of risk being questionable or being subject to change, the research must be periodically reviewed by the **HSRC** on a basis throughout the course of the research or until otherwise notified. This requires resubmission of this form, with updated information, for each periodic review.

☐ (3) The proposed research evidences some unnecessary risk to participants and therefore must be revised to remedy the following specific area(s) on non-compliance:

☐ (4) The proposed research contains serious and potentially damaging risks to subjects and is therefore not approved.

Chair or designated member

11-9-20

Date

Appendix D – Profession T-tests

Results utilizing t-test to compare vignette responses of public accountants to accounting higher educators.

	Public Accountants		Accounting Educators		*t*(282)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.6500	1.21885	1.1339	0.56815	3.188	0.002
2	1.2500	0.65419	1.2232	0.63824	0.287	0.774
3	1.9167	1.21141	1.4063	0.85241	3.067	0.003
4	1.5000	1.04962	1.2589	0.79511	1.940	0.053
5	2.3500	1.61376	2.0714	1.38029	1.338	0.182
6	3.4833	1.68233	3.3884	1.77831	0.371	0.711
7	3.6333	1.91308	3.4152	1.90866	0.786	0.433
8	3.0833	1.66001	2.3661	1.70725	2.907	0.004
9	2.9333	1.67602	2.9018	1.64826	0.131	0.896
10	1.3667	1.08872	1.1964	0.77331	1.379	0.169
11	2.7333	1.52790	3.0089	1.68877	-1.145	0.253
12	3.3833	1.99229	3.6161	1.97175	-0.810	0.418
13	3.2167	1.91419	3.1786	1.97842	0.133	0.894
14	1.9667	1.35255	1.8304	1.26625	0.730	0.466
15	1.7833	1.49680	2.0982	1.52680	-0.143	0.155
16	3.2333	1.77904	2.8795	1.82625	1.340	0.181
17	2.5333	1.62049	2.7054	1.84677	0.096	0.512
18	2.5500	1.70169	2.3125	1.68896	0.966	0.335
19	2.7500	1.80042	1.9821	1.42673	3.056	0.003

	Public Accountants		Accounting Educators		*t*(282)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
20	1.3833	1.09066	1.1384	0.64478	2.217	0.027
21	2.1000	1.74375	1.7991	1.37557	1.417	0.157
22	4.9167	1.60815	4.7500	1.88931	0.625	0.532
23	2.5167	1.59970	2.3125	1.52722	0.910	0.363
24	5.1333	2.11906	5.6384	1.87228	-1.803	0.072
25	1.7167	1.29001	1.2946	0.83787	2.402	0.019
26	1.5500	0.92837	1.4643	0.96046	0.618	0.537
27	4.2000	2.22314	5.4286	1.97388	-3.890	0.000
28	2.4500	1.56687	2.4777	1.64561	-0.117	0.907
29	3.7000	1.95110	3.9018	1.86042	-0.738	0.461
30	4.3000	1.95110	3.7188	1.91674	2.078	0.039

Results utilizing t-test to compare vignette responses of public accountants who have not taught accounting in higher education in the last five years to accounting higher educators who have not practiced public accounting in the last five years.

	Public Accountants		Accounting Educators		*t*(246)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.7647	1.28978	1.1117	0.44917	3.560	0.001
2	1.2745	0.69508	1.1980	0.59453	0.790	0.430
3	1.9020	1.20424	1.3858	0.84116	2.884	0.005
4	1.4510	1.02594	1.2030	0.67717	2.073	0.039
5	2.3137	1.60612	2.0812	1.38634	1.032	0.303
6	3.5882	1.62698	3.4162	1.76685	0.629	0.530

	Public Accountants		Accounting Educators		*t*(246)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
7	3.5686	1.80283	3.4112	1.91356	0.530	0.597
8	3.1569	1.52804	2.3401	1.69365	3.129	0.002
9	2.9804	1.72615	2.9036	1.65549	0.293	0.770
10	1.3333	1.05198	1.1726	0.72186	1.279	0.202
11	2.8627	1.52341	3.0254	1.71261	0.182	0.537
12	3.5490	1.96279	3.6142	1.95182	0.988	0.832
13	3.3137	1.84922	3.2183	1.99440	0.302	0.758
14	2.0588	1.43404	1.8071	1.28307	0.347	0.224
15	1.7059	1.38988	2.0305	1.46353	-1.426	0.155
16	3.2941	1.76968	2.8629	1.84239	1.501	0.135
17	2.4314	1.41781	2.6904	1.80152	-0.953	0.342
18	2.4510	1.65304	2.3147	1.68197	0.517	0.605
19	2.7647	1.81756	1.8782	1.29180	3.276	0.002
20	1.3529	1.11038	1.1218	0.65883	1.905	0.058
21	2.0784	1.62288	1.8020	1.37262	1.233	0.219
22	4.9804	1.42113	4.7614	1.85960	0.783	0.434
23	2.5490	1.56606	2.3096	1.53880	0.987	0.325
24	5.1961	2.06901	5.6142	1.89074	-1.380	0.169
25	1.6471	1.14584	1.2741	0.77327	2.198	0.032
26	1.5294	0.92418	1.3909	0.85983	1.010	0.314
27	4.1765	2.14202	5.4264	1.97972	-3.771	0.000
28	2.4314	1.56531	2.4467	1.62363	-0.061	0.952
29	3.6471	1.79804	3.9239	1.84592	-0.959	0.338
30	4.2157	1.84731	3.6041	1.90477	2.056	0.041

Results utilizing t-test to compare vignette responses of public accountants who have never taught accounting in higher education to accounting higher educators who have never practiced public accounting.

	Public Accountants		Accounting Educators		*t*(114)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.7800	1.29819	1.1212	0.37273	3.481	0.001
2	1.2800	0.70102	1.1970	0.43746	0.782	0.436
3	1.9200	1.20949	1.4091	0.91108	2.498	0.014
4	1.4600	1.03431	1.2727	0.64559	1.196	0.234
5	2.3400	1.61131	1.9848	1.28293	1.322	0.189
6	3.5800	1.64242	3.2121	1.52432	1.245	0.216
7	3.6000	1.80702	3.2727	1.94181	0.926	0.356
8	3.1800	1.53450	2.4394	1.73763	2.389	0.019
9	3.0000	1.73793	2.8788	1.51419	0.401	0.690
10	1.3400	1.06157	1.1970	0.58756	0.924	0.357
11	2.8800	1.53384	3.1515	1.63841	-0.908	0.366
12	3.5800	1.97008	3.3788	1.74325	0.582	0.562
13	3.3400	1.85835	3.1061	1.98555	0.646	0.520
14	2.0600	1.44857	1.9242	1.44978	0.500	0.618
15	1.7200	1.40029	1.8788	1.28321	-0.635	0.527
16	3.3200	1.77787	2.7879	1.82727	1.571	0.119
17	2.4400	1.43086	2.8030	1.92330	-1.120	0.265
18	2.4600	1.66856	2.1515	1.61952	1.003	0.318
19	2.8000	1.81827	1.8636	1.07969	3.235	0.002
20	1.3600	1.12050	1.1970	0.80803	0.911	0.364
21	2.1000	1.63195	1.5000	0.99615	2.296	0.024

	Public Accountants		Accounting Educators		*t*(114)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
22	5.0000	1.42857	4.3636	1.76841	2.081	0.040
23	2.5600	1.57998	2.0303	1.27665	1.939	0.056
24	5.1800	2.08679	5.3182	1.97803	-0.364	0.717
25	1.6600	1.15370	1.1667	0.45007	2.863	0.006
26	1.5400	0.93044	1.3788	0.73934	1.040	0.301
27	4.1400	2.14771	5.3182	2.05433	-2.981	0.004
28	2.4400	1.57998	2.3485	1.54414	0.313	0.755
29	3.6400	1.81558	3.5303	1.86646	0.317	0.752
30	4.2200	1.86580	3.2424	1.93001	2.740	0.007

Appendix E – Age Correlation

Results for correlation of age and vignette results utilizing a Pearson correlation.

Correlation for age (n = 293)

	1	2	3	4	5	6	7	8	9	10
Age	-.312**	-.049	-.220**	-.075	-.100	-.183**	-.078	-.199**	-.059	-.053

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for age (n = 293)

	11	12	13	14	15	16	17	18	19	20
Age	-.083	-.009	-.013	-.038	.104*	-.093	-.002	-.015	-.249**	-.083

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for age (n = 293)

	21	22	23	24	25	26	27	28	29	30
Age	-.082	-.082	-.047	.003	-.173**	-.059	.099	-.016	-.066	-.070

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Appendix F – Gender T-test

Results utilizing t-test to compare vignette responses of men to women.

	Male		Female		*t*(292)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.2754	0.79656	1.1811	0.72831	1.044	0.298
2	1.2635	0.67844	1.1575	0.54080	1.446	0.149
3	1.5449	0.94235	1.4803	0.99083	0.569	0.570
4	1.3174	0.85792	1.2835	0.83474	0.340	0.734
5	2.2036	1.47892	1.9685	1.33296	1.408	0.160
6	3.5389	1.76563	3.2205	1.69927	1.557	0.121
7	3.5988	1.89819	3.2283	1.91149	1.653	0.099
8	2.4251	1.65888	2.5748	1.76617	-0.745	0.457
9	2.9880	1.60191	2.8661	1.74284	0.622	0.534
10	1.2335	0.86391	1.2205	0.80587	0.132	0.895
11	3.0599	1.65995	2.8661	1.66363	0.460	0.323
12	3.4371	1.94052	3.7008	2.02490	0.462	0.258
13	3.3772	2.05238	2.9134	1.79958	2.023	0.044
14	1.9641	1.32125	1.7008	1.18399	1.769	0.078
15	2.0479	1.50424	1.9921	1.53528	0.312	0.755
16	3.0419	1.86390	2.8898	1.76486	0.709	0.479
17	2.6467	1.86947	2.6614	1.68193	-0.070	0.944
18	2.5629	1.78867	2.1102	1.56463	2.267	0.024
19	2.0599	1.52371	2.2047	1.56011	-0.799	0.425
20	1.1677	0.72521	1.2047	0.79020	-0.417	0.677
21	1.9760	1.55212	1.6772	1.30859	1.748	0.081

	Male		Female		*t*(292)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
22	4.9581	1.82801	4.6063	1.84803	1.627	0.105
23	2.4970	1.63130	2.2047	1.38208	1.624	0.105
24	5.8204	1.83443	5.1496	2.00031	2.986	0.003
25	1.3234	0.67903	1.4409	1.21925	-1.051	0.294
26	1.6168	1.07958	1.2756	0.67468	3.127	0.002
27	5.2156	2.05678	5.0551	2.13552	0.652	0.515
28	2.7186	1.71417	2.1181	1.40641	3.210	0.001
29	3.9701	1.94325	3.7087	1.77777	1.185	0.237
30	3.8683	2.00767	3.7795	1.83404	0.390	0.967

Appendix G – CPA License T-test

Results utilizing t-test to compare vignette responses of individuals with a CPA to those without a CPA.

	With License		Without License		*t*(293)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.1095	0.53662	1.5000	1.06509	-4.189	0.000
2	1.2488	0.71261	1.1702	0.40530	0.995	0.320
3	1.5025	0.97018	1.5426	0.94658	-0.333	0.739
4	1.3433	0.94687	1.2128	0.56554	1.237	0.217
5	2.1393	1.45619	2.0319	1.33965	0.605	0.546
6	3.4279	1.79611	3.3617	1.62541	0.304	0.762
7	3.5821	1.91167	3.1383	1.86997	1.871	0.062
8	2.4478	1.72873	2.5638	1.65626	-0.544	0.587
9	2.9303	1.67485	2.9468	1.63541	-0.079	0.937
10	1.2388	0.92341	1.2021	0.61487	0.350	0.726
11	2.9453	1.70938	3.0319	1.55510	-0.417	0.677
12	3.6119	2.05394	3.4255	1.79898	0.755	0.451
13	3.2537	2.01502	3.0213	1.81972	0.952	0.342
14	1.9652	1.36154	1.6064	0.99696	2.284	0.023
15	2.2040	1.63499	1.6383	1.12500	3.034	0.003
16	2.9950	1.76493	2.9574	1.94502	0.165	0.869
17	2.6567	1.81565	2.6915	1.78420	-0.154	0.878
18	2.4478	1.76593	2.2021	1.56287	1.154	0.250
19	2.1692	1.64050	2.0213	1.28665	0.770	0.442
20	1.2139	0.87693	1.1170	0.35489	1.032	0.303

	With License		Without License		*t*(293)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
21	1.9552	1.60093	1.6170	1.04836	2.163	0.031
22	4.7960	1.90347	4.8085	1.71192	-0.054	0.957
23	2.4478	1.62435	2.2021	1.29996	1.286	0.200
24	5.6716	1.84435	5.2234	2.07988	1.866	0.063
25	1.4030	1.04489	1.3085	0.70370	0.796	0.427
26	1.4577	0.91074	1.5000	1.00268	-0.360	0.719
27	5.3134	2.03624	4.8085	2.16659	1.944	0.053
28	2.4925	1.62210	2.3936	1.59447	0.491	0.624
29	3.9751	1.85860	3.6277	1.90067	1.485	0.139
30	4.0100	1.92611	3.4255	1.89220	2.442	0.015

Appendix H – Profession Correlation

Results for correlation of profession and vignette results utilizing a Pearson correlation.

Correlation for profession (n = 293)

	1	2	3	4	5	6	7	8	9	10
Profession	-.264**	-.032	-.180**	-.122*	-.107	-.025	-.069	-.194**	.028	-.085

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for profession (n = 293)

	11	12	13	14	15	16	17	18	19	20
Profession	.082	.031	-.009	-.048	.044	-.027	.031	-.031	-.230**	-.136*

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for profession (n = 293)

	21	22	23	24	25	26	27	28	29	30
Profession	-.094	-.017	-.022	.085	-.182**	-.058	.187**	-.022	.051	-.129*

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Appendix I – Institution T-test

Results utilizing t-test to compare vignette responses of individuals teaching at public non-profit institutions to those teaching at private non-profit institutions.

	Public NFP		Private NFP		*t*(228)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.1224	0.54770	1.1325	0.57955	-0.131	0.896
2	1.2109	0.57614	1.1928	0.63357	0.221	0.825
3	1.4150	0.91295	1.4337	0.79928	-0.156	0.876
4	1.2993	0.83923	1.2169	0.74977	0.743	0.458
5	2.0204	1.34199	2.1084	1.38821	-0.472	0.637
6	3.3197	1.79415	3.4458	1.71260	-0.520	0.603
7	3.5170	1.96669	3.2892	1.87753	0.858	0.392
8	2.2789	1.76256	2.4458	1.54804	-0.720	0.472
9	2.8912	1.61809	2.9880	1.69284	-0.428	0.669
10	1.2313	0.90711	1.1325	0.51255	0.913	0.362
11	3.0136	1.76723	2.9157	1.53976	0.422	0.673
12	3.3401	1.90708	4.0000	2.03626	-2.459	0.015
13	3.1837	1.96553	3.1928	1.94722	-0.034	0.973
14	1.7823	1.23042	1.9277	1.29524	-0.844	0.399
15	2.0816	1.53279	2.0120	1.46915	0.336	0.737
16	2.9524	1.85920	2.8675	1.80630	0.336	0.737
17	2.6803	1.86528	2.6024	1.77338	0.309	0.757
18	2.2109	1.61852	2.5904	1.84811	-1.621	0.106
19	1.9184	1.33196	1.9880	1.53412	-0.360	0.719
20	1.1769	0.78252	1.0843	0.35630	1.019	0.309

	Public NFP		Private NFP		*t*(228)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
21	1.7619	1.38650	1.8434	1.48556	-0.417	0.677
22	4.7483	1.86108	4.6747	2.00066	0.280	0.780
23	2.2517	1.52083	2.4819	1.52509	-1.101	0.272
24	5.5510	1.92027	5.6386	1.89079	-0.334	0.739
25	1.3197	0.84389	1.2530	0.85316	0.574	0.567
26	1.4762	1.00909	1.3976	0.71465	0.626	0.532
27	5.3401	2.04570	5.2892	1.96636	0.184	0.854
28	2.5306	1.67294	2.3855	1.53680	0.650	0.516
29	3.8571	1.87266	3.8554	1.88791	0.007	0.995
30	3.6395	1.95478	3.7952	1.81967	0.320	0.553

Appendix J – Incorporate Ethics T-test

Results utilizing t-test to compare vignette responses of individuals who have incorporated ethics into accounting courses to those who have not.

	Incorporated		Did not Incorporate		*t*(243)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.1238	0.53928	1.2000	0.86772	-0.700	0.485
2	1.2095	0.61396	1.1429	0.55002	0.603	0.547
3	1.4333	0.89005	1.4857	0.88688	-0.323	0.747
4	1.2476	0.73571	1.4000	1.11672	-1.043	0.298
5	2.0190	1.34471	2.1714	1.54322	-0.607	0.544
6	3.3571	1.76924	3.4286	1.65006	-0.223	0.824
7	3.3762	1.90100	3.6000	2.14476	-0.633	0.527
8	2.3286	1.70607	2.5429	1.72086	-0.687	0.493
9	2.8952	1.67403	3.0286	1.56216	-0.440	0.660
10	1.1905	0.74622	1.2571	0.98048	-0.466	0.641
11	2.9667	1.69261	3.1429	1.62956	-0.573	0.567
12	3.5714	1.99212	3.4000	1.86611	0.475	0.635
13	3.0571	1.94827	3.8571	2.04570	-2.233	0.026
14	1.8095	1.26488	1.8286	0.95442	-0.085	0.932
15	2.0905	1.54561	2.0571	1.45406	0.119	0.905
16	2.8429	1.77140	3.3143	2.09722	-1.418	0.157
17	2.7619	1.89950	2.2571	1.48211	1.497	0.136
18	2.3524	1.69706	2.3429	1.84619	0.030	0.976
19	1.9714	1.43074	2.1429	1.55569	-0.648	0.518
20	1.1190	0.55347	1.2857	1.04520	-1.415	0.158
21	1.8000	1.41354	1.7714	1.43662	0.110	0.912

	Incorporated		Did not Incorporate		*t*(243)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
22	4.7762	1.89747	4.7429	1.78791	0.097	0.923
23	2.3381	1.54826	2.1714	1.15008	0.609	0.543
24	5.6286	1.87534	5.6571	1.87778	-0.083	0.934
25	1.2905	0.83946	1.4286	1.09237	-0.860	0.390
26	1.4333	0.90603	1.4286	0.85011	0.029	0.977
27	5.3095	2.06460	5.4857	1.82098	-0.475	0.635
28	2.4333	1.61270	2.6286	1.68184	-0.659	0.510
29	3.9333	1.83672	3.5714	2.06206	1.060	0.290
30	3.7667	1.94612	3.6857	1.77849	0.231	0.818

Appendix K – Taught Ethics Course T-test

Results utilizing t-test to compare vignette responses of individuals who have taught a standalone ethics course to those who have not.

	Taught Ethics		Did not Teach Ethics		*t*(246)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
1	1.0702	0.25771	1.1675	0.69069	-1.042	0.299
2	1.2456	0.76253	1.1885	0.54875	0.627	0.531
3	1.3509	0.74381	1.4817	0.93945	-0.964	0.336
4	1.2632	0.72028	1.2513	0.79451	0.101	0.920
5	1.7895	1.20619	2.1361	1.40387	-1.687	0.093
6	3.2807	1.66642	3.4241	1.78097	-0.541	0.589
7	2.9474	1.76697	3.5654	1.93164	-2.161	0.032
8	1.8947	1.42283	2.5340	1.77338	-2.804	0.006
9	2.7018	1.60318	3.0000	1.66386	-1.197	0.232
10	1.1754	0.50437	1.2094	0.84487	-0.288	0.773
11	3.0000	1.48805	3.0157	1.72437	-0.062	0.950
12	3.3509	1.95019	3.6126	1.98326	-0.878	0.381
13	2.5965	1.77140	3.3455	2.01206	-2.532	0.012
14	1.9649	1.37536	1.7592	1.16737	1.119	0.264
15	2.0526	1.41952	2.0785	1.51800	-0.115	0.909
16	2.6491	1.59789	2.9843	1.88198	-1.219	0.224
17	2.6316	2.00563	2.6859	1.80227	-0.194	0.846
18	2.4737	1.86227	2.3141	1.66883	0.616	0.538
19	2.0877	1.52691	1.9738	1.44890	0.514	0.607
20	1.1930	0.83321	1.1257	0.57576	0.693	0.489
21	1.8596	1.44468	1.7749	1.40173	0.398	0.691

	Taught Ethics		Did not Teach Ethics		*t*(246)	*p*
Vignette	*M*	*SD*	*M*	*SD*		
22	4.6667	1.79616	4.8010	1.88685	-0.477	0.634
23	2.3333	1.40577	2.3246	1.52501	0.039	0.969
24	5.4561	1.89991	5.6021	1.92184	-0.504	0.614
25	1.2807	0.81841	1.3298	0.91254	-0.365	0.715
26	1.4561	0.82527	1.4241	0.91378	0.237	0.812
27	4.9474	2.01265	5.3560	2.09484	-1.304	0.193
28	2.4912	1.50146	2.4346	1.64945	0.232	0.817
29	3.5263	1.86227	3.9791	1.86366	-1.610	0.109
30	3.7719	2.20403	3.7592	1.83091	0.044	0.965

Appendix L – Years in Public Accounting Correlation

Results for correlation of years in public accounting (YiPA) and vignette results utilizing a Pearson correlation.

Correlation for years in public accounting (n = 293)

	1	2	3	4	5	6	7	8	9	10
YiPA	-.081	.021	-.012	.061	-.056	-.085	-.030	-.020	-.042	.084

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for years in public accounting (n = 293)

	11	12	13	14	15	16	17	18	19	20
YiPA	-.016	-.066	.080	.022	.128*	-.007	-.096	.074	-.014	.041

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for years in public accounting (n = 293)

	21	22	23	24	25	26	27	28	29	30
YiPA	.008	-.013	.070	.005	.060	-.008	-.052	.119*	-.035	.112

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Appendix M – Years in Accounting Higher Education Correlation

Results for correlation of years teaching (YT) in accounting higher education and vignette results utilizing a Pearson correlation.

Correlation for years teaching in accounting higher education (n = 293)

	1	2	3	4	5	6	7	8	9	10
YT	-.223**	-.011	-.204**	-.043	-.039	-.084	-.057	-.192**	-.035	-.069

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for years teaching in accounting higher education (n = 293)

	11	12	13	14	15	16	17	18	19	20
YT	.076	-.014	-.041	-.057	.126*	-.049	.048	.010	-.149*	-.084

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Correlation for years teaching in accounting higher education (n = 293)

	21	22	23	24	25	26	27	28	29	30
YT	-.062	-.077	-.045	.044	-.186**	.044	.101	-.020	-.005	-.059

Note. *Correlation is statistically significant at the .05 level

**Correlation is statistically significant at the .01 level

Appendix N – Differences by degree ANOVA

Results utilizing one-way ANOVA to compare vignette responses of individuals with a bachelor's, master's, and doctorate degree.

An executive earning $100,000 a year padded his expense account by about $3,000 a year.	Between Groups	17.538	2	8.769	16.384	.000
	Within Groups	155.213	290	.535		
	Total	172.751	292			
In order to increase profits of the firm, a general manager used a production process that exceeded legal limits for environmental pollution.	Between Groups	.171	2	.086	.212	.809
	Within Groups	116.962	290	.403		
	Total	117.133	292			
Because of pressure from his brokerage firm, a stockbroker recommended a type of stock that he did not consider to be a good investment.	Between Groups	6.914	2	3.457	3.822	.023
	Within Groups	262.294	290	.904		
	Total	269.208	292			
A small business received one-fourth of its gross revenue in the form of cash. The owner reported only one-half of the cash receipts for income tax purposes.	Between Groups	1.108	2	.554	.769	.464
	Within Groups	208.858	290	.720		
	Total	209.966	292			
A company paid a $350,000	Between Groups	3.363	2	1.681	.830	.437

"consulting" fee to an official of a foreign country. In return, the official promised assistance in obtaining a contract that will produce $10 million profit for the contracting company.	Within Groups	587.143	290	2.025		
	Total	590.505	292			
Sarah Jenkins, CPA, an internal auditor at Josephs Energy Company, uses the computer in her office and the company's connection to the Internet to do day trading in the stock market.	Between Groups	2.733	2	1.366	.447	.640
	Within Groups	886.121	290	3.056		
	Total	888.853	292			
A company president found that a competitor had made an important scientific discovery that would sharply reduce the profits of his own company. He then hired a key employee of the competitor in an attempt to learn the details of the discovery.	Between Groups	.875	2	.438	.120	.887
	Within Groups	1055.842	290	3.641		
	Total	1056.717	292			
A highway-building	Between Groups	30.701	2	15.351	5.425	.005

contractor deplored the chaotic bidding situation and cutthroat competition in his industry. Therefore, he reached an understanding with the other major contractors to permit bidding which would provide them with a reasonable profit.	Within Groups	820.527	290	2.829		
	Total	851.229	292			
A company president recognized that sending expensive Christmas gifts to purchasing agents might compromise their positions. However, he continued the policy since it was common practice and changing it might result in a loss of business.	Between Groups	2.923	2	1.462	.528	.590
	Within Groups	802.203	290	2.766		
	Total	805.126	292			
A corporate director learned that his company intended to announce a stock split and increase its dividend. On the basis of this information, he bought additional shares and then following the	Between Groups	.335	2	.168	.237	.789
	Within Groups	205.344	290	.708		
	Total	205.679	292			

announcement sold them for a gain.						
A corporate executive promoted a loyal friend and competent manager to the position of divisional vice president in preference to a better-qualified manager with whom he had no close personal ties.	Between Groups	3.963	2	1.981	.717	.489
	Within Groups	801.914	290	2.765		
	Total	805.877	292			
A comptroller selected a legal method of financial reporting which concealed some embarrassing financial facts that would otherwise have become public knowledge.	Between Groups	9.178	2	4.589	1.179	.309
	Within Groups	1129.143	290	3.894		
	Total	1138.321	292			
Jones Energy, Inc. transfers an asset to an off-balance sheet entity. The entity uses the asset to obtain debt financing from a bank for 97% of the asset's fair market value. Because the bank requires a guarantee for the loan, the company's	Between Groups	1.305	2	.652	.171	.843
	Within Groups	1106.163	290	3.814		
	Total	1107.468	292			

management use						
An engineer discovered what he perceived to be a product design flaw that constituted a safety hazard. His company declined to correct the flaw. The engineer decided to keep quiet, rather than taking his complaint outside the company.	Between Groups	3.711	2	1.855	1.152	.317
	Within Groups	466.979	290	1.610		
	Total	470.689	292			
An employer received applications for a supervisor' s position from two equally qualified applicants but hired the male applicant because he thought that some employees might resent being supervised by a female.	Between Groups	5.446	2	2.723	1.187	.307
	Within Groups	665.277	290	2.294		
	Total	670.724	292			
As part of the marketing strategy for a new product, the producer changed its color and marketed it as "new and improved," even though its other	Between Groups	9.130	2	4.565	1.389	.251
	Within Groups	952.748	290	3.285		
	Total	961.877	292			

characteristics were unchanged.						
In order to improve investor perception of company performance, RST Corp.'s management waits until the fourth quarter of the fiscal year to make all necessary adjusting entries. Management argues that the timing of the adjustments is irrelevant because the adjustments will be made before the annual financial statements are released.	Between Groups	4.914	2	2.457	.752	.472
	Within Groups	947.632	290	3.268		
	Total	952.546	292			
Facing large clean-up costs, a mining company that produces arsenic as a by-product of its regular operations hired research consultants to show that the safe level of arsenic in drinking water is higher than previously believed.	Between Groups	1.406	2	.703	.243	.784
	Within Groups	838.246	290	2.891		
	Total	839.652	292			
An owner of a small	Between Groups	11.494	2	5.747	2.452	.088

business firm obtained a free copy of a copyrighted computer software program from a business friendrather than spending $500 to obtain his own program from the software dealer.	Within Groups	679.578	290	2.343		
	Total	691.072	292			
Jack is a used car salesman who was under pressure from his boss to increase sales in order for the company to survive. In response, he began rolling back odometers and using high-pressure sales tactics.	Between Groups	2.107	2	1.054	1.864	.157
	Within Groups	163.940	290	.565		
	Total	166.048	292			
Management of LMN Lenders, Inc., a loan company, makes a nonrecourse loan to a customer, who, in turn, makes a nonrecourse loan to a third party. The third party uses the loan to buy real estate from the loan company at a price that is twice the appraised	Between Groups	7.476	2	3.738	1.766	.173
	Within Groups	613.916	290	2.117		
	Total	621.392	292			
An electricity producer	Between Groups	2.999	2	1.500	.440	.644

decided not to upgrade a smokestack scrubber since its releases are still within the legal limits and the upgrade would reduce profits by 10 percent.	Within Groups	987.881	290	3.406		
	Total	990.881	292			
Lester is editor of the Daily Paper, which was running an expose article about defective products being sold by local businesses. One of the owners of these businesses, Shoes, Inc., called Lester and threatened to pull out his advertising in the Daily Pap	Between Groups	1.488	2	.744	.315	.730
	Within Groups	684.963	290	2.362		
	Total	686.451	292			
Pears, Inc., a large computer manufacturer recently introduced a new line of computers that made their existing line functionally obsolete. Pears, Inc. decided to donate the obsolete computer inventory to a local school district and in so doing, Pears, In	Between Groups	27.219	2	13.610	3.703	.026
	Within Groups	1065.886	290	3.675		
	Total	1093.106	292			

Dean is a purchasing agent who has the final say on which suppliers his firm will buy from. Deal let it be known that when price and other things were equal, his purchasing decisions could be swayed by receipt of an "appropriate" gift.	Between Groups	12.145	2	6.072	6.973	.001
	Within Groups	252.558	290	.871		
	Total	264.703	292			
Martha is a new sales representative who is taking over a sales territory in which her firm has been unsuccessful in landing a very large client, Giant, Inc. Determined to make the sale, Martha decided to violate company policy and pay for a gift to Giant	Between Groups	.043	2	.021	.024	.976
	Within Groups	259.015	290	.893		
	Total	259.058	292			
The board of directors of TTT, Inc., recently approved a policy earmarking 7.5 percent of its profits for corporate giving. The funds will come directly out of retained earnings and thereby reduce	Between Groups	40.213	2	20.106	4.718	.010
	Within Groups	1235.924	290	4.262		
	Total	1276.137	292			

the payout of dividends to the stockholders of the firm.						
The design department of XYZ Child Corporation recently developed a new, lighter weight baby carrier. The new design is less expensive to manufacture, but has a slightly higher risk of handle collapse which could cause injury to children. XYZ decided to p	Between Groups	.808	2	.404	.155	.857
	Within Groups	757.991	290	2.614		
	Total	758.799	292			
A factory that makes very loud noise during production located next to a residential neighborhood, because land costs were lower there.	Between Groups	2.199	2	1.100	.314	.730
	Within Groups	1014.340	290	3.498		
	Total	1016.539	292			
John Maynard, CPA, a staff auditor with ABC & Associates, a CPA firm, goes into the office on the weekend to use the firm's tax software to prepare the tax returns for his parents and several of his relatives.	Between Groups	16.176	2	8.088	2.180	.115
	Within Groups	1075.872	290	3.710		
	Total	1092.048	292			

Appendix O – Differences by Rank ANOVA

Results utilizing one-way ANOVA to compare vignette responses of public accountants with a rank of staff, senior, manager, and partner.

An executive earning $100,000 a year padded his expense account by about $3,000 a year.	Between Groups	10.304	3	3.435	4.143	.008
	Within Groups	97.827	118	.829		
	Total	108.131	121			
In order to increase profits of the firm, a general manager used a production process that exceeded legal limits for environmental pollution.	Between Groups	2.296	3	.765	1.330	.268
	Within Groups	67.868	118	.575		
	Total	70.164	121			
Because of pressure from his brokerage firm, a stockbroker recommended a type of stock that he did not consider to be a good investment.	Between Groups	4.238	3	1.413	1.357	.260
	Within Groups	122.877	118	1.041		
	Total	127.115	121			
A small business received one-fourth of its gross revenue in the form of cash. The owner reported only one-half of the cash receipts for income tax purposes.	Between Groups	4.339	3	1.446	2.110	.103
	Within Groups	80.882	118	.685		
	Total	85.221	121			
A company paid a $350,000	Between Groups	24.513	3	8.171	3.245	.024

"consulting" fee to an official of a foreign country. In return, the official promised assistance in obtaining a contract that will produce $10 million profit for the contracting company.	Within Groups	297.093	118	2.518		
	Total	321.607	121			
Sarah Jenkins, CPA, an internal auditor at Josephs Energy Company, uses the computer in her office and the company's connection to the Internet to do day trading in the stock market.	Between Groups	6.808	3	2.269	.679	.567
	Within Groups	394.307	118	3.342		
	Total	401.115	121			
A company president found that a competitor had made an important scientific discovery that would sharply reduce the profits of his own company. He then hired a key employee of the competitor in an attempt to learn the details of the discovery.	Between Groups	21.362	3	7.121	1.970	.122
	Within Groups	426.614	118	3.615		
	Total	447.975	121			
A highway-building	Between Groups	28.345	3	9.448	3.143	.028

contractor deplored the chaotic bidding situation and cutthroat competition in his industry. Therefore, he reached an understanding with the other major contractors to permit bidding which would provide them with a reasonable profit.	Within Groups	354.680	118	3.006		
	Total	383.025	121			
A company president recognized that sending expensive Christmas gifts to purchasing agents might compromise their positions. However, he continued the policy since it was common practice and changing it might result in a loss of business.	Between Groups	12.611	3	4.204	1.438	.235
	Within Groups	345.004	118	2.924		
	Total	357.615	121			
A corporate director learned that his company intended to announce a stock split and increase its dividend. On the basis of this information, he bought additional shares and then following the	Between Groups	3.577	3	1.192	1.715	.168
	Within Groups	82.029	118	.695		
	Total	85.607	121			

announcement sold them for a gain.						
A corporate executive promoted a loyal friend and competent manager to the position of divisional vice president in preference to a better-qualified manager with whom he had no close personal ties.	Between Groups	19.468	3	6.489	2.845	.041
	Within Groups	269.155	118	2.281		
	Total	288.623	121			
A comptroller selected a legal method of financial reporting which concealed some embarrassing financial facts that would otherwise have become public knowledge.	Between Groups	52.807	3	17.602	4.334	.006
	Within Groups	479.291	118	4.062		
	Total	532.098	121			
Jones Energy, Inc. transfers an asset to an off-balance sheet entity. The entity uses the asset to obtain debt financing from a bank for 97% of the asset's fair market value. Because the bank requires a guarantee	Between Groups	11.182	3	3.727	.965	.412
	Within Groups	455.974	118	3.864		
	Total	467.156	121			

for the loan, the company's management use						
An engineer discovered what he perceived to be a product design flaw that constituted a safety hazard. His company declined to correct the flaw. The engineer decided to keep quiet, rather than taking his complaint outside the company.	Between Groups	6.147	3	2.049	1.188	.317
	Within Groups	203.467	118	1.724		
	Total	209.615	121			
An employer received applications for a supervisor' s position from two equally qualified applicants but hired the male applicant because he thought that some employees might resent being supervised by a female.	Between Groups	31.548	3	10.516	4.865	.003
	Within Groups	255.051	118	2.161		
	Total	286.598	121			
As part of the marketing strategy for a new product, the producer changed its color and marketed it as "new and improved," even though its other	Between Groups	5.804	3	1.935	.587	.625
	Within Groups	388.794	118	3.295		
	Total	394.598	121			

characteristics were unchanged.						
In order to improve investor perception of company performance, RST Corp.'s management waits until the fourth quarter of the fiscal year to make all necessary adjusting entries. Management argues that the timing of the adjustments is irrelevant because th	Between Groups	3.550	3	1.183	.394	.758
	Within Groups	354.745	118	3.006		
	Total	358.295	121			
Facing large clean-up costs, a mining company that produces arsenic as a by-product of its regular operations hired research consultants to show that the safe level of arsenic in drinking water is higher than previously believed.	Between Groups	29.042	3	9.681	3.691	.014
	Within Groups	309.458	118	2.623		
	Total	338.500	121			
An owner of a small business firm obtained a free copy of a copyrighted computer software program from a business friendrather	Between Groups	13.437	3	4.479	1.688	.173
	Within Groups	313.095	118	2.653		

than spending $500 to obtain his own program from the software dealer.						
	Total	326.533	121			
Jack is a used car salesman who was under pressure from his boss to increase sales in order for the company to survive. In response, he began rolling back odometers and using high-pressure sales tactics.	Between Groups	3.760	3	1.253	1.924	.129
	Within Groups	76.863	118	.651		
	Total	80.623	121			
Management of LMN Lenders, Inc., a loan company, makes a nonrecourse loan to a customer, who, in turn, makes a nonrecourse loan to a third party. The third party uses the loan to buy real estate from the loan company at a price that is twice the appraised	Between Groups	23.094	3	7.698	3.673	.014
	Within Groups	247.299	118	2.096		
	Total	270.393	121			
An electricity producer decided not to upgrade a smokestack scrubber since its releases are still within the legal limits and the	Between Groups	8.138	3	2.713	.785	.505
	Within Groups	407.968	118	3.457		
	Total	416.107	121			

upgrade would reduce profits by 10 percent.						
Lester is editor of the Daily Paper, which was running an expose article about defective products being sold by local businesses. One of the owners of these businesses, Shoes, Inc., called Lester and threatened to pull out his advertising in the Daily Pap	Between Groups	17.646	3	5.882	2.397	.072
	Within Groups	289.575	118	2.454		
	Total	307.221	121			
Pears, Inc., a large computer manufacturer recently introduced a new line of computers that made their existing line functionally obsolete. Pears, Inc. decided to donate the obsolete computer inventory to a local school district and in so doing, Pears, In	Between Groups	5.486	3	1.829	.435	.728
	Within Groups	495.735	118	4.201		
	Total	501.221	121			
Dean is a purchasing agent who has the final say on which suppliers his firm	Between Groups	7.153	3	2.384	1.745	.162
	Within Groups	161.216	118	1.366		

will buy from. Deal let it be known that when price and other things were equal, his purchasing decisions could be swayed by receipt of an "appropriate" gift.	Total	168.369	121			
Martha is a new sales representative who is taking over a sales territory in which her firm has been unsuccessful in landing a very large client, Giant, Inc. Determined to make the sale, Martha decided to violate company policy and pay for a gift to Giant	Between Groups	1.255	3	.418	.437	.727
	Within Groups	112.844	118	.956		
	Total	114.098	121			
The board of directors of TTT, Inc., recently approved a policy earmarking 7.5 percent of its profits for corporate giving. The funds will come directly out of retained earnings and thereby reduce the payout of dividends to the stockholders of the firm.	Between Groups	2.477	3	.826	.169	.917
	Within Groups	574.802	118	4.871		
	Total	577.279	121			

The design department of XYZ Child Corporation recently developed a new, lighter weight baby carrier. The new design is less expensive to manufacture, but has a slightly higher risk of handle collapse which could cause injury to children. XYZ decided to p	Between Groups	34.081	3	11.360	4.797	.003
	Within Groups	279.460	118	2.368		
	Total	313.541	121			
A factory that makes very loud noise during production located next to a residential neighborhood, because land costs were lower there.	Between Groups	4.729	3	1.576	.413	.744
	Within Groups	449.935	118	3.813		
	Total	454.664	121			
John Maynard, CPA, a staff auditor with ABC & Associates, a CPA firm, goes into the office on the weekend to use the firm's tax software to prepare the tax returns for his parents and several of his relatives.	Between Groups	8.268	3	2.756	.697	.555
	Within Groups	466.330	118	3.952		
	Total	474.598	121			

Appendix P – Ordinal Logistic Regression

Results utilizing an ordinal logit regression for instances in which correlation with age overlapped with correlation with difference by profession or difference by degree.

Ordinal logistic regression for vignette 1

	Estimate	Std. Error	Sig.
Age	-0.047	0.016	0.004
Public Accountant	1.127	1.02	0.269
Educator	0	.	.
Bachelor's	-0.292	1.072	0.785
Master's	-1.093	0.912	0.231
Doctorate	0	.	.

Ordinal logistic regression for vignette 3

	Estimate	Std. Error	Sig.
Age	-0.013	0.011	0.004
Public Accountant	0.971	0.555	0.08
Educator	0	.	.
Bachelor's	-0.744	0.634	0.241
Master's	-0.121	0.411	0.768
Doctorate	0	.	.

Ordinal logistic regression for vignette 8

	Estimate	Std. Error	Sig.
Age	-0.015	0.009	0.103
Public Accountant	0.124	0.486	0.799
Educator	0	.	.
Bachelor's	0.607	0.551	0.271
Master's	0.056	0.323	0.863
Doctorate	0	.	.

Ordinal logistic regression for vignette 19

	Estimate	Std. Error	Sig.
Age	-0.029	0.009	0.002
Public Accountant	0.827	0.497	0.096
Educator	0	.	.
Bachelor's	-0.771	0.568	0.175
Master's	-0.188	0.342	0.582
Doctorate	0	.	.

Ordinal logistic regression for vignette 25

	Estimate	Std. Error	Sig.
Age	-0.017	0.01	0.088
Public Accountant	0.1	0.516	0.846
Educator	0	.	.
Bachelor's	-0.386	0.599	0.519
Master's	0.289	0.346	0.404
Doctorate	0	.	.

Ordinal logistic regression for vignette 27

	Estimate	Std. Error	Sig.
Age	-0.001	0.009	0.920
Public Accountant	-0.458	0.732	0.532
Educator	0.771	0.593	0.194
Bachelor's	0.668	1.331	0.616
Master's	0.621	1.302	0.633
Doctorate	0.467	1.308	0.721