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The Impact of Deliberation Time on Ethical Decision Quality: A Study of Early-Career Professional Accountants

Ricki Livingston

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THE IMPACT OF DELIBERATION TIME ON ETHICAL DECISION QUALITY: A STUDY OF EARLY-CAREER PROFESSIONAL ACCOUNTANTS

by

Ricki W. Livingston

A Dissertation Submitted in Partial Fulfillment of the Requirement for the Degree

of

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ACCEPTANCE

This dissertation was prepared under the direction of the *RICKI W. LIVINGSTON* Dissertation Committee. It has been approved and accepted by all members of that committee, and it has been accepted in partial fulfillment of the requirements for the degree of Doctor of Business Administration in the J. Mack Robinson College of Business of Georgia State University.

Richard Phillips, Dean

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DEDICATION

I dedicate this dissertation to the One who gave me everything I have ever needed, my faithful Lord and Savior, Jesus Christ. I thank Him for the timeless moral principles provided in His best-selling literary work, The Holy Bible. I thank Him for surrounding me with a tremendous support system including the following wonderful people:

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To all of those mentioned in the dedication and acknowledgements,

"The Lord bless you and keep you;

The Lord make His face shine upon you,

And be gracious to you;

The Lord lift up His countenance upon you,

And give you peace."

-Numbers 6:24-26

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ABSTRACT

The Impact of Deliberation Time on Ethical Decision Quality: A Study of Early-Career Professional Accountants

By

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April 2021

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Ethical decision-making is central to the study of the professional accounting practice. When professional accountants engage in decision-making without consideration to ethics, decision quality declines and stakeholders suffer severe financial implications. Situational factors such as time variation may influence the accountant's ability to make a sound ethical decision. The result is an increased potential of fraudulent behavior. The Fraud Triangle Theory postulates three factors that must be present for fraud to occur: Rationalization, Pressure, and Opportunity (Cressey, 1973). Recent disruptive trends in professional accounting such as workforce reduction and automation potentially impact ethical decision-making. Both trends result in a change in workload and a new variation in time for deliberation and rationalization. However, despite these substantial changes to the work situation, stakeholders continue to demand stability in ethical decision making. This study adds evidence to the existing body of knowledge in behavioral accounting examining the impact of deliberation time on ethics in decision making in early-career professional accountants. It is hypothesized that deliberation time influences the quality of the ethical decision. Professional work experience and gender are examined as moderators in both situations.

This dissertation collects data from a panel of 363 master of accounting students over four years in a North American university by presenting scenarios portraying ethical dilemmas in professional accounting. An analysis of student responses to ethical dilemmas using descriptive statistics and hierarchical regression analysis serves to classify the findings based on situational and individual factors. Six hypotheses are tested to find that deliberation time influences ethical decisions. These findings support the Fraud Triangle Theory which posits that rationalization may be a factor leading to unethical behavior. Additionally, these findings serve to inform CPAs and professional accounting firms about the importance of workload balancing and ethical awareness.

Keywords: Professional Accounting, Ethics, Fraud Triangle Theory, Decision Quality, Deliberation, Decision Making, Time, and AICPA Code of Professional Conduct

“Blessed are those who hunger and thirst for righteousness, for they will be satisfied.”

-Matthew 5:6

I INTRODUCTION OF DISSERATION RESEARCH

In this 2-paper dissertation, I examine the relationship between the time it takes to deliberate a decision and the ethicality of the decision in the context of early-career professional accountants. This introduction to my dissertation begins with the motivation of the study, background, theoretical framing, research design, and summary of findings. Following this introduction, Paper 1 presents a full theory-based study. Paper 1 is prepared for submission to a peer-reviewed academic journal. Paper 2 presents an application of the findings from Paper 1, along with recommendations for the professional accounting practice. Paper 2 is prepared for submission to a peer-reviewed practitioner journal.

I.1 Research Motivation

According to the 2020 Global Study on Occupational Fraud and Abuse issued by the Association of Certified Fraud Examiners in February 2021, external audits were the source of detection in only 4 percent of 2,504 organizations analyzed in 125 countries. Internal audits accounted for 15 percent of detection. Internal controls seemed almost not worthwhile, finding only 2 percent of known fraud cases. Further, the study revealed the following information about the organizations:

- Fraud accounts for $3.6 billion in total revenue losses.
- Fraudulent behavior is undetected for 14 months with approximately $8,300 per month in revenue losses.
- Organizations lose approximately 5% of their revenue each year.
- Asset misappropriation schemes account for an estimated 86% of all cases.
- Financial statement fraud schemes account for an estimated 10% of all cases.

- Organizations with both fraud awareness programs and on-going ethics training saw more success with employees formally reporting fraud awareness versus those without training.

Despite increasingly sophisticated fraud detection techniques, tips are still by far the most common way fraud is discovered, accounting for 43 percent of detected cases. All acts of fraud, or unethical behavior, share a commonality: They begin with a temptation, which is followed by time for deliberation. Ultimately a decision must be made to either engage in unethical behavior or hold to a higher moral standard. Therefore, this study presents research focusing on time taken for deliberation and its effect on ethical decision making in the accounting profession.

Ethical decisions in the accounting profession are essential to the going concern of business and overall economic health. The ethicality of a decision comes into question when accountants are faced with variations in time available for decision making. Ethical decision making can suffer under extreme workloads; however, time allowed for extensive deliberation may also lead to rationalization and justifying an unethical decision. Current research on the relationship between deliberation time and ethical decision making specific to the accounting profession is contradictory and lacking. Therefore, a need exists for further research on the impact of deliberation time and ethical decision making in accounting.

Multiple factors contribute to the variation of time in professional accounting. Most obvious is that of heavy workloads based on tax filing deadlines, complicated audit assignments and period-end financial reporting. The profession is also undergoing a reduction of workforce in an attempt to gain economic efficiencies. Further, there are new expectations of analytical skills in addition to the common accounting body of knowledge. With this shift in workloads, it is important to understand if variation in time for deliberation impacts ethical decision making.

Prior research in this area is found primarily in psychology and general business literature. However, the findings are conflicting. Overall, the relationship between deliberation time and decision quality has followed an inverted u-shape pattern. Both quick decisions and decisions that take longer for deliberation were found to be more unethical suggesting that there is a need for time optimization. (Moberg, 2000; Amabile, 1996; Scott and Bruce, 1994; Andrews and Farns , 1972). However, other studies find that quick decisions are more ethical than deliberated decisions (Shalvi, Eldar, & Bereby-Meyer, 2012). Yet other studies find that quick decisions are less ethical than deliberated decisions (Lai, Sasmita, Gul, Foo, & Hutchinson, 2018). This study revisits the conflict in prior literature as it applies to early-career professional accountants. Therefore, my research question is:

Is there an association between deliberation time and ethical decision quality in early-career professional accountants?

The following sections of this introduction will include background on the measurement of ethical decision making, a brief literature review, theoretical context, research design, and summary of findings.

I.2 Background

Defining Ethical Decision Quality

Scholars define *decision quality* as the judgement of quality at the moment the decision is made. Decision quality is not measured by the action that follows as the result of the decision (Howard, 1988; Raiffa, Hammond, & Keeney, 2002). Decision quality is composed of six elements: *framing, alternatives, relevant and reliable information, clear values and tradeoffs, sound reasoning,* and *commitment to action* (Matheson & Matheson, 1998). In this study, I focus

on the *values* element of decision quality through the lens of ethicality, thus I arrive at my dependent variable, *Ethical Decision Quality* (EDQ).

Ethics is derived from the Greek word *ethos*, simply meaning "custom, habit, character or disposition" (Merriam-Webster, 2019). The term used in isolation does not self-postulate behavior as *right* or *wrong*, rather it requires a referent system as a basis for judgement. In this study, the referent system used to determine ethical decision quality in the early-career accounting profession is the American Institute of Certified Professional Accountants (AICPA) Code of Professional Conduct (CPC).

I.3 Literature Review

Ethical Decisions in Professional Accounting

Much of the research related specifically to ethical decisions in professional accounting has only recently emerged (Bampton & Cowton, 2013; Uysal, 2010). In 1989, the American Accounting Association (AAA) introduced the journal, *Behavioral Research,* in an attempt to increase accounting ethics scholarship. Furthermore, the National State Boards of Accounting (NASBA) Center for Public Trust in Accounting (CPT) calls for more scholarship by the linking of theory to practice. Yet, Bampton and Cowton (2013) noted that the majority of prior research focused on assessing attitudes and biases toward the situation instead of actual behavioral decisions. They also called for more research examining accounting ethics interventions.

Unsurprisingly, the primary theme in prior accounting ethics research involves fraud and corruption. Ferrell & Ferrell (2011) show that the failure of Enron was due to institutional factors and systematic leadership deficiencies that served to influence decision making. Lail, MacGregor, Marcum and Stuebs (2017) examines the role of virtues and concludes that virtuous professionalism should be addressed first in an effort to repair damage done to financial

reporting systems caused by past fraud. Further studies provide insights that the role of training failed to prevent ethical lapses in decision making (Craft, 2013).

Codes of Professional Conduct

Ethical decision making requires agreement between and among organizations to define ethical behavior. In an attempt to achieve agreement, organizations adopt a code of conduct to clearly define values and mitigate potential conflicts. When people possess knowledge of clearly summarized principles in the form of rules, the feasibility of application in lower deliberation time exists (Moberg, 2000). However, the impact of a code varies based on the industry (Hwang, Staley, Chen & Lan, 2008; Chow, Wu & Chan, 2009). Also, pressures to conform with standards has been shown to negatively impact moral reasoning (Abdolmohammadi, Gabhart, & Reeves, 1997). To date, my search of the literature reveals that no prior research has tested deliberation time in relation to ethical dilemmas reflecting the AICPA CPC.

I.4 Theoretical Framing

The majority of prior research in accounting ethics is characterized by an overall absence of theoretical framing and explicit hypothesis (Randall & Gibson, 1990; Weber, 1992; Robertson,1993). Therefore, I call upon the Fraud Triangle Theory, a seminal accounting theory by Donald R. Cressey (1973), for framing the theoretical study and the derivation of my independent variables. The Fraud Triangle Theory claims that fraudulent behavior occurs when there attributes converge: Opportunity, Rationalization, and Pressure (Cressey, 1973). In Paper 1, I seek to contribute to the study of this theory by providing evidence of the association of deliberation time with ethical decision quality through the lens of two of the three theoretical components: Rationalization and Pressure. In Paper 2, I seek to apply the findings from Paper 1

to inform accounting firms of potential issues resulting from the variation of deliberation time. I conclude with recommendations to mitigate risk of fraudulent behavior.

I.5 Research Design

The theoretical study in Paper 2 examines each of the six principles from the AICPA CPC against deliberation time. I use secondary data that I previously collected through a longitudinal field experiment. In the study, early-career professional accountants are presented with various ethical dilemmas. Ethical dilemmas are assessed with a questionnaire based on measures derived from the principles of the AICPA CPC. Hierarchical regression is used to test the data.

I.6 Summary of Findings

In this study, I find that deliberation time is related to ethical decision quality. Specifically, a longer time taken for deliberation results in a lower ethical decision on five of the six AICPA code principles including *Responsibilities, Public Interest*, *Integrity, Objectivity and Independence*, and *Scope and Nature of Services*. Although the results were not statistically significant, *Due Care* also shows a decline in ethicality as deliberation time increases. In a year-over-year regression analysis, I find that ethicality was higher in 2020 versus 2017, 2018, and 2019, yet ethicality declined with the deliberation time regardless of the year.

This evidence suggests that accounting firms experiencing time variations resulting from a shift in the workforce may experience undesirable ethical consequences. Due to rationalization, ethical decisions may suffer under excessive time for deliberation. Short-term, myopic efficiencies may result in long-term negative economic impact through poor ethical decision quality. Accounting firms may consider strategies for occasional rebalancing and

optimizing of workload across the staff. Accounting educators, individual CPAs, and accounting firms may offset concerns with ethical decisions by continued exposure to the principles of the AICPA CPC.

REFERENCES

AICPA. Code of Professional Conduct.

Abdolmohammadi, M.J., Gabhart, D.R.L. & Reeves, M.F. (1997). Ethical Cognition of Business Students Individually and in Groups. *Journal of Business Ethics,* 16**,** 1717–1725. https://doi.org/10.1023/A:1005709723798

Amabile, T. M. 1988. "A Model of Creativity and Innovation in Organizations." In B. M. Staw, and L. L. Cummings (Eds.), *Research in Organizational Behavior,* Volume 10. Greenwich, CT: JAI Press.

Andrews, F. M. and G. F. Farns. 1972. Time Pressure and Performance of Scientists and Engineers: A Five Year Panel Study. *Organizational Behavior and Human Performance*, Vol. 8, pp. 185-200.

Association of Certified Fraud Examiners, (2021). 2020 Global Study on Occupational Fraud and Abuse. *CPATrendlines.com.*

Bampton, R. & Cowton, C. (2013). Taking Stock of Accounting Ethics Scholarship: A Review of the Journal Literature. *Journal of Business Ethics*, *114*(3), 549–563. https://doi.org/10.1007/s10551-012-1341-3

Chow, W.S., Wu, J.P. & Chan, A.K.K. (2009). The Effects of Environmental Factors on the Behavior of Chinese Managers in the Information Age in China. *J Bus Ethics* 89, 629. https://doi.org/10.1007/s10551-008-0022-8

Craft, J. L. (2013). A review of the empirical ethical decision-making literature: 2004–2011. *Journal of Business Ethics*, 117(2), 221–259.

Cressey, D.R., (1973). Other People's Money. *Montclair*. Patterson Smith. 30.

ethos. (2019). In *Merriam-Webster.com.* Retrieved December 23, 2019, from https://merriam-wesbster.com/dictionary/ethos

Ferrell, O.C. and Ferrell, L. (2011). The responsibility and accountability of CEOs: the last interview with Ken Lay. *Journal of Business Ethics*, 100:2,209-219.

Howard, R. A. (1988). Decision Analysis: Practice and Promise. *Management Science*, *34*(6), 679–695. https://doi.org/10.1287/mnsc.34.6.679

Hwang, D., Staley, B., Te Chen, Y., & Lan, J. S. (2008). Confucian culture and whistle‐blowing by professional accountants: an exploratory study. *Managerial Auditing Journal.*

Lai, K. M. Y., Sasmita, A., Gul, F. A., Foo, Y. B., & Hutchinson, M. (2018). Busy Auditors, Ethical Behavior, and Discretionary Accruals Quality in Malaysia. *Journal of Business Ethics, 150*(4), 1187–1198.

Lail, B., MacGregor, J., Marcum, J. Stuebs, M.. (2017). Virtuous Professionalism in Accountants to Avoid Fraud and to Restore Financial Reporting. J Bus Ethics 140, 687–704. https://doi-org.ezproxy.lib.uconn.edu/10.1007/s10551-015-2875-y.

Matheson, D., & Matheson, J. (1998). The Smart Organization: Creating Value through Strategic R&D. *Harvard Business School Press*, Boston, MA. 298 pp.

Moberg, D.J. (2000). Time Pressure and Ethical Decision-Making: The Case for Moral Readiness. *Business and Professional Ethics Journal*, 19(2), 41-67. https://doi.org/10.5840/bpej200019214

National State Boards of Accountancy, Center for Public Trust. (2021). *About Us.* Retrieved on February 11, 2021, from https://thecpt.org/about-us/.

Raiffa, H., Hammond, J. S., & Keeney, R. L. (2002). Smart Choices: A Practical Guide to Making Better Decisions. In *Harvard Business School Press Books* (p. 1).

Randall, D. M., & Gibson, A. M. (1990). Methodology in business ethics research: A review and critical assessment. *Journal of Business Ethics*, 9(6), 457–471.

Robertson, D. C. (1993). Empiricism in business ethics: Suggested research directions. J*ournal of Business Ethics*, 12(8), 585–599.

Scott, S. G., & Bruce, R.A.1994. Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. *Academy of Management Journal*, Vol. 37, pp. 580-607.

Shalvi, Shaul, Ori Eldar, and Yoella Bereby-Meyer. (2012). "Honesty Requires Time (and Lack of Justifications)." *Psychological Science,* 23.10: 1264-270. Web.

Uysal, Ö. Ö., (2010). Business ethics research with an accounting focus: A bibliometric analysis from 1988 to 2007. *Journal of Business Ethics*, 93(1), 137–160.

Weber, J. (1992). Scenarios in business ethics research. *Business Ethics Quarterly*, 2(2), 137–160.

Zhong, C.-B., Ku, G., Lount, R., & Murnighan, J. (2010). Compensatory Ethics. *Journal of Business Ethics*, 92(3), 323–339. https://doi-org.ezproxy.lib.uconn.edu/10.1007/s10551-009-0161-6

II PAPER 1: THE IMPACT OF DELIBERATION TIME ON ETHICAL DECISION QUALITY: A STUDY OF EARLY-CAREER PROFESSIONAL ACCOUNTANTS

II.1 INTRODUCTION

The concept of integrity in professional accounting through sound ethical decision making has been prevalent in behavioral accounting and finance literature for some time. The practice of accounting touches every facet of business operations, serving as the common thread interwoven throughout stakeholders both within the practice and external to the practice. The public accounting profession is unique from that of medical doctors or lawyers in that the public accountant is not only obliged to serve their clients, but also their colleagues and the public at-large. Due to the fiduciary nature of the profession, certified public accountants (CPAs) are held to elevated ethical standards as measured by the American Institute of Certified Professional Accountants (AICPA) Code of Professional Conduct (CPC).

The primary objective of professional accounting is to provide accurate and reliable information so that all economic stakeholders have the best opportunity to make well-informed business decisions. Failure to maintain integrity through ethical decision making results in derogatory events that are minor, such as the use of a company-issued computer for checking personal email, or severe, such as scandals akin to Enron (Healy & Palepu, 2003). Given that unethical decisions may severely impact individuals (e.g., loss of income, incarceration for fraud) or organizations (e.g., bankruptcy, massive layoffs), ethical decision making in professional accounting has received increased attention (Ness & Connelly, 2017). Schroeder, Clark, and Cathey (2017) note: "If behavioral finance [accounting] is to be successful in understanding financial institutions and participants, and if individuals and policy-makers want to make better decisions, they must take into account the true nature of people with their imperfections and bounded rationality."

Professional accounting is reputed for certain problematic characteristics. Crushing workloads and continual workforce reductions are long-standing concerns. Over the last decade, there has been an alarming reduction in the demand for professional accountants even in the face of predicted economic growth (McCabe, Cohn, Browning, Russell, & Stimpson, 2017). A 2021 study published by the Bureau of Labor Statistics reported a downward adjustment in their estimate of job growth rates in the accounting profession. Originally, the growth rate was predicted to be at 10.7% from 2014 to 2024. The adjustment now predicts an average 4% growth rate until 2029. However, according to the January 2021 International Monetary Fund World Economic Outlook Update, the world economy is projected to continue growing at approximately 5% through 2022. This decline in demand is estimated to occur through consolidations of current positions and suspension of restaffing vacant positions. As a result of the shift in the workforce, professional accountants incur additional workload, and subsequently, a new variation of time for deliberation and consideration of implications when faced with ethical dilemmas.

More recently, disruptive technologies, including robotic process automation (RPA) and optical character recognition (OCR), impact the time allowed for ethical decision making. As of 2021, RPA serves to automate about 50% of manual accounting processes in audit, attestation, and tax (Cooper, Holderness, Sorenson, & Wood, 2019). While efficiencies in both processing time and costs are saved, a shift occurs in the decision making experience of the accountant. Instead of an accountant reviewing and entering the information of a single invoice into an accounting information system, the accountant now must analyze batches of invoice data that have been scanned into the system using RPA and OCR technologies (Cooper et al. 2019). The increase of technology and automated processes serve to concentrate an increased load of

decision responsibilities across fewer accountants (McCabe et al., 2017). As a result, accountants are now tasked with a higher concentration of decision making tasks that possess a broader scope and increased magnitude of ethical implications.

Due to technological advances, today's entry-level accountants are now expected to have both the basic knowledge of accounting along with advanced data analytics skills. Accountants are increasingly entrusted with more tasks due to the belief that sophisticated internal controls and internal audits will detect any unethical decisions. Hence, early career professional accountants are tasked with a greater number of decisions.

The influence of deliberation time and decision making has been examined in multiple outlets. In the book *Blink*: *The Power of Thinking Without Thinking,* author Malcolm Gladwell (2005) discusses the phenomenon of quick decisions and the resulting conclusions. He posits that the human brain has capabilities of arriving at a conclusion through an internal computer, or adaptive unconsciousness. This capability is further heightened with repeated exposure to data. However, the quality of the conclusion is contingent on the quality of the data. Therefore, he suggests that humans should be wary of their own instincts. However, Gladwell states that instinctive responses may be influenced through education and therefore controlled (Gladwell, 2005).

Prior scholarly research in psychology and business literature has examined the concept of deliberation time in relation to ethical decision making. Yet, recent studies report conflicting results. Overall, the relationship between deliberation time and decision quality has followed an inverted u-shape pattern (Moberg, 2000; Amabile, 1988; Scott and Bruce, 1994; Andrews & Farns, 1972). Research by Lai, Sasmita, Gul, Foo, & Hutchinson (2018) finds that "auditor busyness" arises when auditors accept more clients than they are able to serve effectively. As a

result of decisions made quickly, the audit suffers from inferior due diligence and infringed ethical guidelines. Conversely, a study by Shalvi, Eldar, and Bereby-Meyer (2012) reveals that ethical decision quality declines with the passage of time, as time allows for rationalization. This study revisits the question of the impact of deliberation time on ethical decision making by early-career professional accountants.

The expectations and demands for integrity and ethicality are evident in both the early-career professional accounting environment and the academic context of a professional master of accounting degree program. Both professional accounting and graduate university environments posit heavy workloads along with requirements for ethical behavior. Gaining knowledge through the examination of time taken for deliberation in relation to decision quality will enlighten leadership with new opportunities to improve both institutions.

II.1.1 Research Question

Therefore, this study seeks to answer the question:

Is there an association between deliberation time and ethical decision making in early-career professional accounting?

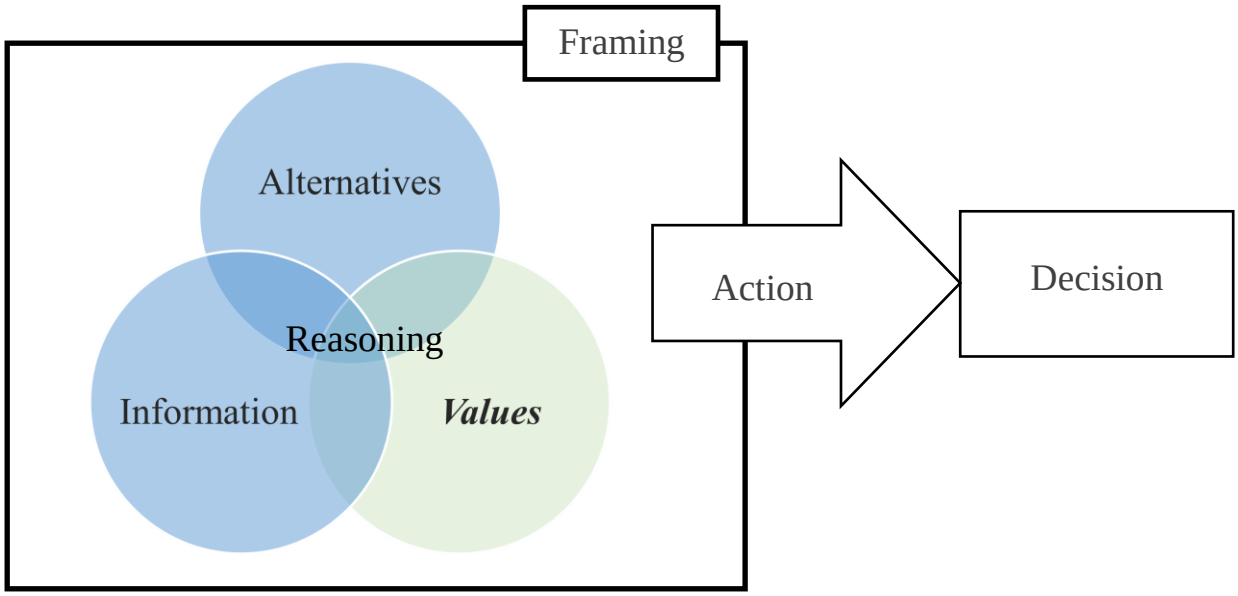
I use secondary data collected by a longitudinal field experiment to examine the relationship between deliberation time and ethicality when early-career professional accountants are presented with various ethical dilemmas. Ethical dilemmas are assessed with a questionnaire based on measures derived from the principles of the AICPA CPC. I find evidence that deliberation time is associated to ethical decision quality on 5 of the 6 principles. Understanding the distinction between the six principles and the related ethical outcome is important as firms may impose varying compensating processes depending upon the context of each principle.

II.2 BACKGROUND

II.2.1 Defining Ethical Decision Quality

Scholars define *decision quality* as the judgement of quality at the moment the decision is made. Decision quality is not measured by the action that follows as the result of the decision (Howard 1988, Raiffa, Hammond, & Keeney, 2002). Decision quality is composed of six elements: *framing, alternatives, relevant and reliable information, clear values and tradeoffs, sound reasoning,* and *commitment to action* as shown in Figure 1. *Framing* provides specifics about the issues to be decided. Within the frame, *alternatives* defines the choices available; *information* details knowledge and assumptions associated with the alternatives; and *values* reflect the morals, desires and goals for achievement. *Reasoning* combines *information, alternatives,* and *values,* forming the decision basis. *Action* is the election of the choice leading to the decision (Matheson & Matheson, 1998). In this study, I focus on the *values* element of decision quality through the lens of ethicality, thus I arrive at my dependent variable, *Ethical Decision Quality* (EDQ).

Figure 1: Elements of the Decision Quality Process



The word *ethics* used in isolation is often inappropriately assumed to inherently possess a directional characteristic that is either "right" or "wrong". However, the term originates from the Greek word *ethos*, simply meaning "custom, habit, character or disposition" (Merriam-Webster, 2019). The term used in isolation does not self-postulate behavior as right or wrong, rather it requires a referent system as a basis for judgement. Simply stated, ethics is a set of moral principles (Corts, 1968). *Morals* are "principles of right and wrong behavior and the goodness or badness of human character" (encyclopedia.com, 2021). It is within the referent system which is comprised of moral principles defining right and wrong that an ethical decision may be judged right (high quality) or wrong (low quality). Therefore, the term ethics is neutral until a specified set of moral principles is applied to the context of the decision. In this study, the referent system of moral principles used to determine ethical decision quality in the early-career accounting profession is the AICPA CPC.

The AICPA CPC was first introduced in 1973, revised in 1988, and updated in 2014. It is composed as a principles-based standard, versus a rules-based standard, and is applicable to all members of the AICPA. The principles inform general norms providing a framework for more specific rules. Though there are various codes of conduct within professional accounting, the AICPA code is most widely adopted code by the states for the organization of certified public accountants (CPAs).

The next section presents a review of the literature, theoretical framing and hypothesis development. This is followed by an explanation of the experimental design, description of the research instrument, and method of facilitation. Results of the statistical analyses are presented. A discussion follows explaining the findings and implications for ethical decision making. I conclude with limitations and recommendations for future research.

II.3 LITERATURE REVIEW

This section presents a study in the context of prior accounting research on ethical decision making. I focus specifically on literature regarding the expectations for ethicality and the role of the AICPA CPC in professional accounting. I follow this with a presentation of literature on deliberation time, and conclude with a brief presentation of findings from prior research regarding the influence of professional work experience and gender on ethical decision making.

II.3.1 Ethical Decision Making

The study of ethical decision making is covered extensively in prior research including psychology and general business streams. Over a period from 1975 to 2015, approximately 500 articles were published on empirical research in ethical decision making (Lehnert, Craft, Singh & Park, 2016). The prevalence of scholarship is also evidenced by the number of meta-analysis on

ethical decision making conducted over the last three decades (Lehnert et al., 2016; Ford & Richardson, 1994; Loe, Ferrell & Mansfield, 2000; O'Fallon & Butterfield, 2005; Craft, 2013; Lehnert, Park and Singh, 2014). The majority of the studies covered in the meta-analysis are focused in non-business psychology or general business ethics journals.

II.3.2 Ethical Decision Making in Professional Accounting

Much of the research related specifically to ethical decision making in professional accounting has only emerged in the last two decades (Brampton & Cowton, 2013; Uysal, 2010). In the mid to late 1980's, the American Accounting Association (AAA), a professional association which publishes academic journals, organized the AAA Ethics Research Symposium to bring more attention to the importance of the topic. In 1989, the AAA launched the *Behavioral Research in Accounting* journal. This journal is where the majority of contemporary literature on professional accounting ethics is presented. Within this journal, a search of keywords "ethics" and "decision" resulted in 21 articles published from 1989 until 2020.

Furthermore, the National State Boards of Accounting Center for Public Trust in Accounting (NASBA CPT) (2021) calls for more scholarship by the linking of theory to practice. Specifically, their mission statement declares, "Business ethics should consist of more than testing on the code of ethics, but should provide new knowledge to enhance business practices." Though I could argue that all professional accounting decisions are ethical decisions, prior empirical research specific to ethical decision making within the field of professional accounting is limited. In Bampton & Cowton's (2013) systematic review of previously published accounting ethics scholarship, they failed to find any research to report within their category, *accounting theory*. Though the research specific to ethical decision making in accounting is limited, several related articles contribute to my review.

Bampton and Cowton (2013) noted that the majority of prior research focused on assessing attitudes and biases toward the situation instead of actual behavior decisions. They also recommended that prior work in the field suffered from a lack of research on the impact of accounting ethics interventions and circumstances among various types of people. Studies have been performed examining the separability of personal ethics and biases from firm-level ethics. "Due to the design of our minds, mental traps and biases frequently get between our best intentions and true decision quality" (Spetzler, Winter & Meyer, 2016). No matter if the final impact of a decision is at the individual level or through the collaborative efforts at the firm level, the inception of every decision is within a unique individual. Thus I examine ethical decision making using the early-career professional accountant as my level of analysis.

Unsurprisingly, the primary theme in prior accounting ethics research involves fraud and corruption. Ferrell & Ferrell (2011) shows that the failure of Enron was due to institutional factors and systematic leadership deficiencies that served to influence decision making. Lail, MacGregor, Marcum and Stuebs (2017) examines the role of virtues and concludes that virtuous professionalism should be addressed first in an effort to repair damage done to financial reporting systems caused by past fraud. Further studies suggest that formal ethical training failed to prevent ethical lapses in decision making (Craft, 2013).

II.3.2.1 Codes of Professional Conduct

Ethical decision making requires agreement between and among organizations to define ethical behavior. In an attempt to achieve agreement, organizations adopt a code of conduct to clearly define values and mitigate potential conflicts. When people possess knowledge of clearly summarized principles in the form of rules, the feasibility of application in lower deliberation

time exists (Moberg, 2000). The overarching purpose of a code of conduct is alignment of our personal worldview with a prescribed professional work ethic.

A study by Brink, Eaton, Grenier, and Reffett (2017) finds that implementing a code of conduct deters unethical behavior in online labor markets. Though a strong code of conduct results in higher ethical decisions (Hwang, Staley, Chen, & Lan, 2008; Chow, Wu, & Chan, 2009), the sum-total impact of the code may face competing pressures depending on the industry. Prior studies find that pressure of conformity with rules-based standards, such as are found in Generally Accepted Accounting Principles (GAAP), may be a factor for professional accountants' low scores when measured on ability to reason morally (Abdolmohammadi, Gabhart, & Reeves, 1997).

However, a code of conduct in isolation did not improve the ethical behavior of internal auditors when faced with an ethical dilemma (O'Leary & Stewart, 2007). A code of conduct must be coupled with economic incentives to positively influence ethical behavior in remote work environments (Brink, et at., 2017). Additionally, penalties may deter unethical behavior (Gurley, Wood, & Nijhawan, 2007). No studies were found to have examined the relationship between deliberation time and ethical decision quality through the lens of the AICPA CPC.

II.3.2.2 Deliberation Time in Decision Making

Research from psychology, general business, and accounting reveal prior findings related to deliberation time and ethical decision quality. However, the results are conflicting. Some studies find that a quick decision results in higher ethical decision quality, or that time taken for deliberation returns a lower ethical decision quality. Verschuere, Köbis, Bereby-Meyer, Rand, & Shalvi (2018) finds that telling the truth requires less time than telling a lie, as lying requires greater cognitive resources. Quick decisions are based on simple or familiar rules, instead of

lengthy deliberations, and subsequently result in the decision-maker fixating on one alternative while disregarding all others (Simon, 1960; Bruner, Goodnow, & Austin, 1956; Luchin,1942). A seminal study in decision making by Ben-Zur and Breznitz (1981) finds that a shorter deliberation time revealed increased risk aversion by the decision maker resulting in a higher ethical decision quality. A study by Svensson and Wood (2005) finds that deliberation time is crucial in managing the quality of core values in an organization. And, decisions should be made quickly to minimize core value compromise. Zhong, Ku, Lount, and Murnighan (2010) finds that a longer timeframe for deliberation resulted in lower ethical decision quality. In their study, prolonged introspection diverted respondents away from initial affective reasoning and ethical reactions. Finally, Moberg (2000) concludes that short deliberation times leads to less rationalization. These findings that show decisions made within lower deliberation times are more ethical are also in agreement with the Fraud Triangle Theory, which posits that time for rationalization leads to increased chances of justifying unethical decisions (Cressey, 1973).

Other studies show just the opposite. Quick decisions result in a lower ethical decision quality and time taken for deliberation of decision consequences increases ethical decision quality. Research by Lai, Sasmita, Gul, Foo, and Hutchinson (2018), and Koh, Scully, and Woodliff (2018) show that decreased deliberation time reduces ethical decision quality. In the study by Lai et al. (2018), findings show that the size of an individual auditor's client base is associated with auditor decision quality. Larger client bases resulted in lower auditor decision quality as proxied by the number of audit failures.[1] Koh, et al. (2018) reports that decreased

[1] Audit failure is viewed as an ethical lapse in the accounting profession (Public Company Accounting Oversight Board, PCAOB, 2020).

deliberation time has a negative impact on ethical decision quality in a business environment, though the ethical decision quality is somewhat higher if the decreased time is anticipated. Dorner (1990) finds that decisions made quickly are more "ballistic" as they do not consider all the consequences of the decision. In the realm of a positively positioned decision, such as one allowing the opportunity to help another person, a quick decision has been shown to decrease citizenship behavior (Hui, Organ & Crooker, 1994).

II.3.3 Individual Factors

II.3.3.1 Gender

By far, gender receives the greatest attention in prior research on ethical decision making (Lehnert, et al., 2014). Yet even with this extensive examination, contradictory findings exists. Although most studies find that gender is not related to ethical decision making, those studies with significance note that females are more ethical than males (Lehnert et al., 2014; Craft, 2013; O'Fallon & Butterfield, 2005; Tse & Au, 1997). Research shows that there is a difference between moral orientation between genders (Baker & Hunt, 2003) and that responses to various ethical dilemmas varied based on gender (Christie, Kwon, Stoeberl & Baumhart, 2003). Other research finds that females demonstrate a higher sensitivity and less tolerance of ethical issues (Lehnert, et al., 2014; Eweje & Brunton, 2010; Ameen, Guffey & McMillan ,1996). Furthermore, females used a harsher judgement than males when analyzing ethical case scenarios (Fleishman & Valentine, 2003). Females also were higher in their ability to enact moral reasoning (Herington & Weaven, 2008; Eynon, Hill, & Stevens, 1997). In a study on perception, Krambia-Karpardis and Zopiatis (2008) finds that females are more ethical than males. Specific to accounting ethics research, Bernardi and Donald (1997) show that females exceed males in moral development and that low-moral-development females along with high-

moral-development males are exiting the profession. These findings suggest that the profession has effectively managed to retain low-morally-developed males and high-morally-developed females. Likewise, Sweeney (1995) and Etherington and Schulting (1995) find that gender plays a role in moral reasoning for professional accountants.

Conversely, previous studies examined the relationship between moral intensity and ethical decision making. To this end, Nguyen, Basuray, Smith, Kopka, and McCulloh (2008) reports that gender does not moderate the relationship between ethical decisions and moral intensity. In a study using accounting students, Chan and Leung (2006) find no association between gender and ability to recognize ethical dilemmas using case scenarios.

II.3.3.2 Professional Experience

Prior research shows minimal differences in ethical reasoning between students and seasoned professionals. A study by Emerson, Conroy and Stanley (2007) shows there is little significance between accounting students and accounting professionals with longer work experiences. Scofield, Phillips and Bailey (2004) finds no significance based on level of accounting position at the firms. However, in a study on ethical decision making of internal auditors, O'Leary and Stewart (2007) shows that more experienced auditors made better ethical decisions in some cases. Conversely, Ponemon and Gabhart (1993) finds that moral awareness is higher at the staff-level and slowly declines as the accountant works up to the partner level.

II.4 THEORETICAL FRAMING

Prior research in accounting ethics is characterized by an absence of theoretical framing and explicit hypothesis (Randall & Gibson, 1990; Weber, 1992; Robertson, 1993). Sir Ronald Fisher, a noted British statistician, (cited in Cochran, 1965) calls for the substantiation of correlation-based methods by "making your theories elaborate" (pg. 252). Miles and Shevlin

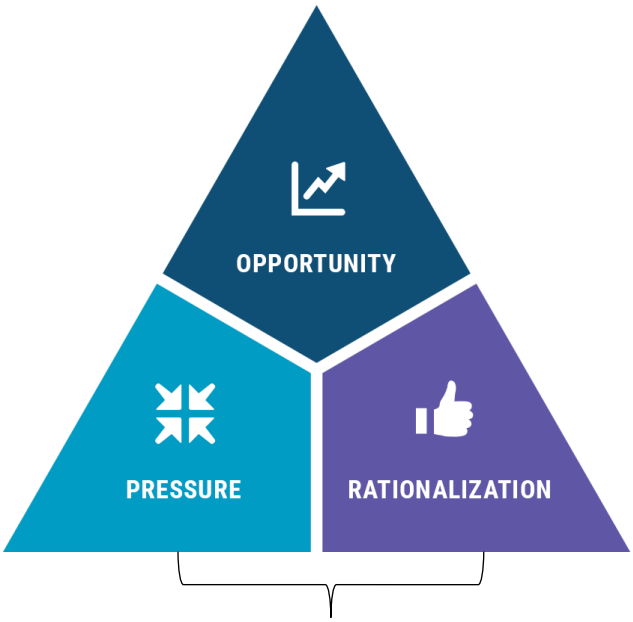
(2010) clarify Fisher's position by stating that the theory itself should determine the independent variables. By this, analyses move from correlational inferences to causal inferences. Abelson (1995) states that there should be no relationships that are not explained by the hypothesized causal mechanism. Therefore, we call upon the Fraud Triangle Theory for framing the study as shown in Figure 2.

II.4.1 Fraud Triangle Theory

The concept of organizational deviance, a behavior which ultimately leads to fraud, has been studied for decades (Vaughan, 1999). Scholars and practitioners share a common goal of understanding specific individual or situational factors that ultimately lead to detection of unethical behaviors. The field of Fraud Examination emerged by unifying the study of two distinct disciplines: accounting and criminology. Morales, Gendron and Guénin-Paracini (2014) posit that the Fraud Triangle, a framework developed by D.R. Cressey (1973), serves as the basis for this unified discipline. The widespread propagation of the Fraud Triangle yields debate encompassing the evaluation, monitoring, and normalization of character, all at the individual unit of analysis.

Morales, et al. (2014) explains that the coupling of control mechanisms, such as a code of ethics, with an individual's morality is essential to detecting and deterring abnormal or fraudulent behaviors. The need for consideration of individual human character is required to construct effective control policies and interventions (Foucault, 1977-8). This is the intent and attempt of the Fraud Triangle as it goes beyond a static list of rules or policies and incorporates the concepts of morality and immorality. It serves as a measure of the "soul" as an indicator for potential fraud (Morales, et al., 2014).

Figure 2: The Fraud Triangle Theory: Derived Independent Variables



Adapted from Cressey (1973)

In this study, we extend the Fraud Triangle which states that three factors must exist and culminate for fraud, or compromised ethical decision quality, to occur: Rationalization, Opportunity, and Pressure (Cressey, 1973). According to the theory, *rationalization* is a justification of personal actions; *opportunity* is the ability to execute a plan without being caught, and *pressure* is a negative force influencing a behavior. The theory was developed to provide an explanatory three-legged framework whereby firms should build mechanisms to deter and prevent fraud. We assess the impact of deliberation time in relation to ethical decision quality through the lens of two of the three factors: rationalization and pressure.

One limitation is that the theory was created to explain solo fraud behavior conducted on an individual basis (Morales, 2014). Furthermore, Cressey's construct of pressure was specific to incentivization (1973). For this study, we examine pressure in the context of deliberation time.

II.4.1.1 Rationalization

The lens of rationalization is used to examine the impact of deliberation time on ethical decision quality. Rationalization has been viewed using the theory of Moral Disengagement, which finds that influences of the work environment ethics results in a self-imposed sanctioning, providing a regulatory mechanism for ethical behavior (Bandura, 1991). Moral disengagement occurs when the situation allows for a separation from normal self-sanctioning. According to Mayhew and Murphy (2014), individuals disengage by either reframing an unethical act as ethical, minimizing or dismissing the consequences, or shifting responsibility to another individual.

Accordingly, another underlying component of rationalization is that of moral relativity. As the individual engages in repeated rationalization, they tend to gradually reinterpret what they once held as *truth.* This effect of wearing away may be a result of employment in a firm that espouses an unethical culture. No matter the origin of the moral relativity, the individual eventually becomes detached from their previous definition of honesty (Sutherland, 1983).

The issue of deliberation time also impacts rationalization to commit fraud. In the literature, rationalization is sometimes referred to as *sense-making,* or the process of assigning value to a behavior (Weick, Sutcliffe, & Obstfeld, 2005). Deliberation is defined as, "the act of thinking about or discussing something and deciding carefully" (Merriam-Webster, 2021). As time increases, the opportunity to deliberate decisions and rationalize fraudulent behavior is increased.

II.4.1.2 Pressure

The lens of pressure is used to examine the impact from deliberation time required by a professional accountant to make a decision about an ethical dilemma. Within the Fraud Triangle,

pressure was proposed to reflect the pressure of incentives to commit fraud (Cressey, 1973). For instance, it is widely known that when a firm rewards managers based on the bottom-line, fraudulent earnings management increases.

In consideration of prior research and theoretical framing, findings suggest that the influence of deliberation time is inconclusive yet deserving of continued examination. Future analysis would serve to inform professional accounting firms about workplace environments that may improve ethical decision-making and reduce fraud risk. Therefore, in accordance with Cressey (1973), we expect to find that deliberation time is associated with ethical decision making.

II.4.2 The AICPA Code of Professional Conduct as a Moral Compass

To provide a referent basis for ethical judgment for certified public accountants, the AICPA developed the CPC. The study of ethics, including knowledge of the AICPA CPC, is interwoven through university-level accounting curriculum and continuing professional education (CPE) requirements for practicing CPAs. While the specific number of requisite credit hours in the study of ethics are decided at the state level, the AICPA CPC is standard content on the CPA examination at the national level (NASBA, 2021).

The CPC consists of six principles, detailing expected behavioral norms, and serves as a framework for more explicit rules. The CPC is applicable to all members of the AICPA and provides a basis of credibility for CPAs. Membership in the AICPA is voluntary; however, members found in violation of the code face consequences such as license suspension or revocation through regulatory agencies including the Public Company Accounting Oversight Board (PCAOB), the Securities and Exchange Commission (SEC) and state boards of accountancy. Members must commit to upholding the principles through honorable decisions,

even if commitment requires personal sacrifice.[2] The six principles of the code are summarized below. Table 7 explains how the principles serve as a basis for our hypotheses:

II.4.2.1 Principle 1, Responsibilities

"In carrying out their responsibilities as professionals, members should exercise sensitive professional and moral judgements in all their activities. Members are obligated to improve the art of accounting, maintain the public's confidence, and maintain the profession's special responsibility for self-governance."[3]

The two attributes that are derived from *Principle 1, Responsibilities*, and serve to measure ethical decision quality are self-governance and cooperation. Self-governance is defined as having the control of one's own affairs (Merriam-Webster, 2020). Within the accounting profession, self-governance is expected to be practiced on a continuum, beginning with personal decisions impacting the decision-maker themselves, moving through the firm-level decisions, and extending to decisions impacting the profession as a whole. Cooperation is the act of working together collectively to maintain and enhance the traditions of the profession.[4] One method of cooperation within the profession occurs in the context of proactive decision making when knowledge arises that impacts the operations of the firm.

Prior research finds that decisions related to self-governance are instinctively self-preserving. Time for deliberation is required for proactive decisions exhibiting self-control (Shalvi et al., 2012). Decisions related to cooperation within a profession, such as whistleblowing, also require deliberation time as the employee must consider legal protection

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[2] AICPA Code of Professional Conduct 0.300.010.02
[3] Ibid., 0.300.020.01
[4] Ibid., 0.300.010.02

and possible repercussions, both stated and implicit. Whistleblowers incur reprisal risk such as "harassment, slander, reprimands, punitive transfers, threats, demotion, and dismissal," all which inhibit their motivation to disclose knowledge of an unfavorable situation (Keil, Amrit, Robert, & Sweta, 2010). Therefore,

H1: Controlling for gender and experience, deliberation time influences ethical decision quality measuring *Principle 1, Responsibilities.*

II.4.2.2 Principle 2, Serve the Public Interest

"Members should accept the obligation to act in a way that will serve the public interest, honor the public trust, and demonstrate commitment to professionalism."[5]

The two attributes that are derived from *Principle 2, Serve the Public Interest*, and serve to measure ethical decision quality are firm credibility and veracity of reporting. Firm credibility occurs when all employees are represented according to their actual capabilities. The hallmark of a CPA is their obligation to serve the public as opposed to other professions, such as doctors and lawyers, who are more concentrated on obligations to their clients. As a CPA, serving the public interest requires protection of the well-being of "clients, credit grantors, governments, employers, investors, the business and financial community, and others who rely on the character of members to maintain the orderly functioning of commerce."[6] Public protection is best implemented when all staff members exhibit ethical behavior in the realm of how they represent their capabilities. Overstating achievements by misrepresented staff credentials misleads clients and results in unreliable audit opinions and financial statements.

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[5] Ibid., 0.300.030.01
[6] Ibid., 0.300.030.02

When knowledge arises of unethical behavior in the staff, such as misrepresenting credentials, managers must make a challenging decision as to how to handle the employee. Decisions to dismiss employees on the grounds of dishonesty are often complicated and result in deliberation due to the magnitude of impact both to the firm itself and the offender. Also, managers must consider the level of difficulty in restaffing the vacated position. Though these decisions are typically made quickly, the severity of the consequences may cause the manager to prolong deliberation time, allowing an opportunity for rationalization (Moberg, 2000).

In addition to ensuring the credentials of the staff, firms must provide trustworthy services. Therefore, serving the public interest entails providing accurate and reliable information through veracity of financial reporting. An opportunity to falsify or misrepresent through reporting typically elicits an intuitive high ethical affective response, yet with the progression of time, the accountant may begin to justify an unethical report (Zhong et al., 2010). Under heavy workloads and reduced time, decisions such as exclusion of adequate tests of accounts and disregard for important information required for effective audit reports often suffer as measured through the determination of audit failure (AICPA CAR, 1978; Lai et al., 2018). Therefore,

H2: Controlling for experience and gender, deliberation time influences ethical decision quality measuring *Principle 2, Serve the Public Interest.*

II.4.2.3 Principle 3, Integrity

"To maintain and broaden public confidence, members should perform all professional responsibilities with the highest sense of integrity."[7]

[7] Ibid., 0.300.040.01.

The attribute that is derived from *Principle 3, Integrity*, and serves to measure ethical decision quality is honesty. *Integrity* serves as a fundamental characteristic of the profession. In substance, it is a prerequisite to all the other principles as the CPC charges members to use integrity as the standard for all decisions.[8] Further, the CPC states, "Integrity is measured in terms of what is right and just. In the absence of specific rules, standards, or guidance or in the face of conflicting opinions, a member should test decisions and deeds by asking: 'Am I doing what a person of integrity would do? Have I retained my integrity?' Integrity requires a member to observe both the form and the spirit of technical and ethical standards; circumvention of those standards constitutes subordination of judgment."[9]

Laditka and Houk (2006) find that a primary ethical conflict in the workplace includes honesty and professional integrity. However honesty and integrity are not synonymous. Integrity is derived from the word *integer*, referring to the state of being whole. The exhibition of honesty is a by-product and signal of integrity. Honesty is a quality displayed by people with a commitment to moral uprightness.

The research reveals numerous studies regarding honesty in light of deliberation time. Verschuere et al., (2018) shows that lying requires a greater cognitive load and time than honesty. In the situation of dishonesty, liars must work hard not to contradict themselves by keeping the recollection of the details fresh in their memory. Concurrently, the dishonest person must remember not to allow this knowledge to be accidently divulged. Finally, the behavior of the dishonest person must not convey signals of lying to colleagues and clients (Suchotzki, Verschuere, Bockstaele, Ben-Shakhar, & Crombez, 2017).

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[8] Ibid., 0.300.040.02.
[9] Ibid., 0.300.040.04.

Accordingly, work by both Gigerenzer (2008) and Simon (1957) on the effect of deliberation time is considered. Simon (1957) finds that the time allowed for decision making limits the ability to deliberate and rationalize decision as noted in his work on bounded rationality in decision making. Gigerenzer (2008) posits heuristics in decision making known as "fast and frugal". His studies show that with the use of heuristics, or rules-of-thumb, quick decisions with less investment of efforts can be accurate. He refers to this concept as less-is-more, which contrasts the idea that longer deliberation results in improved decision making. Therefore,

H3: Controlling for experience and gender, deliberation time influences ethical decision quality measuring *Principle 3, Integrity*.

II.4.2.4 Principle 4, Objectivity and Independence

*"*A member should maintain objectivity and be free of conflicts of interest in discharging professional responsibilities."[10] "A member must be candid with all their dealings with members in public practice."[11] "A member in public practice must maintain objectivity and independence through an ongoing assessment of client relationships and public responsibilities."[12]

The two attributes that are derived from *Principle 4, Objectivity and Independence*, that serve to measure ethical decision quality are candor and peer pressure. Candor entails direct, forthright and unambiguous communication. Peer pressure arises when influential forces from

[10] Ibid., 0.300.050.01
[11] Ibid., 0.300.050.05
[12] Ibid., 0.300.050.04.

outside sources present alternatives which attempt to persuade decision makers to a specific position.

Candor, or candid communication, is often associated with willingness to share knowledge. However, candor does not consider the level of competence in the knowledge conveyed. In other words, a candid person can speak with earnest effort and unambiguous terms, yet be inaccurate about the subject matter. Candor may be influenced by time in ethical decision making due to a fear of harmful repercussions or offending the receiver (Comer & Vega, 2011; Hannah, Avolio, and Walumbwa, 2011b; Sekerka, Bagozzi, and Charnigo, 2009). Additionally, there may exist a lack of understanding about how to construct the message. This fear lengthens the deliberation time for decisions.

In organizations, peer pressure is not isolated to colleagues operating within the same firm at the same level. Rather, it emerges from various levels both internal and external to the organization. Sources may including subordinates, managers, clients and regulators. Peer pressure may strengthen as a result of an increased deliberation time. A study by Critcher, Inbar and Pizzaro (2013) finds a negative character perception exists when ethical deliberation time is longer.

The common thread underpinning both candor and peer pressure is the attribute of moral courage. May, Luth, and Schwoerer (2014) defines moral courage as, “the fortitude to convert moral intentions into actions despite pressure from either inside or outside of the organization to do otherwise.” Some research posits courageous decisions to be quick, instinctive and trait-like, requiring little time for deliberation. Courage to be both candid and not subordinate an ethical position to a dominating pressure, even in light of unfavorable consequences, is essential to objective and independent behavior. Therefore,

H4: Controlling for experience and gender, deliberation time influences ethical decision quality measuring *Principle 4, Objectivity and Independence*.

II.4.2.5 Principle 5, Due Care

"A member should observe the profession's technical and ethical standards, strive continually to improve competence and the quality of services, and discharge professional responsibility to the best of the member's ability."[13]

The two attributes that are derived from *Principle 5, Due Care*, and serve to measure decision quality are firm competence and diligent service. Firm competence entails the collective resources uniquely attributed to an organization. Diligent service denotes earnest effort and consistency when performing assigned duties. To achieve the principle of due care in practice, ethical decision making incorporates skills acquired through both education and experience to deliver diligent service.

In the context of the CPC, the primary competencies are derived from a synthesis of education and experience. Competency begins with a mastery of the common body of knowledge required for designation as certified public accountant.[14] Both education and experience are components required for certified public accountant licensure. Therefore firm competence is essential to *Due Care.* Ethics education has been shown to prepare employees for managing moral dilemmas. Accountants who maintain ethical training not only become more aware of an ethical problem, but they also assign more weight to the problem. Further, they demonstrate increased ability to properly handle ethical problems, decreasing time the need for deliberation (May et al., 2014).

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[13] Ibid., 0.300.060.01.
[14] Ibid., 0.300.060.02

The CPC specifies that diligent service "imposes the responsibility to render services promptly and carefully, to be thorough, and to observe applicable technical and ethical standards." [15] And "Diligent Service imposes the obligation to perform professional services to the best of the member's ability, with concern for the best interest for whom the services are performed."[16] Ethical decisions to serve diligently are difficult when time is constrained. Therefore,

H5: Controlling for experience and gender, deliberation time influences ethical decision quality measuring *Principle 5, Due Care*.

II.4.2.6 Principle 6, Scope and Nature of Services

*"*A member in public practice should observe the Principles of the Code of Professional Conduct in determining the scope and nature of services to be provided."[17]

This principle encapsulates all five of the prior principles. Hence, in this study, we observe ethical decision quality related to this principle from an overall view the effect of deliberation time measured by the analysis of Principles 1 – 5. Therefore,

H6: Controlling for experience and gender, overall deliberation time influences overall ethical decision quality measuring *Principle 6, Scope and Nature of Services*.

II.5 RESEARCH MODELS

Figures 3 – 8 show the models for this research. The independent variable, *Deliberation Time (DT),* serves as the main effect variable on the dependent variable that captures the measure of the level of ethicality, *Ethical Decision Quality (EDQ). Professional Experience* and *Gender*

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[15] Ibid., 0.300.060.05
[16] Ibid., 0.300.060.02
[17] Ibid, 0.300.070.01

serve as control variables.

Figure 3: Model 1, Responsibilities, DV1

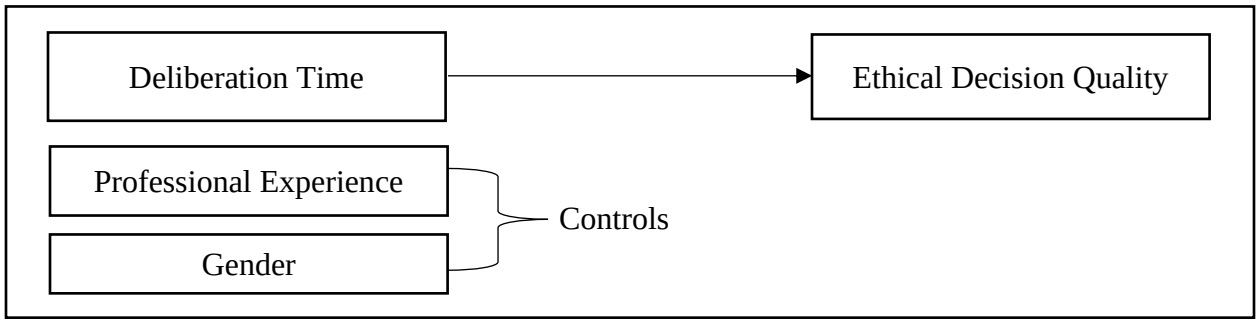


Figure 4: Model 2, Serve the Public Interest, DV2

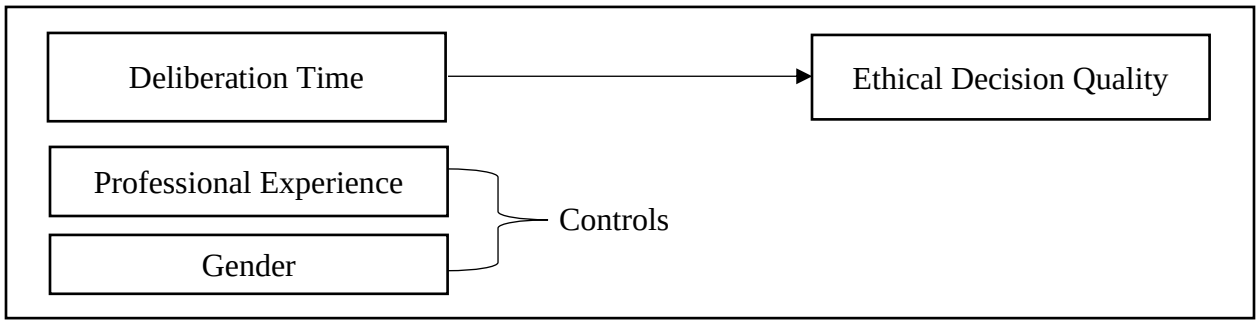


Figure 5: Model 3, Integrity, DV3

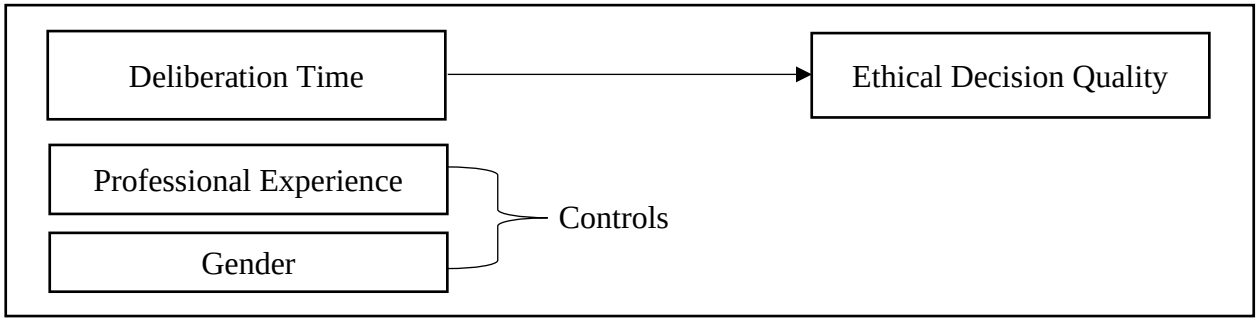


Figure 6: Model 4, Objectivity and Independence, DV4

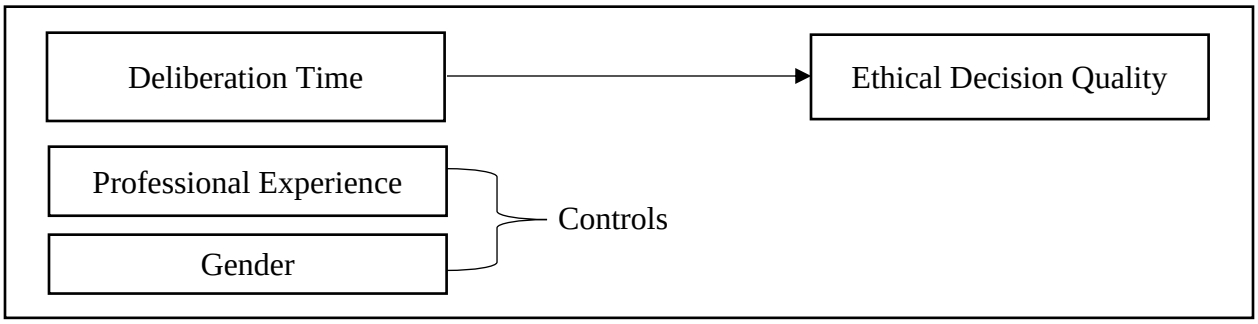


Figure 7: Model 5, Due Care, DV5

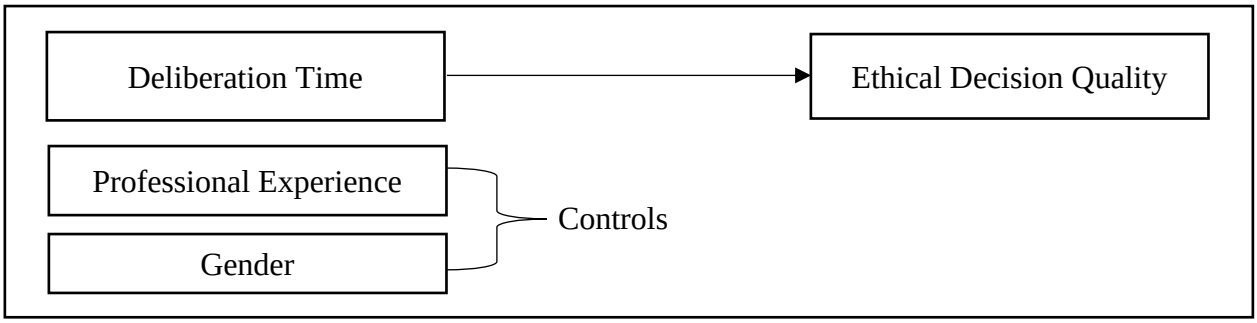
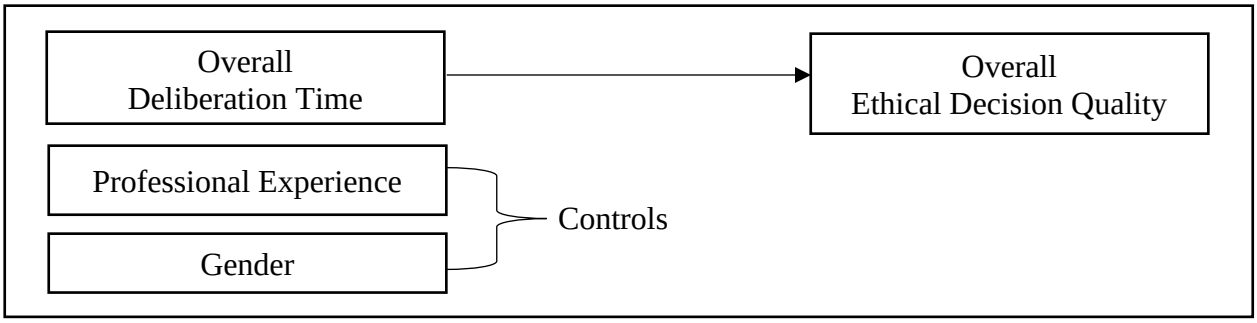


Figure 8: Model 6, Scope and Nature of Services (Overall), DV6



Ethical Decision Quality Factors in Professional Accounting

Variables from the research model are defined in Tables 1 - 6 below. EDQ can range from 0 to 10. A higher total EDQ score is noted when a participant employs accounting-specific ethical principles in their responses to a scenario portraying an ethical dilemma. The result of a higher total EDQ is an ethically favorable outcome for the stakeholders. Conversely, a lower

EDQ score occurs when the participant ignores or rejects ethical principles resulting in an ethically unfavorable outcome for the stakeholders.

Table 1: Model 1, Ethical Decision Quality Factors

Name	Definition	Measure
DV1: Responsibilities Ethical Decision Quality	discrete numerical variable calculated as the subject's score on Principle 1, *Responsibilities*	0 = None Correct 1 = One Correct 2 = Two Correct
IV1: Responsibilities Deliberation Time	continuous variable based on the amount of time elapsing between the subject opening the question and submitting the response	Unit of time
CV1: Experience	categorical variable based on the subject's professional experience	1 = 0 to 5 years 2 = 6 to 10 years 3 = 11 to 20 years 4 = 20+ years
CV2: Gender	categorical variable based on the gender of the subject	0 = Male 1 = Female

Table 2: Model 2, Ethical Decision Quality Factors

Name	Definition	Measure
DV2: Serve the Public Interest Ethical Decision Quality	discrete numerical variable calculated as the subject's score on Principle 2, *Serve the Public Interest*	0 = None Correct 1 = One Correct 2 = Two Correct
IV2: Serve the Public Interest Deliberation Time	continuous variable based on the amount of time elapsing between the subject opening the question and submitting the response	Unit of time
CV1: Experience	categorical variable based on the subject's professional experience	1 = 0 to 5 years 2 = 6 to 10 years 3 = 11 to 20 years 4 = 20+ years
CV2: Gender	categorical variable based on the gender of the subject	0 = Male 1 = Female

Table 3: Model 3, Ethical Decision Quality Factors

Name	Definition	Measure
DV3: Integrity Ethical Decision Quality	discrete numerical variable calculated as the subject's score on Principle 3, *Integrity*	0 = None Correct 1 = One Correct 2 = Two Correct
IV3: Integrity Deliberation Time	continuous variable based on the amount of time elapsing between the subject opening the question and submitting the response	Unit of time
CV1: Experience	categorical variable based on the subject's professional experience	1 = 0 to 5 years 2 = 6 to 10 years 3 = 11 to 20 years 4 = 20+ years
CV2: Gender	categorical variable based on the gender of the subject	0 = Male 1 = Female

Table 4: Model 4, Ethical Decision Quality Factors

Name	Definition	Measure
DV4: Objectivity & Independence Ethical Decision Quality	discrete numerical variables calculated as the subject's score on Principle 4, *Objectivity & Independence*	0 = None Correct 1 = One Correct 2 = Two Correct
IV4: Objectivity & Independence Deliberation Time	continuous variable based on the amount of time elapsing between the subject opening the question and submitting the response	Unit of time
CV1: Experience	categorical variable based on the subject's professional experience	1 = 0 to 5 years 2 = 6 to 10 years 3 = 11 to 20 years 4 = 20+ years
CV2: Gender	categorical variable based on the gender of the subject	0 = Male 1 = Female

Table 5: Model 5, Ethical Decision Quality Factors

Name	Definition	Measure
DV5: Due Care Ethical Decision Quality	discrete numerical variable calculated as the subject's score on Principle 5, *Due Care*	0 = None Correct 1 = One Correct 2 = Two Correct
IV5: Due Care Deliberation Time	continuous variable based on the amount of time elapsing between the subject opening the question and submitting the response	Unit of time
CV1: Experience	categorical variable based on the subject's professional experience	1 = 0 to 5 years 2 = 6 to 10 years 3 = 11 to 20 years 4 = 20+ years
CV2: Gender	categorical variable based on the gender of the subject	0 = Male 1 = Female

Table 6: Model 6, Ethical Decision Quality Factors

Name	Definition	Measure
DV6: Scope & Nature Overall Ethical Decision Quality	discrete numerical variable measuring overall quality based on the cumulative score on all five principles	0 to 10
IV6: Scope & Nature Overall Deliberation Time	continuous variable based on the cumulative deliberation time to respond to all questions	Unit of time
CV1: Experience	categorical variable based on the subject's professional experience	1 = 0 to 5 years 2 = 6 to 10 years 3 = 11 to 20 years 4 = 20+ years
CV2: Gender	categorical variable based on the gender of the subject	0 = Male 1 = Female

II.6 METHODOLOGICAL APPROACH

In both psychology and business literature, ethicality has typically been examined through a qualitative approach. This study seeks to add to the body of knowledge by using a quantitative social scientific approach. The social scientific approach utilizes theory and observation of phenomena with operationalized and measurable variables (Trevino, 1992). Field experiments are reputed to be highly generalizable in management research (Braithwaite, 1955; Kaplan, 1964). In this research, I use data previously collected through a longitudinal field experiment. I present participants with various scenarios of ethical dilemmas situated in the accounting profession.

I then collect data with a software system which tracks the participants' responses and their deliberation time. Samaddar, Nargundkar and Daley (2006) note that the use of primary data may introduce biases towards research motivation. However, at the time of data collection, there were no specific intentions of formal research. When I proposed this study, I established a detailed research program with defined hypotheses.

II.7 METHODS

II.7.1 Participants

Study participants were students in a Master of Science in Accounting class at an North American university. This is appropriate due to the generalized nature of the scenarios that present graduate-level accounting ethical dilemmas (Arnold, Collier, Leech & Sutton, 2004). The participants had various levels of prior accounting and financial experience ranging from accounting firm internships to executive level positions such as industry controllers and Chief Financial Officers. All participants had requisite coursework in accounting. Therefore, the

participants were not a convenience sample and did not serve as mere proxies for actual accountants (Bampton & Cowton, 2013; Randall & Gibson, 1990). Participants totaled 343. Demographic information was collected such as gender and total years of professional work experience. Professional experience ranged from 1 to 36 years (M = 8.5 years, standard deviation [SD] = 4.7 years. Fifty-six percent of the participants were male and 44% were female. All participants held either an undergraduate degree in accounting or a graduate-level certificate in accounting fundamentals. In addition to responses to the ethical sensitivity questions, data reflecting deliberation time per question were collected. To date, this experiment has been conducted 6 times over a 4-year period.

II.7.2 Experimental Task

Participants were given three scenarios authored by Knapp (2017) to read and consider. Leitsch (2004) finds evidence for using varying scenarios in this methodology because "various accounting issues had an influence on students' moral intention and moral intensity." Scenarios were written in the third person rather than directly asking what the participant would do themselves. According to Ponemon and Gabhart (1993) and Arnold and Ponemon (1991), the approach of framing scenarios and questions in the third-person is more effective due to the ethical nature of the context.

Although I cannot guarantee complete knowledge of the participants' activity during the deliberation time, steps were taken to ensure that the best efforts were used to capture deliberation. First, participants were given thirty minutes to answer ten randomized ethical sensitivity questions measuring the principles of the CPC. Clay (2001) states that students require an average of 30 seconds to respond to questions with only two choices. Allowing the participants thirty minutes to answer ten true-false questions reduced the probability that time

pressure was a factor. Additionally, the use of true-false questions provides a more discrete determination of decision as compared to multiple choice questions with three or more choices. The research shows that participants may believe that multiple answers are correct, yet they are forced to select only one answer (Parker, Anderson, Heidemann, Merrill, Merritt, Richmond, & Urban-Lurain, 2012). Second, participants' responses were not recorded until the questions were saved in the software prior to moving on to the next question. Participants opened the questions one at a time. Deliberation time was determined by the amount of time (in seconds) from when the participant opened the question to the point they submitted their decision.

II.7.3 Ethical Decision Quality Measurement

Each CPC principle was measured by two of the ten questions. Since Principle 6 encompasses the prior five principles, the overall deliberation time was used to measure overall ethical decision quality. Table 7, *Assessment of AICPA Principles* presents a mapping of the AICPA principle with the ethical dilemma scenario number, survey questions number, and the observed attribute assessed by each question.

Table 7: Assessment of AICPA Principles

Model	Scenario	Question(s)	Observed Attribute
1. Responsibilities	S1	Q2	Self-governance
	S1	Q3	Professional cooperation
2. Public Interest	S2	Q6	Firm credibility
	S2	Q8	Reporting veracity
3. Integrity	S2	Q4	Truth-telling
	S3	Q10	Honest representation
4. Objectivity & Independence	S1	Q1	Candor
	S3	Q7	Peer pressure
5. Due Care	S2	Q5	Firm competence
	S3	Q9	Diligent service
6. Scope & Nature of Services	S1, S2, S3	Q1 – Q10	Overall measures collected from Principles 1 - 5

II.8 ANALYSIS AND RESULTS

A test of the relationship among all variables in this study was performed and investigated using zero-order Pearson correlations. Details of mean, standard deviations, and correlation coefficients are presented in Table 8. A close inspection of the scatterplots and statistics showed that all dependent variables had reasonable variance relative to the central tendencies (Appendix C, Figure 9 and Table 17). Mautz (1963) details the role of behavioral accounting research as social science research. An examination of skewness and kurtosis revealed tendencies typical to data collected in the social sciences. As it goes with rules-of-thumb, acceptable values for skewness and kurtosis vary. In the social sciences, Brown (2006) suggests that data with a skew above |3.0| and a kurtosis above |10.0| are considered problematic, but a large sample size mitigates issues with skewness and kurtosis.

An inspection of IV2 and IV3 showed kurtosis slightly about 9.0. Additionally, IV4 was slightly above the critical value of 10.0 for kurtosis. Tabachnik and Fidell (2018) call for transformation of positively skewed data by using the logarithm. Using the lognormal distribution is a common method when measuring response times in the case of a cognitive tests or accuracy tests (Van Der Linden, 2006; Bolsinova, de Boeck, & Tijmstra, 2017a). To compare the effect on the data, hierarchical regression was performed both before and after transformation (Appendix D). There was only a small difference in analysis after lognormal transformation. To maintain a consistent and conservative analysis, I proceeded with untransformed variables.

Table 8: Mean, Standard Deviation and Correlations

Measure	*M*	SD	CV1	CV2	IV1	IV2	IV3	IV4	IV5	IV6	DV1	DV2	DV3	DV4	DV5
CV1: Experience	8.5	4.70	-												
CV2: Gender	0.44	4.97	0.07	-											
IV1: Responsibilities DT	86.64	86.76	-0.02	0.05	-										
IV2: Public Interest DT	52.68	72.56	-0.06	0.06	.21**	-									
IV3: Integrity DT	78.49	96.72	0.04	-0.00	.20**	.18**	-								
IV4: Objectivity & Independence DT	62.72	79.77	-0.03	0.026	.16**	0.02	.20**	-							
IV5: Due Care DT	53.13	66.88	0.01	-0.05	.18**	.17**	.14**	.20**	-						
IV6: Overall DT	334.15	234.56	-0.01	0.03	.62**	.52**	.65**	.54**	.53**	-					
DV1: Responsibilities EDQ	1.50	0.68	0.04	0.05	-.34**	-0.06	-.13*	-0.10	-.13*	-.27**	-				
DV2: Public Interest EDQ	1.39	0.74	0.039	0.045	-.14*	-.25**	-.22**	-0.05	-0.09	-.26**	.20**	-			
DV3: Integrity EDQ	1.30	0.79	-0.09	0.01	-.22**	-0.10	-.25**	-.27**	-.27**	-.38**	0.03	0.09	-		
DV4: Objectivity & Independence EDQ	1.26	0.71	0.04	0.00	0.00	-0.08	-0.04	-.17**	-0.09	-.12*	-.19**	-.14**	0.07	-	
DV5: Due Care EDQ	1.17	0.81	-0.06	-0.06	-0.15**	-0.12*	-0.11	-0.06	-0.03	-0.18**	0.10	0.10	0.18**	-0.15**	-
DV6: Overall EDQ	6.62	1.78	-0.02	0.02	-.35**	-.26**	-.31**	-.29**	-.26**	-.51**	.45**	.52**	.61**	.23**	.55**

**. Correlation is significant at the 0.01 level (2-tailed).

II.8.1 Hierarchical Analysis

I used hierarchical multiple regression for Models 1 – 6 to assess the ability of deliberation time to predict the level of ethical decision quality after controlling for the influence of work experience and gender. The results are detailed in Table 9 – Table 15.

Table 9: Hierarchical Regression with DV1, IV1, CV1 and CV2

	Model 1.0		Model 1.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	0.035	0.525	0.028	0.579
CV2: Gender	0.047	0.388	0.065	0.205
IV1: Deliberation Time			-0.346***	0.000
R^2:	0.004		0.123	
ΔR^2:			0.119	
F-statistic:	0.618	0.540	15.857***	0.000
ΔF-statistic			46.172***	0.000

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

In Table 9, hierarchical multiple regression was used to assess the ability of deliberation time (IV1, Responsibilities DT) to predict the level of ethical decision quality (DV1, Responsibilities EDQ) after controlling for the influence of work experience and gender. Work experience and gender were entered at Step 1, explaining .40% of the variance in ethical decision quality. After entry of the deliberation time at Step 2, the total variance explained by the model as a whole was 12.3% $F(3, 339) = 15.857$ $p < .001$. Deliberation time explained an additional 11.9% of the variance in ethical decision quality after controlling for work experience and gender, *R* squared change = 0.119, *F* change (2, 340) = 46.172, $p < .001$. In the final model, only the deliberation time was statistically significant (*beta* = -0.346, $p < .001$). According to these

findings, deliberation time and ethical decision quality are negatively related. Therefore, a longer time for decision results in a more unethical decision on *Principle 1, Responsibilities*.

Table 10: Hierarchical Regression with DV2, IV2, CV1 and CV2

	Model 2.0		Model 2.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	0.036	0.663	0.021	0.692
CV2: Gender	0.042	0.778	0.059	0.267
IV2: Deliberation Time			-0.251***	0.000
R^2:	0.003		0.066	
ΔR^2:			0.063	
F-statistic:	0.563	0.570	7.986***	0.000
ΔF-statistic			22.760***	0.000

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

In Table 10, hierarchical multiple regression was used to assess the ability of deliberation time (IV2, Public Interest DT) to predict the level of ethical decision quality (DV2, Public Interest EDQ) after controlling for the influence of work experience and gender. Work experience and gender were entered at Step 1, explaining .30% of the variance in ethical decision quality. After entry of the deliberation time at Step 2, the total variance explained by the model as a whole was 6.6% $F(3, 339) = 7.986$, $p < .001$. Deliberation time explained an additional 6.3% of the variance in ethical decision quality after controlling for work experience and gender, *R* squared change = 0.063, *F* change (2, 340) = 22.760, $p < .001$. In the final model, only the deliberation time was statistically significant (*beta* = -0.251, $p < .001$). According to these findings, deliberation time and ethical decision quality are negatively related. Therefore, a

longer time for decision results in a more unethical decision on *Principle 2, Serve the Public Interest*.

Table 11: Hierarchical Regression with DV3, IV3, CV1 and CV2

	Model 3.0		Model 3.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	-0.086	0.113	-.075	0.153
CV2: Gender	0.012	0.824	0.011	0.841
IV3: Deliberation Time			-0.246***	0.000
R^2:	0.086		0.261	
ΔR^2:			0.175	
F-statistic:	1.270	0.282	8.242***	0.000
ΔF-statistic			22.027**	0.000

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

In Table 11, hierarchical multiple regression was used to assess the ability of deliberation time (IV3, Integrity DT) to predict the level of ethical decision quality (DV3, Integrity EDQ) after controlling for the influence of work experience and gender. Work experience and gender were entered at Step 1, explaining 8.6% of the variance in ethical decision quality. After entry of the deliberation time at Step 2, the total variance explained by the model as a whole was 26.1% $F(3, 339) = 8.242$, $p < .001$. Deliberation time explained an additional 17.5% of the variance in ethical decision quality after controlling for work experience and gender, *R* squared change = 0.175, *F* change (2, 340) = 22.027, $p < .001$. In the final model, only the deliberation time was statistically significant (*beta* = -0.246, $p < .001$). According to these findings, deliberation time

and ethical decision quality are negatively related. Therefore, a longer time for decision results in a more unethical decision on *Principle 3, Integrity.*

Table 12: Hierarchical Regression with DV4, IV4, CV1 and CV2

	Model 4.0		Model 4.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	-0.043	0.429	0.038	0.482
CV2: Gender	-0.002	0.969	-.003	0.961
IV4: Deliberation Time			-0.169***	0.002
R^2:	0.002		0.030	
ΔR^2:			0.028	
F-statistic:	0.313	0.731	3.524***	0.015
ΔF-statistic			9.928**	0.002

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

In Table 12, hierarchical multiple regression was used to assess the ability of deliberation time (IV4, Objectivity & Independence DT) to predict the level of ethical decision quality (DV4, Objectivity & Independence EDQ) after controlling for the influence of work experience and gender. Work experience and gender were entered at Step 1, explaining 0.20% of the variance in ethical decision quality. After entry of the deliberation time at Step 2, the total variance explained by the model as a whole was 3.0% $F(3, 339) = 3.524$, $p < .05$. Deliberation time explained an additional 2.80% of the variance in ethical decision quality after controlling for work experience and gender, *R* squared change = 0.028, *F* change (2, 340) = 9.928, $p < .001$. In the final model, only the deliberation time was statistically significant (*beta* = -0.169, $p < .05$). According to these findings, deliberation time and ethical decision quality are negatively related.

Therefore, a longer time for decision results in a more unethical decision on *Principle 4, Independence and Objectivity.*

Table 13: Hierarchical Regression with DV5, IV5, CV1 and CV2

	Model 5.0		Model 5.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	-0.056	0.299	-0.056	0.302
CV2: Gender	-0.051	0.344	-0.053	0.329
IV5: Deliberation Time			-0.035	0.523
R^2:	0.006		0.007	
ΔR^2:			0.001	
F-statistic:	1.067	0.345	0.846	0.469
ΔF-statistic			0.409	0.523

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

In Table 13, hierarchical multiple regression was used to assess the ability of deliberation time (IV5, Due Care DT) to predict the level of ethical decision quality (DV5, Due Care EDQ) after controlling for the influence of work experience and gender. Work experience and gender were entered at Step 1, explaining 0.60% of the variance in ethical decision quality. After entry of the deliberation time at Step 2, the total variance explained by the model as a whole was 0.70% $F(3, 339) = 0.846$. Deliberation time explained an additional 0.10% of the variance in ethical decision quality after controlling for work experience and gender, *R* squared change = 0.001, *F* change (2, 340) = 0.0409, $p < .001$. The final model returned no statistical significance. According to these findings, deliberation time does not statistically influence ethical decision quality on *Principle 5, Due Care.*

Table 14: Hierarchical Regression with DV6, IV6, CV1 and CV2

	Model 6.0		Model 6.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	-0.019	0.727	-0.027	0.560
CV2: Gender	0.016	0.766	0.032	0.497
IV6: Deliberation Time			-0.515***	0.000
R^2:	0.001		0.226	
ΔR^2:			0.225	
F-statistic:	0.098	0.906	40.914***	0.000
ΔF-statistic			122.474***	0.000

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

In Table 14, hierarchical multiple regression was used to assess the ability of deliberation time (IV6, Scope and Nature DT) to predict the level of ethical decision quality (DV5, Scope and Nature EDQ) after controlling for the influence of work experience and gender. Work experience and gender were entered at Step 1, explaining 0.10% of the variance in ethical decision quality. After entry of the deliberation time at Step 2, the total variance explained by the model as a whole was 22.6% $F(3, 339) = 40.914$, $p < .001$. Deliberation time explained an additional 22.5% of the variance in ethical decision quality after controlling for work experience and gender, *R* squared change = 0.225, *F* change (2, 340) = 122.474, $p < .001$. In the final model, only the deliberation time was statistically significant (*beta* = -0.515, $p < .001$). According to these findings, deliberation time and ethical decision quality are negatively related. Therefore, a longer time for decision results in a more unethical decision on *Principle 6, Scope and Nature of Services.*

Table 15: Hypotheses Outcome

Hypotheses	Results
$H1_A$: Controlling for gender and experience, deliberation time influences ethical decision quality measuring Principle 1 (Responsibilities).	reject $H1_0$, $p \leq .001$
$H2_A$: Controlling for gender and experience, deliberation time influences ethical decision quality measuring Principle 2 (Serve the Public Interest).	reject $H2_0$, $p \leq .001$
$H3_A$: Controlling for gender and experience, deliberation time influences ethical decision quality measuring Principle 3 (Integrity).	reject $H3_0$, $p \leq .001$
$H4_A$: Controlling for gender and experience, deliberation time influences ethical decision quality measuring Principle 4 (Objectivity & Independence).	reject $H4_0$, $p = 0.015$
$H5_A$: Controlling for gender and experience, deliberation time influences ethical decision quality measuring Principle 5 (Due Care).	cannot reject $H5_0$, $p = 0.469$
$H6_A$: Controlling for gender and experience, deliberation time influences ethical decision quality measuring Principle 6 (Scope & Nature of Services).	reject $H6_0$, $p \leq .001$

II.8.2 Analysis by Year

Further analysis was run to better understand the differences in effect of time on decision quality between the years 2017, 2018, 2019, and 2020. Given that a marked shift occurred in the workforce during the COVID-19 pandemic, the year 2020 was positioned as the baseline for comparison. Dummy variables were created for years 2017, 2018, and 2019, and added to the regression model for DV6 (Scope and Nature of Services). In Table 16, results show statistical significance for the year 2017 (*beta* = -0.593, $p < .05$), year 2018 (*beta* = -0.876, $p < .001$) and year 2019 (*beta* = -0.389, $p = 0.089$). The total variance explained by the model as a whole was 29.5% $F(3, 339) = 23.405$, $p < .001$.

Table 16: Year-Over-Year Regression Analysis with DV6, IV6, IV7, CV1, CV2, Dummy1, Dummy2, and Dummy3

	Model 7.0	
Variable	β	Sig.
IV7: 2020 (Constant)	8.461***	0.000
CV1: Work Experience	-0.060	0.523
CV2: Gender	0.092	0.579
IV6: Deliberation Time	-0.004***	0.000
Dummy1: 2017	-0.593**	0.011
Dummy2: 2018	-0.876***	0.000
Dummy3: 2019	-0.389*	0.089
R^2:	0.295	
F-statistic:	23.405***	0.000

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

Statistical significance was noted on all years, 2017, 2018, and 2019, as compared to year 2020. Figure 12 in Appendix E, Figure 11 demonstrates yearly differences.

II.9 DISCUSSION

This study shows insights about the relationship between the time it takes an early-career professional accountant to make a high quality decision based on an ethical standard, specifically the AICPA Code of Professional Conduct. I find evidence that early-career professional accountants who take more time for deliberation often make more unethical decisions. Using students in a specialized masters of accounting program allows the opportunity to discover new knowledge about the Fraud Triangle Theory and decision sciences through the study of ethical decision making. Further, the findings of this research may serve to inform professional

accounting firms in workforce development and planning the control environment. The proposed recommendations consider both situational and individual factors giving rise to unethical decision making. The following discussion serves to inform both prior theoretical research and practical applications in professional accounting.

II.9.1 Informing the Fraud Triangle Theory

As applied to theory, these findings provide evidence supporting Cressey's (1973) theory, the Fraud Triangle, which states that rationalization and pressure give rise to unethical behavior. As framed in this study, the passage of time allows for deliberation of decisions. Cressey (1973) posits that rationalization takes time and increases the chance of unethical behavior. Further in this study, pressure is observed through the passage of time. Cressey's theory states that an increase of pressure through factors such as promotion incentivization and financial gain results in an increased chance of unethical behavior. Conversely, I find that when pressure is defined as the passage of time, the decrease of pressure results in unethical behavior.

As applied to the profession, the findings serve to inform the role of the AICPA CPC as a moral standard in ethical decision making. While it is true that the Principles of the ACIPA CPC do share some common ideas, there are clear observable attributes embedded within each one. In our analysis, evidence was found to support the hypothesis that deliberation time is related to ethical decision quality on Principle 1 (Responsibilities), Principle 2 (Serve the Public Interest), Principle 3 (Integrity), Principle 4 (Objectivity and Independence), and Principle 6 (Scope and Nature of Services).

Of the first five principles, deliberation time relating to Principle 1 (Responsibilities) and Principle 3 (Integrity) demonstrated the strongest impact on ethical decision quality. This stands to reason since the context of both principles addresses the core ethical character traits of the

professional accountant. For example, Principle 1 (Responsibilities) charges professional accountants to use morals as their basis of justifying their behavior. Principle 3 (Integrity) states that integrity is a fundamental element of character which does not accommodate deceit. It showed a stronger relationship than Principle 1. This is likely due to the fact that the concept of integrity is a common thread interwoven throughout the other principles.

Deliberation time on Principle 2 (Public Interest) and Principle 4 (Objectivity and Independence) showed a weaker relationship to ethical decision quality. Contextually, these two principles address behavioral interactions with stakeholders as a result of ethical decisions rather than core ethical character traits. For example, Principle 2 addresses how the professional accountant should be careful to serve other stakeholders including all members of the financial community. And, Principle 4 charges the professional accountant to proactively avoid conflicts of interest.

Deliberation time of responses measuring Principle 5 (Due Care) did not show a significant relationship to ethical decision quality. The principle emphasizes the importance of maintaining adequate competence and delivering quality services to the best of their ability. Therefore, it is possible that the measures of adequacy and ability are largely subjective. Further, it is possible that the context of this principle may not be viewed as strictly ethical guidance in comparison to the other principles. Additionally, competence and quality service may be seen through the lens of a checklist, rather than an assessment of ethicality. Therefore, it stands to reason that deliberation time may not impact ethical decision quality on Principle 5.

Deliberation time relating to Principle 6 served to explain the greatest variance in ethical decision quality. This is to be expected based on the findings of Principles 1 – 5 as Principle 6 instructs professional accountants to observe all principles of the CPC.

II.9.2 Year-Over-Year Analysis

Year 2020 brought unprecedented worldwide changes to the workforce. Professional accountants were suddenly uprooted from their offices and forced into a new work environment in remote locations. For this reason, I selected the year 2020 as a baseline of comparison in the year-over-year analysis. When the data is parsed by year, the analysis shows that in 2020, deliberation time had the same effect on ethical decision making as in years 2017, 2018, and 2019 (See Appendix E, Figure 11). Ethical decision quality decreases as deliberation time increases. The year 2020 had an overall higher level of quality compared to other years. This could be a result of the exogenous shock to the work environment as a result of the COVID-19 pandemic. The year 2019 and 2017 are nearly identical in ethical quality. However, 2017 drops at a sharper rate than 2019 as time increases. The year 2018 has the lowest ethical quality, yet declines over time at a lower rate than 2017, 2019, and 2020. With the exception of 2018, ethical decision quality increased year-over-year. This exception may be attributed to a lagging effect resulting from a trend in the disciplinary actions of AICPA ethics violations. Starting in 2016, there was an easing of disciplinary actions as noted by an increase of dismissed ethics violation cases versus a decrease of stricter discplinary actions such as expulsions, suspensions, admonishments. (AICPA, 2021). The change in this trend may have signaled to professional accountants that enforcement of unethical behavior was easing.

II.9.3 Workload Optimization

In further application to the profession, the findings demonstrate that striking the balance is crucial for workforce planning. As professional accountants are unable to sustain quality decision making in extreme workloads, this study demonstrates that a light workload may also be a concern. Therefore, the need for workforce optimization arises. Accounting firm leaders must

continually reassess and monitor the workload of their staff to ensure the employees are functioning in a balanced manner.

Historically, audit caseload is determined by the auditor's area of expertise and estimated audit hours based on the size of the client. In taxation, returns are allocated based on staff experience with the most complicated filings assigned to senior staff. Many firms are using workforce optimization software solutions. Though the software may, in a practical sense, delegate time for ethical decision making by assigning the proper amount of audits and tax returns to the staff, it does not address ethicality wholistically.

Additionally, environmental control systems should be implemented, reviewed, and maintained to assist in fraud detection and prevention. An obvious strategy for control of ethical behavior is that of technological implementations. Most firms today boast sophisticated software systems that can detect anomalies in account estimates in real time. However, another powerful control does not rely so heavily on technology. Rather, it calls for continual human resource development and training through increased employee engagement and practical instruction.

One such tool for practical instruction is found in the AICPA CPC. The code calls for the use of the conceptual framework approach in situations where the rules may be compromised by members in public practice. First, the member must identify threats which are defined as "Relationships or circumstances that could compromise a member's compliance with the rules." Second, the member must evaluate the significance of the threat and determine if it is at an acceptable level. An acceptable level means that a third party would agree that the situation does not yield the member to a compromise of compliance with rules. Finally, if the member

concludes that the threat is not at an acceptable level, then safeguards must be implemented to eliminate the threat or reduce it to an acceptable level.[18]

According to the conceptual framework approach, safeguards involve any action or measure that mitigates or eliminates the threat. They may be implemented at various levels such as through the profession, legislation, regulation, or the firm. Safeguards may also be implemented by the client. However, such safeguards may not be solely relied upon. Examples of safeguard implemented by the profession, legislation, and regulation are education, training programs, professional standards, external reviews, competency requirements for licensure, and resources such as hotlines for reporting ethical violations and counseling in the case of an ethical dilemma.[19] Examples of safeguards implemented by a firm are expectations for acting in the public interest, monitoring quality control, policies on relationships between the firm and clients, and policies for addressing ethical conduct.[20] Finally, examples of safeguards implemented by the client include policies and procedures to address ethical conduct, governance over decision making regarding a firm's services, and policies prohibiting the violation of independence and objectivity.[21]

Moreover, since it has been shown that repeated exposure to ethics training is effective, accounting firms should consider ongoing training in ethics through repeated review of the AICPA CPC and case discussions of prior ethical violations. This may be accomplished through requirements of the firm itself, as well as the requisite courses delivered through license-mandated continuing professional education (CPE) courses.

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[18] Ibid., 1.000.010
[19] Ibid., 1.00.010.21
[20] Ibid., 1.00.010.23
[21] Ibid., 1.00.010.22

II.10 CONCLUSIONS

This study finds that a longer time for deliberation results in lower ethical decisions in early-career professional accountants. The findings also support the conclusions of the Fraud Triangle Theory by providing evidence that rationalization leads to a higher chance of fraudulent behavior (Cressey, 1973). While other studies have examined ethical decision making in accounting, no study has examined deliberation time as it relates to ethicality in this population. My results provide strong support for the position that the chance of unethical decisions is higher as time passes. My research is one factor for consideration in light of the shifting work environment in professional accounting.

One explanation of this tension between contrary findings in the literature may be attributed to heuristics used in decision making. In summary, a person who frequently exercises a virtuous heuristic will decide to do "the right thing" quickly (Ordoñez, Benson, & Pittarello, 2015). Gigerenzer and Brighton (2009) find that "fast and frugal" heuristics result in increased decision accuracy. In a short deliberation time, people may use a "feeling heuristic" allowing their mood to control the decision instead of an objective consideration of the alternatives (Siemer and Reisenzein, 1998). The use of heuristics in ethical decision making should be examined.

As with all experimental research, limitations must be acknowledged. There are inherent limitations when using graduate students in experimental studies. The major problems with field experiments include the difficulty of gaining access to organizations, the organization's likely resistance to the use of random assignment, and the inability to control the influence of extraneous independent variables (Trevino, 1992). A study by Moberg (2000) finds that high time pressure negatively effects ethical decision making. The pressure of the time limit in the 30

minute survey window could be a factor. Though Holian (2006) finds that varying levels of both holistic skills and judgement is related to gender and age, this study and prior studies suggest individual factors such as age and professional experience have a weak to moderate relationship. The minor differences noted due to age or professional experience could be explained by other holistic skills not examined in this study.

Given that the data were collected prior to this dissertation, additional individual variables such as religious-orientation and age would be useful. Foucault (1977-8) reminds us that even the German police understood the concept of *Polizeiwissenschaft* which posits that a set of laws governing the care of buildings, squares and paths cannot be enacted without consideration to "religions and manners" (p. 342). Other behavioral implications are found in groups such as conformity, co-policing, behavior normalization and intensification of attitudes. Therefore, it should be noted that, due to conformity, lower ethical decision quality may result from working in the presence of other people who are unethical. This proposition may be examined through a future study on work location factoring in measures of ethical in-betweenness, as well as other variables of interest.

Further research is needed to include antecedents of deliberation time. Potential antecedents are sources of time pressure (career or personal), location of ethical decision (remote work versus collocation), ethical sensitivity (prior indoctrination), and various other situational and demographic factors. Ethical competence is assumed to be constant as ethics training is a standard to CPA licensure. Further research should be conducted to better understand strategies for optimizing accounting staff workload.

This study does not wish to generalize the differences found to professional accountants who have undergone significant ethical training and CPA certification. Rather the findings

should be generalized to the population studied, early career professional accountants of different ages with varying professional experience.

APPENDICES

Appendix A: Survey Instrument

Accounting Ethics Questionnaire

Instructions: Read the three scenarios provided. Open the questionnaire and answer the 10 true-false questions as they appear. You have 30 minutes to complete this task. Once you open the questionnaire, the timer will begin and cannot be stopped. Once your answers are submitted they may not be changed.

Q1. An employer has the right to ask the employee if they have been convicted of a crime before they started working for them.

Q2. Wiley Jackson should immediately contact the office human resource professional at the firm and tell him what happened.

Q3. Assuming that Sally Jones told her office managing partner about Wiley Jackson's incident, she acted ethically in disclosing the incident to him.

Q4. Leigh Ann Walker acted unethically when she told her senior, Jackie Vaughn, that she had not taken the CPA exam.

Q5. Jackie Vaughn overreacted to Leigh Ann Walker's admission that she had been untruthful regarding the CPA exam.

Q6. The partner, Don Roberts acted appropriately in dismissing Leigh Ann Walker from the firm.

Q7. Bill was probably too inexperienced (18 months with this employer) to oversee such a material, high risk area of the audit.

Q8. Bill did not need to push back after the partner told him, "Don't worry about it", when Bill had asked the partner about the client closing two of the 14 sales departments.

Q9: Bill should sign off on the inventory memo stating that the inventory account was "presented fairly, in all material respects, in conformity with generally accepted accounting principles".

Q10: If YOU were in Bill's situation, after completing almost 1,000 hours of audit work and having only discovered an immaterial number of errors ($72,000), you would sign off that the inventory account was "presented fairly, in all material respects, in conformity with generally accepted accounting principles".

Appendix B: Ethical Dilemma Scenarios[22]

Scenario 1, Wiley Jackson Accounting Major

Wiley Jackson spent three months as an audit intern with a local practice office of a major accounting firm while he was earning an undergraduate accounting degree at the University of Wisconsin-Milwaukee. Wiley thoroughly enjoyed the three-month internship. He made several friends and, more importantly, gained valuable work experience and insight into the nature and work environment of independent auditing. On the final day of his internship, Wiley had an exit interview with the office managing partner (OMP). The OMP told Wiley that he had impressed his superiors and co-workers. Wiley's performance reviews indicated that he had strong technical and interpersonal skills and always conducted himself in a professional and ethical manner. At the end of the exit interview, the OMP offered Wiley a full-time position with the firm once he completed his master's degree in accounting at UWM. Wiley was thrilled by the offer and accepted it immediately.

While working on his graduate degree, Wiley received a packet of documents from his future employer that he was to complete and return. The packet contained standard insurance forms, 401-K elections, a W-4 form, a personal investments worksheet for independence-compliance purposes, and a "Statement of Arrests and Convictions" form. Wiley recalled having completed an earlier version of the latter document before beginning his internship. Among the questions included in this form was the following:

[22] Knapp, 2017

Scenario 1, Wiley Jackson Accounting Major (cont.)

Have you ever been convicted of a misdemeanor (excluding minor traffic violations) or a felony, or driving while intoxicated in this or any other state, or are criminal charges currently pending against you?

The form required a full explanation if this question was answered "Yes." Wiley had previously responded "No" to this question because, at the time, he had had a "clean" record, except for a few parking tickets and one speeding violation. But now, as he sat at his desk staring and the form, he was not sure how to respond to the question.

After completing his internship, Wiley had been invited to a graduation party at an off-campus location. Although he was not a "party animal," Wiley had decided to accept the invitation since it would likely be his final opportunity to see many of his friends who were graduating from UWM. When he arrived at the site of the party, Wiley was surprised by the large number of people there. In fact, because the older, two-story home could not accommodate all the partygoers, several dozen of them were congregated in the front yard and on the residential street on which the house was located.

As he made his way through the boisterous crowd, Wiley suddenly came face to face with Sally Jones. Sally, a UWM alumna, had been the audit senior assigned to Wiley's largest client during his internship. While Wiley was talking to Sally, an acquaintance thrust a cold beer into his hand and slapped him on the shoulder. "No talking business here, Dude. It's party time!" As luck would have it, just a few minutes later, the party was "busted" by the local police. Before Wiley realized exactly what was happening, a policeman approached him and asked for his I.D. As he handed over his driver's license, Wiley, who was three days short of his 21st birthday, realized that he was in trouble. Moments later, the stone-faced policeman began

Scenario 1, Wiley Jackson Accounting Major (cont.)

writing out a minor-in-possession citation. The citation ordered Wiley to appear before a local judge the following month.

Wiley was distraught and had a difficult time sleeping that night. The next morning, he called an attorney and told him what had happened. The attorney informed Wiley that he had dealt with many similar situations involving college students and that Wiley should not be "stressed out" by the incident. For first-time offenders, like Wiley, the attorney had always been successful in persuading a judge to approve "deferred adjudication." As long as Wiley stayed out of trouble over the following two years, the minor-in-possession charge would be expunged from his record, "just like it never happened," according to the attorney.

Scenario 2, Leigh Ann Walker Staff Accountant

Leigh Ann Walker graduated from a major state university in the spring of 1989 with a bachelor's degree in accounting. During her college career, Walker earned a 3.9 grade point average and participated in several extracurricular activities, including three student business organizations. Her closest friends often teased her about the busy schedule she maintained and the fact that she was, at times, a little too "intense." During the fall of 1988, Walker interviewed with several public accounting firms and large corporations and received six job offers. After considering those offers, she decided to accept an entry-level position on the auditing staff of a Big Six accounting firm. Walker was not sure whether she wanted to pursue a partnership position with her new employer. But she believed that the training programs the firm provided and the breadth of experience she would receive from a wide array of client assignments would get her career off to a fast start.

Scenario 2, Leigh Ann Walker Staff Accountant (cont.)

Walker spent the first two weeks at her new job at the firm's regional audit staff training school. On returning to her local office in early June 1989, she was assigned to work on the audit of Saint Andrew's Hospital, a large sectarian hospital with a June 30 fiscal year-end. Walker's immediate superior on the Saint Andrew's engagement was Jackie Vaughn, a third-year senior. On her first day on the Saint Andrew's audit, Walker learned that she would audit the hospital's cash accounts and assist with accounts receivable. Walker was excited about her first client assignment and pleased that she would be working for Vaughn. Vaughn had a reputation as a demanding supervisor who typically brought her engagements in under budget. She was also known for having an excellent rapport with her clients, a thorough knowledge of technical standards, and for being fair and straightforward with her subordinates.

Like many newly hired staff auditors, Walker was apprehensive about her new job. She understood the purpose of independent audits and was familiar with the work performed by auditors but doubted that one auditing course and a two-week staff-training seminar had adequately prepared her for her new work role. After being assigned to work under Vaughn's supervision, Walker was relieved. She sensed that although Vaughn was demanding, the senior would be patient and understanding with a new staff auditor. More important, she believed that she would learn a great deal from working closely with Vaughn. Walker resolved that she would work hard to impress Vaughn and had hopes that the senior would mentor her through the first few years of her career.

Early in Walker's second week on Saint Andrew's engagement, Jackie Vaughn casually asked her over lunch one day whether she had taken the CPA examination in May. After a brief pause, Walker replied that she had not but planned to study intensively for the exam during the

Scenario 2, Leigh Ann Walker Staff Accountant (cont.)

next five months and then take it in November. Vaughn indicated that was a good strategy and offered to lend Walker a set of CPA review manuals, an offer Walker declined. In fact, Walker had returned to her home state during the first week of May and sat for the CPA exam. Fear of failure, or rather, fear of admitting failure, caused Walker to decide not to tell her co-workers that she had taken the exam. She realized that most of her peers would not pass all sections of the exam on their first attempt. Nevertheless, Leigh Ann wanted to avoid the embarrassment of admitting throughout the remainder of her career that she had not been a "first timer."

Walker continued to work on the Saint Andrew's engagement throughout the summer. She completed the cash audit within budget, thoroughly documenting the results of the audit procedures she applied. Vaughn was pleased with Walker's work and frequently complimented and encouraged her. As the engagement was winding down in early August, Walker received her grades on the CPA exam in the mail one Friday evening. To her surprise, she had passed all parts of the exam. She immediately called Vaughn to let her know of the impressive accomplishment. To Walker's surprise, Vaughn seemed irritated, if not disturbed, by the good news. Walker then recalled having earlier told Vaughn that she had not taken the exam in May. Walker immediately apologized and explained why she had chosen not to disclose that she had taken the exam. Following her explanation, Vaughn still seemed annoyed, so Walker decided to drop the subject and pursue it later in person.

The following week, Vaughn spent Monday through Wednesday with another client, while Walker and the other staff assigned to the Saint Andrew's audit engagement continued to wrap up the hospital audit. On Wednesday morning, Walker received a call from Don Roberts, the office managing partner and Saint Andrew's audit engagement partner. Roberts asked

Scenario 2, Leigh Ann Walker Staff Accountant (cont.)

Walker to meet with him late that afternoon in his office. She assumed that Roberts simply wanted to congratulate her on passing the CPA exam.

The usually upbeat Roberts was somber when Walker stepped into his office that afternoon. After she was seated, Roberts informed her that he had spoken with Jackie Vaughn several times during the past few days and that he had consulted with the three other audit partners in the office regarding a situation involving Walker. Roberts told Walker that Vaughn was very upset by the fact that she (Walker) had lied regarding the CPA exam. Vaughn had indicated that she would not be comfortable having a subordinate on future engagements who she could not trust to be truthful. Vaughn had also suggested that Walker be dismissed from the firm because of lack of integrity she had demonstrated.

After a brief silence, Roberts told a stunned Walker that he and the other audit partners agreed with Vaughn. He informed Walker that she would be given sixty days to find another job. Roberts also told Walker that he and the other partners would not disclose that she had been "counseled out" of the firm if contacted by employers interested in hiring her.

Scenario 3, Bill DeBurger In-Charge Accountant

"Bill, will you have that inventory memo done by this afternoon?"

"Yeah, Sam, it's coming along. I should have it done by five, or so."

"Make it three … or so. Okay, Bub?"

Bill responded with a smile and a not. He had a good relationship with Sam Hakes, the partner supervising the audit of Marcelle Stores.

Scenario 3, Bill DeBurger In-Charge Accountant (cont.)

Bill DeBurger was an in-charge accountant who had 18 months experience with his employer, a large national accounting firm. Bill's firm used the title "in-charge" for the employment position between staff accountant and audit senior. Other titles used by accounting firms for this position included "advanced staff" and "semi-senior." Typically, Bill's firm promoted individuals to in-charge after one year. An additional one to two years experience and successful completion of the CPA exam were usually required before promotion to audit senior. The title "in-charge" was a misnomer, at least in Bill's mind. None of the in-charges he knew had ever been placed in charge of an audit, even a small audit. Based upon Bill's experience, an in-charge was someone a senior or manager expected to work with little or no supervision. "Here's the audit program for payables. Go spend the next five weeks completing the 12 program steps…and don't bother me," seemed to be the prevailing attitude in making work assignments to in-charges.

As he turned back to the legal pad in front of him, Bill forced himself to think of Marcelle Stores' inventory – all $50 million of it. Bill's tasks was to summarize it in a two-page memo, 900 hours of work that he, two staff accountants, and five internal auditors had done over the past two months. Not included in the 900 hours was the time spent on eight inventory observations performed by other offices of Bill's firm.

Marcelle Stores was a regional chain of 112 specialty stores that featured a broad range of products for do-it-yourself interior decorators. The company's most recent fiscal year had been a difficult one. A poor economy, increasing competition, and higher supplier prices had slashed Marcelle's profit to the bone over the past 12 months. The previous year, the company

Scenario 3, Bill DeBurger In-Charge Accountant (cont.)

had posted a profit of slightly less than $8 million; for the year just completed, the company's pre-audit net income hovered at an anemic $500,000.

Inventory was the focal point of each of Marcelle's financial statements. This year, inventory was doubly important. Any material overstatement discovered in the inventory account would convert a poor year profit-wise into a disastrous year in which the company posted its first-ever loss.

Facing Bill on the small table that served as his makeshift desk were two stacks of workpapers, each two feet tall. Those workpapers summarized the results of extensive price tests, inventory observation procedures, year-end cutoff tests, an analysis of the reserve for inventory obsolescence, and various other audit procedures. Bill's task was to assimilate all of this audit evidence into a conclusion regarding Marcelle's inventory. Bill realized that Sam Hakes expected that conclusion to include the key catch phrase, "presented fairly, in all material respects, in conformity with generally accepted accounting principles."

As Bill attempted to outline the inventory memo, he gradually admitted to himself that he had no idea whether Marcelle's inventory dollar value was materially accurate. The workpaper summarizing the individual errors discovered in the inventory account reflected a net overstatement of only $72,000. That amount was not material even in reference to Marcelle's unusually small net income. However, Bill realized that the $72,000 figure was little better than a guess.

The client's allowance for inventory obsolescence particularly troubled Bill. He had heard a rumor that Marcelle intended to discontinue 2 of the 14 sales departments in its stores. If that were true, the inventory in those departments would have to be sold at deep discounts. The

Scenario 3, Bill DeBurger In-Charge Accountant (cont.)

collective dollar value of those two departments' inventory approached $6 million, while the client's allowance for inventory obsolescence had a year-end balance of only $225,000. Earlier in the audit, Bill had asked Sam about the rumored closing of the two departments. The typically easygoing partner had replied with a terse "Don't worry about it."

Bill always took his work assignments seriously and wanted to do a professional job in completing them. He believed that independent audits served an extremely important role in a free market economy. Bill was often annoyed that not all of his colleagues shared that view. Some of his co-workers seemed to have an attitude of "just get the work done". They stressed form over substance: "Tic and tie, make the workpapers look good, and don't be too concerned with the results. A clean opinion is going to be issued no matter what you find."

Finally, Bill made a decision. He would not sign off of the inventory account regardless of the consequences. He did not know whether the inventory account balance was materially accurate, and he was not going to write a memo indicating otherwise. Moments later, Bill walked into the client office being used by Sam Hakes and closed the door behind him.

"What's up?" Sam asked as he flipped through a workpaper file.

"Sam, I've decided that I can't sign off on the inventory account," Bill blurted out.

"What?" was Sam's stunned, one-word reply.

Bill stalled for a few moments to bolster his courage as he fidgeted with his tie.

"Well…like I said, I'm not signing off on the inventory account."

"Why?" By this point, a disturbing crimson shade had already engulfed Sam's ears and was creeping slowly across his face.

Scenario 3, Bill DeBurger In-Charge Accountant (cont.)

"Sam…I just don't think I can sign off. I mean, I'm not sure whether the inventory number is right?"

"Well…yeah. Ya know, it's just tough to…to reach a conclusion, ya know, on an account that large."

Sam leaned back in his chair and cleared his throat before speaking. "Mr. DeBurger, I want you to go back into that room of yours and close the door. Then you sit down at that table and write a nice, neat, very precise and to-the-point inventory memo. And hear this: I'm not telling you what to include in that memo. But you're going to write that memo, and you're going to have it on my desk in two hours. Understood?" Sam's face was entirely crimson as he completed his short speech.

"Uh, okay," Bill replied.

Bill returned to the small conference room that had served as his work area for the past two months. He sat in his chair and stared at the pictures of his tow-year-old twins, Lesley and Kelly, which he had taped to the wall above the phone. After a few minutes, he picked up his pencil, leaned forward, and began outlining the inventory memo.

Appendix C: Bivariate Analysis

Bivariate Analyses Scatterplots

It is common in the social sciences that measured attributes are not be normally distributed. Because of our large sample size, I was able to use multiple regression without severe effects from skew and kurtosis (Brown, 2006).

Figure 9: Deliberation Time vs. Ethical Decision Quality Scatterplots

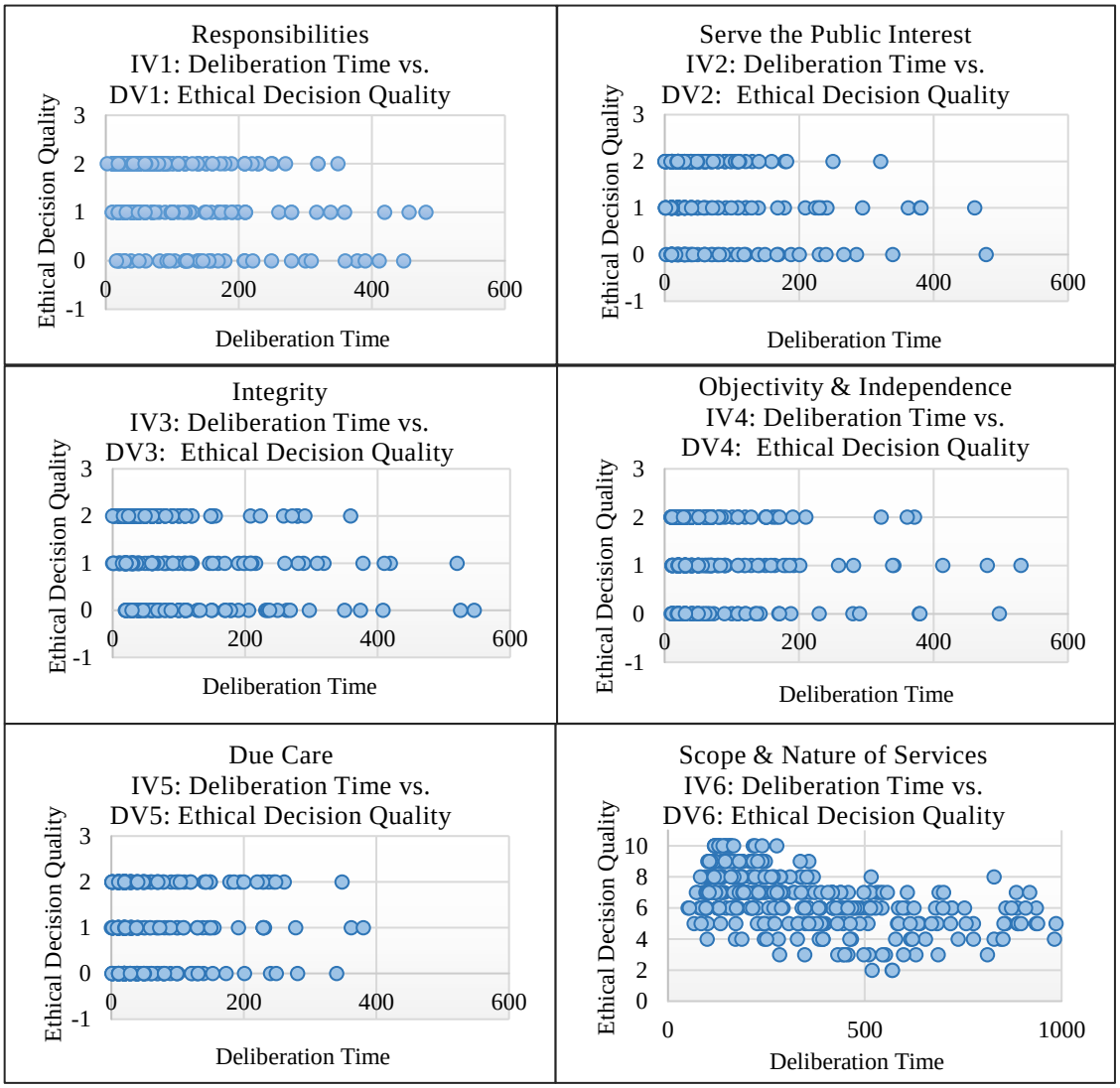


Table 17: Descriptive Statistics DVs 1 – 6 and IVs 1- 6

Measure	*M*	Median	Skew	Kurtosis
IV1: Responsibilities DT	86.64	52.00	2.10	4.60
IV2: Public Interest DT	52.68	22.00	3.00	9.86
IV3: Integrity DT	78.49	40.00	2.01	9.73
IV4: Objectivity & Independence DT	62.72	31.00	3.153	11.39
IV5: Due Care DT	53.13	22.00	2.35	5.80
IV6: Scope & Nature of Services DT	334.15	249.00	1.21	1.04
DV1: Responsibilities EDQ	1.50	2.00	-0.98	-0.23
DV2: Public Interest EDQ	1.39	2.00	-0.77	-0.78
DV3: Integrity EDQ	1.30	2.00	-0.58	-1.17
DV4: Objectivity & Independence EDQ	1.26	1.00	-0.43	-0.95
DV5: Due Care EDQ	1.17	1.00	-0.32	-1.43
DV6: Scope & Nature of Services EDQ	6.62	7.00	-0.15	-0.33

Appendix D: Hierarchical Analysis (Lognormal)

Figure 10: Deliberation Time vs. Ethical Decision Quality Scatterplots (Lognormal)

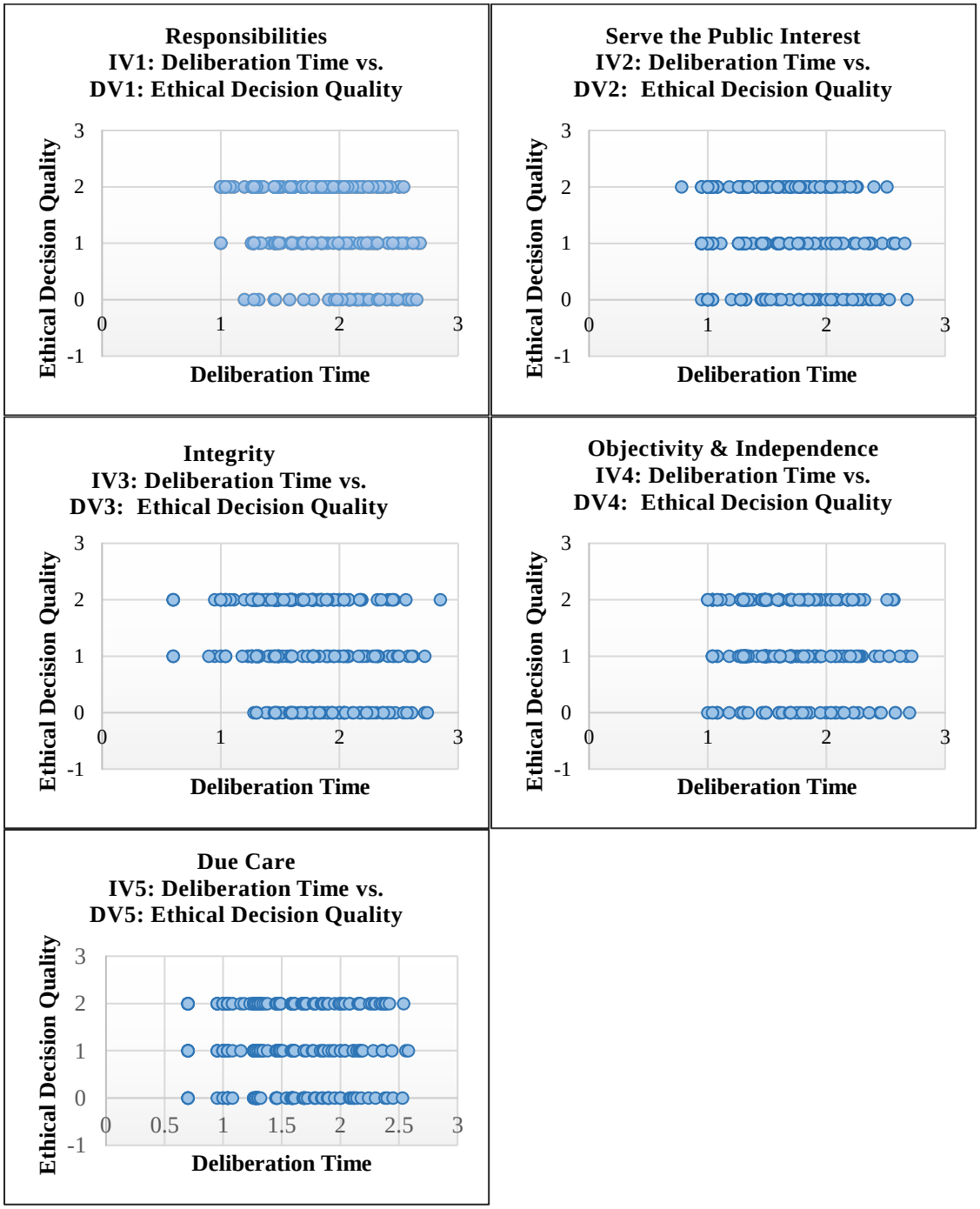


Table 18: Descriptive Statistics (IVs 1 – 5, Lognormal Distribution)

Measure	*M*	Median	Skew	Kurtosis
IV1: Responsibilities DT	1.77	1.72	.145	.036
IV2: Public Interest DT	1.46	1.39	-0.13	1.03
IV3: Integrity DT	1.67	1.60	-0.10	0.94
IV4: Objectivity & Independence DT	1.56	1.49	0.81	0.21
IV5: Due Care DT	1.45	2.40	-0.33	0.72
IV6: Scope & Nature of Services DT	334.15	249.00	1.21	1.04
DV1: Responsibilities EDQ	1.50	2.00	-0.98	-0.23
DV2: Public Interest EDQ	1.39	2.00	-0.77	-0.78
DV3: Integrity EDQ	1.30	2.00	-0.58	-1.17
DV4: Objectivity & Independence EDQ	1.26	1.00	-0.43	-0.95
DV5: Due Care EDQ	1.17	1.00	-0.32	-1.43

Table 19: Correlations Between Variables (IVs 1 – 5, Lognormal Distribution)

Measure	*M*	SD	CV1	CV2	IV1	IV2	IV3	IV4	IV5	IV6	DV1	DV2	DV3	DV4	DV5
CV1: Experience	8.5	4.70	-												
CV2: Gender	0.44	4.97	0.07	-											
IV1: Responsibilities DT	1.77	0.37	0.00	0.00	-										
IV2: Public Interest DT	1.46	0.47	-0.04	0.07	0.26**	-									
IV3: Integrity DT	1.67	0.44	0.09	0.00	0.28**	0.27**	-								
IV4: Objectivity & Independence DT	1.56	0.37	-0.02	-0.03	0.23**	0.12*	0.30*	-							
IV5: Due Care DT	1.45	0.50	0.03	-0.01	0.26**	0.27**	0.25**	0.27**	-						
IV6: Scope & Nature DT	334.15	234.56	-0.01	0.03	.62**	0.52**	0.67**	0.58**	0.58**	-					
DV1: Responsibilities EDQ	1.50	0.68	0.04	0.05	-0.29**	-0.03	-0.10	-0.13*	-0.15**	-0.25**	-				
DV2: Public Interest EDQ	1.39	0.74	0.39	0.05	-0.12*	-0.17**	-0.20**	-0.11*	-0.11*	-0.25**	0.203	-			
DV3: Integrity EDQ	1.30	0.79	-0.09	0.01	-.20**	-0.13**	-0.28**	-0.31**	-0.25**	-0.38**	0.30	0.9	-		
DV4: Objectivity & Independence EDQ	1.26	0.71	0.04	0.00	0.01	0.01	-0.11*	-0.06	-0.18**	-0.09	-0.19**	-0.14**	0.07	-	
DV5: Due Care EDQ	1.17	0.81	-0.06	-0.06	-0.12*	-0.12*	-0.06	-0.05	-0.18**	0.10	0.10	0.18**	-0.15**		-
DV6: Scope & Nature EDQ	6.62	1.78	-0.02	0.02	-.30**	-0.24**	-0.32**	-0.33**	-0.28**	-0.51**	0.45**	0.52**	0.61**	0.23**	0.55**

**. Correlation is significant at the 0.01 level (2-tailed).

Table 20: Hierarchical Regression with DV1, IV1, CV1 and CV2 (IV1 Lognormal Distribution)

	Model 1.0		Model 1.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	0.035	0.525	0.037	0.480
CV2: Gender	0.047	0.388	0.049	0.480
IV1: Deliberation Time			-0.291***	0.000
R^2:	0.003		0.088	
ΔR^2:			0.085	
F-statistic:	0.618	0.540	10.971***	0.000
ΔF-statistic			31.564**	

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

Table 21: Hierarchical Regression with DV2, IV2, CV1 and CV2 (IV2 Lognormal Distribution)

	Model 2.0		Model 2.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	0.036	0.509	0.029	0.589
CV2: Gender	0.042	0.438	0.055	0.307
IV2: Deliberation Time			-0.175***	0.001
R^2:	0.003		0.034	
ΔR^2:			0.030	
F-statistic:	0.559	0.572	3.927***	0.000
ΔF-statistic			10.631**	

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

Table 22: Hierarchical Regression with DV3, IV3, CV1 and CV2 (Lognormal Distribution)

	Model 3.0		Model 3.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	-0.086	0.114	-.062	0.240
CV2: Gender	0.012	0.824	0.012	0.842
IV3: Deliberation Time			-0.276***	0.000
R^2:	0.007		0.083	
ΔR^2:			0.076	
F-statistic:	1.263	0.284	10.203***	0.000
ΔF-statistic			27.883**	

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

Table 23: Hierarchical Regression with DV4, IV4, CV1 and CV2 (Lognormal Distribution)

	Model 4.0		Model 4.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	-0.043	0.429	0.040	0.454
CV2: Gender	-0.002	0.969	-.006	0.906
IV4: Deliberation Time			-0.174***	0.001
R^2:	0.002		0.032	
ΔR^2:			0.030	
F-statistic:	0.313	0.11	3.764**	0.011
ΔF-statistic			10.649**	

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

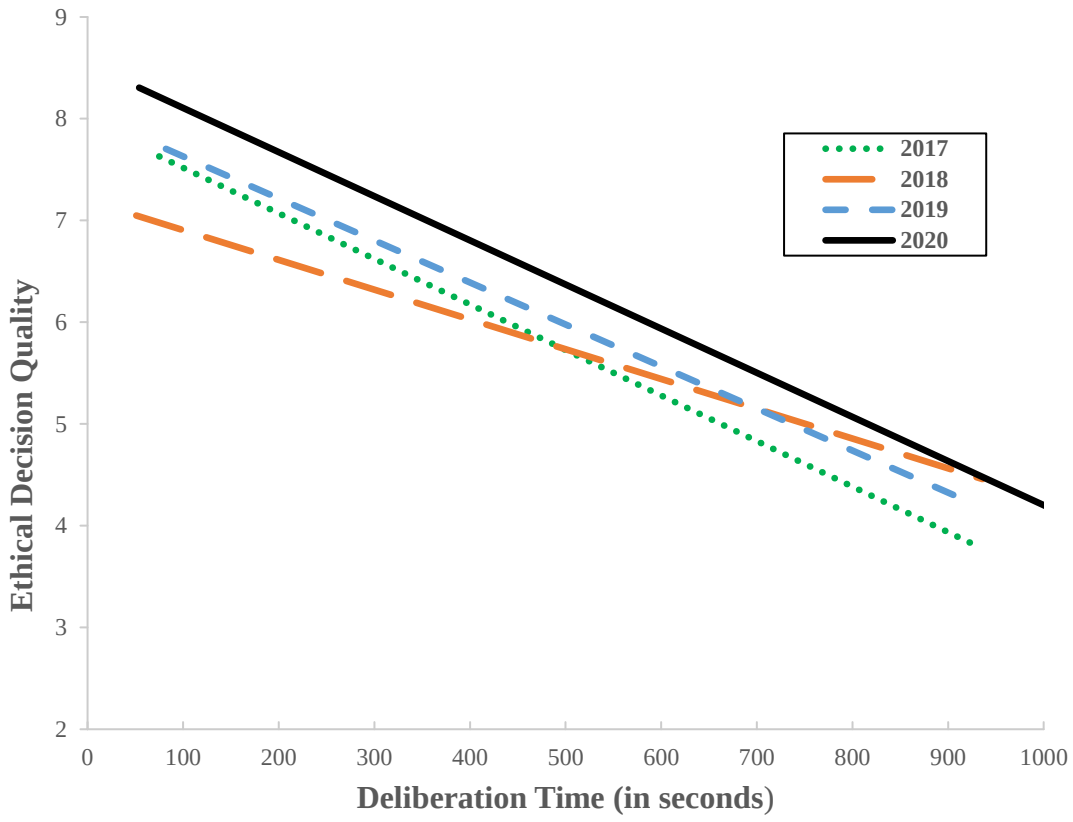
Table 24: Hierarchical Regression with DV5, IV5, CV1 and CV2 (Lognormal Distribution)

	Model 5.0		Model 5.1	
Variable	β	Sig.	β	Sig.
CV1: Work Experience	-0.056	0.300	-0.055	0.312
CV2: Gender	-0.051	0.344	-0.052	0.338
IV5: Deliberation Time			-0.052	0.340
R^2:	0.006		0.009	
ΔR^2:			0.003	
F-statistic:	1.064**	.0346	1.013	0.387
ΔF-statistic			0.912	

*$p < .15$, **, $p \leq .05$, *** $p \leq .001$

Appendix E: Year-Over-Year Analysis

Figure 11: Year-Over-Year Analysis of Ethical Decision Quality and Deliberation Time



Appendix F: IRB Permission

Georgia State University

INSTITUTIONAL REVIEW BOARD

Mail: P.O. Box 3999 In Person: 3rd Floor
Atlanta, Georgia 30302-3999 58 Edgewood
Phone: 404/413-3500 FWA: 00000129

August 05, 2020

Principal Investigator: Subhashish Samaddar

Key Personnel: Livingston, Ricki W; Samaddar, Subhashish

Study Department: Executive Doctorate in Busines

Study Title: Ethical Decisions in Professional Accounting: The Impact of Location Monitoring (LM) and Elapsed Decision Time (EDT)

Submission Type: Application for Designation of Not Human Subjects Research

IRB Number: H21044

Reference Number: 361502

Thank you for your Application for Designation of Not Human Subjects Research. Based on the information provided, this submission has been determined to be not human subjects research. This correspondence should be maintained with your records.

Please do not hesitate to contact the Office of Research Integrity at 404-413-3500 if you have any questions or concerns.

Sincerely,

Deonne J. McNeill, IRB Staff

REFERENCES

Abdolmohammadi, M., & Baker, C. (2006). Accountants' Value Preferences and Moral Reasoning. *Journal of Business Ethics*, 69(1), 11–25. https://doi-org.ezproxy.lib.uconn.edu/10.1007/s10551-006-9064-y.

Abdolmohammadi, M.J., Gabhart, D.R.L. & Reeves, M.F. (1997). Ethical Cognition of Business Students Individually and in Groups. *Journal of Business Ethics,* 16**,** 1717–1725. https://doi.org/10.1023/A:1005709723798

Abelson, R.P. (1995). *Statistics as principled argument.* Hillsdale, NJ: Erlbaum.

Amabile, T. M. (1988). "A Model of Creativity and Innovation in Organizations." In B. M. Staw, and L. L. Cummings (Eds.), *Research in Organizational Behavior,* Volume 10. Greenwich, CT: JAI Press.

Ameen, E. C., Guffey, D. M., and McMillan, J. J. (1996), Gender Differences in Determining the Ethical Sensitivity of Future Accounting Professionals, *Journal of Business Ethics*,15(5), 591-597.

American Institute of Certified Public Accountants (AICPA). (2014). Code of Professional Conduct.

American Institute of Certified Public Accountants (AICPA). (2021). Disciplinary Actions. Retrieved from https://www.aicpa.org/forthepublic/disciplinaryactions.html on February 20, 2021.

American Institute of Certified Public Accountants (AICPA). (1978). The Commission on Auditors' Responsibilities: Report, Conclusions, and Recommendations. New York: AICPA.

Andrews, F. M. and G. F. Farns. (1972). Time Pressure and Performance of Scientists and Engineers: A Five Year Panel Study. *Organizational Behavior and Human Performance*, Vol. 8, pp. 185-200.

Arnold, V., Collier, P.A., Leech, S. A.and Sutton, S. G. (2004). Impact of intelligent decision aids on expert and novice decision-makers' judgments. *Accounting and Finance*, 44 (1): 1–26.

Arnold, D. F. Sr. and Ponemon, L. A. (1991). Internal auditors perceptions of whistle-blowing and the influence of moral reasoning an experiment. *Auditing, A Journal of Practice and Theory.* 10(2), 1-5.

Baker, T. L. & Hunt. T.D., (2003). An Exploratory Investigation into the Effects of Team Composition on Moral Orientation, *Journal of Managerial Issues,* 15(1), 106-119.

Bampton, R. & Cowton, C. (2013). Taking Stock of Accounting Ethics Scholarship: A Review of the Journal Literature. *Journal of Business Ethics, 114*(3), 549–563. https://doi.org/10.1007/s10551-012-1341-3

Bandura, A. (1991). Social cognitive theory of moral thought and action, in and *Handbook of moral behavior and development: Vol. 1 Theory*, eds. W. M. Kurtines and J. L. Gewirtz. Hillsdale, NJ: Erlbaum.

Ben-Zur, H., & Breznitz, S. J. (1981). The effect of time pressure on risky choice behavior. *Acta Psychologica*, 47(2), 89–104.

Bernardi R. & Donald, D. (1997). An examination of moral development within public accounting by gender, staff level, and firm, *Contemporary Accounting Research,* 14(4), 653-668.

Bolsinova, M., de Boeck, P. & Tijmstra, J. (2017). Modelling Conditional Dependence Between Response Time and Accuracy. P*sychometrika* 82, 1126–1148. https://doi.org/10.1007/s11336-016-9537-6.

Braithwaite, R. (1955). Scientific Explanation. Cambridge: Cambridge University Press.Brass, D.J. & Oldham, G.R. (1976). Validating an in-basket test using an alternative set of leadership scoring dimensions. Journal of Applied Psychology, 61, 652-657.

Brink, W.D., Eaton, T.V., Grenier, J.H., Reffett, A. (2017). Deterring Unethical Behavior in Online Labor Markets. *Journal of Business Ethics*, 156, 71–88. https://doi-org.ezproxy.lib.uconn.edu/10.1007/s10551-017-3570-y

Brown, T. A. (2006). *Confirmatory Factor Analysis for Applied Research, First Edition*. The Guilford Press.

Bruner, I S., Goodnow, J.J., and Austin, G. A. (1956). A Study of Thinking. New York: Wiley.

Bureau of Labor Statistics, U.S. Department of Labor, (2021). Occupational Outlook Handbook, Accountants and Auditors, at https://www.bls.gov/ooh/business-and-financial/accountants-and-auditors.htm (visited January 06, 2021).

Chan, S. Y. S., & Leung, P. (2006). The effects of accounting students' ethical reasoning and personal factors on their ethical sensitivity. *Managerial Auditing Journal, 21*(4), 436–457. doi:10.1108/02686900610661432.

Chow, W.S., Wu, J.P. & Chan, A.K.K. (2009). The Effects of Environmental Factors on the Behavior of Chinese Managers in the Information Age in China. *J Bus Ethics* 89, 629. https://doi.org/10.1007/s10551-008-0022-8

Christie, P. M. J., Kwon, I. G., Stoeberl, P. A. & Baumhart, R. (2003). A Cross-Cultural Comparison of Ethical Attitudes of Business Managers: India, Korea and the United States, *Journal of Business Ethics*, 46(3), 263-287.

Clay, B. (2001). Is This a Trick Question? Kansas Curriculum Center, Kansas State Department of Education. https://www.k-state.edu/ksde/alp/resources/Handout-Module6.pdf

Cochran, W.G. (1965). The planning of observational studies of human populations. *Journal of the Royal Statistical Society, 128*, 234-255.

Comer, D. R., & Vega, G. (Eds.). (2011). *Moral courage in organizations: Doing the right thing at work*. Armonk, NY: M.E. Sharpe.

Cooper, Lauren A, Holderness, D. Kip, Sorensen, Trevor L, & Wood, David A. (2019). Robotic Process Automation in Public Accounting. *Accounting Horizons*, *33*(4), 15–35. https://doi.org/10.2308/acch-52466

Corts, Thomas E. (1968) The derivation of ethos, Speech Monographs, 35:2, 201-202, doi: 10.1080/03637756809375583.

Craft, J. L. (2013). A review of the empirical ethical decision-making literature: 2004–2011. *Journal of Business Ethics*, 117(2), 221–259.

Cressey, D.R., (1973). Other People's Money, *Montclair*, Patterson Smith, 30.

Critcher, C. R., Inbar, Y., & Pizarro, D. A. (2013). How quick decisions illuminate moral character. *Social Psychological and Personality Science*, 4(3), 308–315.

deliberation. (2021). In *Merriam-Webster.com*. Retrieved April 8, 2021, from https://www.merriam-webster.com/dictionary/deliberation

Dorner, D. (1990). The Logic of Failure. In D. E. Broadbent, J. Reason, and A. Baddeley (Eds.), Human Factors in Hazardous Situations. Oxford: Clarendon Press.

Emerson, T. L. N., Conroy, S. J., & Stanley, C.W. (2007). Ethical attitudes of accountants: Recent evidence from a practitioners' survey. *Journal of Business Ethics*, 71: 73–87.

Etherington, L. D., and Shulting, L. (1995). Ethical development of accountants. *Research on Accounting Ethics.* 1: 235-51.

ethos. (2019). In *Merriam-Webster.com.* Retrieved December 23, 2019, from https://merriam-wesbster.com/dictionary/ethos

Eynon, G., Hill, N.Y., & Stevens, K. T., (1997). Factors that Influence the Moral Reasoning of Accountants: Implications for Universities and the Profession, *Journal of Business Ethics*, 16(12/13), 1297-1309.

Eweje, G., & Brunton, M. (2010). Ethical perceptions of business students in a New Zealand university: Do gender, age and work experience matter? *Business Ethics: A European Review, 19*(1), 95–111. doi:10.1111/j.1467-8608.2009.01581.x.

Ferrell, O.C. and Ferrell, L. (2011). The responsibility and accountability of CEOs: the last interview with Ken Lay. *Journal of Business Ethics*, 100:2,209-219.

Fleischman, G. & Valentine, S. (2003). Professionals' Tax Liability and Ethical Evaluations in an Equitable Relief Innocent Spouse Case, *Journal of Business Ethics*, 42(1), 27-44.

Ford, R. C., & Richardson, W. D. (1994). Ethical decision making: A review of the empirical literature. *Journal of Business Ethics*, *13*(3), 205–221. https://doi.org/10.1007/bf02074820.

Foucault, M. (1977-78). Security, territory, population. Course at the Collège de France, Paris: Gallimard / Seuil ("Hautes Études" Collection), 2004, 435 p.

Gigerenzer, Gerd (2008). Why Heuristics Work. *Perspectives on Psychological Science*. 3 (1): 20–29. doi:10.1111/j.1745-6916.2008.00058.x. PMID 26158666. S2CID 8947622.

Gigerenzer, G., & Brighton, H. (2009). Homo heuristicus: Why biased minds make better inferences. *Topics in Cognitive Science*, 1(1), 107–143.

Gladwell, M. (2005). *Blink: The power of thinking without thinking*. Little, Brown and Co.

Gurley, K., Wood, P., & Nijhawan, I. (2007). The effect of punishment on ethical behavior when personal gain is involved. *Journal of Legal, Ethical and Regulatory Issues*, 10(1), 91–104.

Hannah, S. T., Avolio, B. J., & Walumbwa, F. O. (2011b). Relationships between authentic leadership, moral courage, ethical and pro-social behaviors. *Business Ethics Quarterly*, *21*(4), 555–578.

Healy, P. M., & Palepu, K. G. (2003). The fall of Enron. *Journal of Economic Perspectives*, 17, 3–26. doi:10.1257/089533003765888403.

Herington, C., & Weaven, S. (2008). Improving consistency for DIT results using cluster analysis. *Journal of Business Ethics, 80*, 499–514. doi:10.1007/s10551-007-9451-z.

Holian, R. (2006). Management decision making, ethical issues and emotional intelligence. *Management Decision*, 44(8), 1122–1138

Howard, Ronald A. (1988). Decision Analysis: Practice and Promise. *Management Science*, *34*(6), 679–695. https://doi.org/10.1287/mnsc.34.6.679

Hui, C., Organ, D. W., & Crooker, K. (1994). Time Pressure, Type A Syndrome, and Organizational Citizenship Behavior: A Laboratory Experiment. *Psychological Reports*, Vol. 75, pp. 199-208.

Hwang, D., Staley, B., Te Chen, Y., & Lan, J. S. (2008). Confucian culture and whistle ‐ blowing by professional accountants: an exploratory study. *Managerial Auditing Journal.*

International Monetary Fund. (2021). World Economic Outlook Update, at https://www.imf.org/en/Publications/WEO/Issues/2021/01/26/2021-world-economic-outlook-update (visited January 06, 2021).

Kaplan, A. (1964). The conduct of inquiry. San Francisco: Chandler. Kelman, H.C. & Hamilton, V.L. Crimes of obedience.. New Haven: Yale University Press.

Keil, M., Amrit, T., Robert, S., & Sweta, S. (2010). Toward a Theory of Whistleblowing Intentions: A Benefit-to-Cost Differential Perspective. *Decision Sciences, 41*(4), 787–812. https://doi.org/10.1111/j.1540-5915.2010.00288.x

Knapp, M. C. (2017). *Contemporary auditing: Real issues and cases*. Mason, Ohio: Thomson/South-Western.

Koh, H. P., Scully, G., & Woodliff, D. R. (2018). Can Anticipating Time Pressure Reduce the Likelihood of Unethical Behaviour Occurring? *Journal of Business Ethics*, 153(1), 197–213.

Krambia-Kapardis, M., & Zopiatis, A. A. (2008). Unchartered territory: Investigating individual business ethics in Cyprus. *Business Ethics: A European Review, 17*(2), 138–148. doi:10.1111/j.1467-8608.2008.00527.x.

Laditka, S.B. and Houck, M.M. (2006). ‘Student-developed case studies: an experiential approach for teaching ethics in management’. *Journal of Business Ethics*, 64:2, 157–167.

Lai, K. M. Y., Sasmita, A., Gul, F. A., Foo, Y. B., & Hutchinson, M. (2018). Busy Auditors, Ethical Behavior, and Discretionary Accruals Quality in Malaysia. *Journal of Business Ethics*, *150*(4), 1187–1198.

Lail, B., MacGregor, J., Marcum, J., Stuebs. M. (2017). Virtuous Professionalism in Accountants to Avoid Fraud and to Restore Financial Reporting. J Bus Ethics 140, 687–704. https://doi-org.ezproxy.lib.uconn.edu/10.1007/s10551-015-2875-y.

Lehnert, K., Craft, J., Singh, N. and Park, Y.-H. (2016), The human experience of ethics: a review of a decade of qualitative ethical decision-making research. *Business Ethics: A European Review*, 25: 498-537. doi:10.1111/beer.12129

Lehnert, K., Park, Y.-H., & Singh, N. (2014). Research Note and Review of the Empirical Ethical Decision-Making Literature: Boundary Conditions and Extensions. *Journal of Business Ethics*, *129*(1), 195–219. https://doi.org/10.1007/s10551-014-2147-2

Leitsch, D. L. (2004). Differences in the perceptions of moral intensity in the moral decision process: An empirical examination of accounting students. *Journal of Business Ethics*, 53, 313–323. doi:10.1023/B:BUSI.0000039378.74446.df.

Loe, T. W., Ferrell, L., & Mansfield, P. (2000). A review of empirical studies assessing ethical decision making in business. *Journal of Business Ethics*, 25(3), 185–204.

Luchin, A. S. (1942). Mechanizations in Problem Solving: The Effect of Einstellung. *Psychological Monographs*, Vol. 54, Whole No. 248.

May, D.R., Luth, M. T., & Schwoerer, C. E. (2014). The Influence of Business Ethics Education on Moral Efficacy, Moral Meaningfulness, and Moral Courage: A Quasi-experimental Study. *Journal of Business Ethics*, *124*(1), 67–80. https://doi.org/10.1007/s10551-013-1860-6

Mayhew, B.W. and Murphy, P.R. (2014). The Impact of Authority on Reporting Behavior, Rationalization and Affect. *Contemporary Accounting Research*, 31: 420-443. https://doi-org.ezproxy.lib.uconn.edu/10.1111/1911-3846.12037

Matheson, D., & Matheson, J. (1998). The Smart Organization: Creating Value through Strategic R&D. *Harvard Business School Press*, Boston, MA. 298 pp.

Mautz, R. (1963). Accounting as a Social Science. The Accounting Review, 38(2), 317-325. Retrieved February 20, 2021, from http://www.jstor.org.ezproxy.lib.uconn.edu/stable/242922

McCabe, S., Cohn, M., Browning, L., Russell, R., & Stimpson, J. (2017, September 18). 2017 top 100 PEOPLE Extra: Accounting's biggest issues. Retrieved February 20, 2021 from https://www.accountingtoday.com/news/2017-top-100-people-extra-accountings-biggest-issues.

Miles, J., & Shevlin, M. (2010). *Applying regression & correlation: A guide for students and researchers*, London: Sage Publications.

Moberg, D.J. (2000). Time Pressure and Ethical Decision-Making: The Case for Moral Readiness. *Business and Professional Ethics Journal*, 19(2), 41-67. https://doi.org/10.5840/bpej200019214

"moral ." *The Oxford Pocket Dictionary of Current English*. (2021). Retrieved January 12, 2021 from Encyclopedia.com: https://www.encyclopedia.com/humanities/dictionaries-thesauruses-pictures-and-press-releases/moral-1

Morales, J., Gendron, Y., & Guénin-Paracini, H. (2014). The construction of the risky individual and vigilant organization: A genealogy of the fraud triangle. *Accounting, Organizations and Society, 39*(3), 170–194. https://doi.org/10.1016/j.aos.2014.01.006

National State Boards of Accountancy, Center for Public Trust. (2021). *About Us.* Retrieved on February 11, 2021, from https://thecpt.org/about-us/.

Ness, Alisha, M., & Connelly, S. (2017) Situational influences on ethical sensemaking: Performance pressure, interpersonal conflict, and the recipient of consequences, *Human Performance*, 30:2-3, 57-78, DOI: 10.1080/08959285.2017.1301454

Nguyen, N. T., Basuray, M. T., Smith, W. P., Kopka, D., & McCulloh, D. (2008). Moral issues and gender differences in ethical judgment using Reidenbach and Robin's (1990) multidimensional ethics scale: Implications in teaching of business ethics. *Journal of Business Ethics*, 77(4), 417–430.

O'Fallon, M., & Butterfield, K. (2005). A Review of the Empirical Ethical Decision-Making Literature: 1996-2003. *Journal of Business Ethics, 59*(4), 375-413. Retrieved November 4, 2020, from http://www.jstor.org/stable/25123570

O'Leary, C. & Stewart, J. (2007). Governance factors affecting internal auditors' ethical decision-making. *Managerial Auditing Journal*, *22*(8), 787–808. https://doi.org/10.1108/02686900710819643

O'Leary, C., & Pangemanan, G. (2008). The effect of groupwork on ethical decision-making of accountancy students. *Journal of Business Ethics,* 75(3), 215–228

Ordóñez, L., Benson, L. & Pittarello, A. (2015). Time Pressure Perception and Decision Making. In The Wiley Blackwell Handbook of Judgment and Decision Making (eds G. Keren and G. Wu) doi:10.1002/9781118468333.ch18.

Parker, J. M., Anderson, C. W., Heidemann, M., Merrill, J., Merritt, B., Richmond, G., & Urban-Lurain, M. (2012). Exploring undergraduates' understanding of photosynthesis using diagnostic question clusters. *CBE-Life Sciences Education,* 11(1), 47–57. https://doi.org/10.1187/cbe.11-07-0054.

Ponemon L. & Gabhart, D. (1993). Ethical reasoning in accounting and auditing. *Canadian General Accountants' Research Foundation,* Vancouver.

Raiffa, H., Hammond, J. S., & Keeney, R. L. (2002). Smart Choices: A Practical Guide to Making Better Decisions. In *Harvard Business School Press Books* (p. 1).

Randall, D. M., & Gibson, A. M. (1990). Methodology in business ethics research: A review and critical assessment. *Journal of Business Ethics*, 9(6), 457–471.

Robertson, D. C. (1993). Empiricism in business ethics: Suggested research directions. J*ournal of Business Ethics*, 12(8), 585–599.

Samaddar, S., Nargundkar, S., & Daley, M. (2006). Inter-organizational information sharing: The role of supply network configuration and partner goal congruence. *European Journal of Operational Research*, 174(2), 744-765. doi:10.1016/j.ejor.2005.01.059

Schroeder, R. G., Clark, M., & Cathey, J. M. (2017). *Financial accounting theory and analysis: Text and cases*.

Scofield, S. B., Phillips Jr., T. J., & Bailey, C. D. (2004). An empirical reanalysis of the selection-socialization hypothesis: A research note. *Accounting, Organizations and Society*, 29 (5–6): 543–63.

Scott, S. G., & Bruce, R.A.(1994). Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. *Academy of Management Journal*, Vol. 37, pp. 580-607.

Sekerka, L.E., Bagozzi, R.P. & Charnigo, R. (2009). Facing Ethical Challenges in the Workplace: Conceptualizing and Measuring Professional Moral Courage. *J Bus Ethics* **89,** 565. https://doi-org.ezproxy.lib.uconn.edu/10.1007/s10551-008-0017-5

self-governance. (2020). In *Merriam-Webster.com.* Retrieved December 20, 2020, from https://merriam-wesbster.com/dictionary/self-governance.

Shalvi, S., Eldar, O. & Bereby-Meyer, Y. (2012). "Honesty Requires Time (and Lack of Justifications)." *Psychological Science*, 23.10: 1264-270. Web.

Siemer, M. and Reisenzein. R. (1998). Effects of Mood on Evaluative Judgments: Influence of Reduced Processing Capacity and Mood Salience. *Cognition and Emotion*, Vol. 12, pp. 783-805.

Simon, Herbert. (1957). A Behavioral Model of Rational Choice, in Models of Man, Social and Rational: Mathematical Essays on Rational Human Behavior in a Social Setting. New York: Wiley.

Simon, H. A. (1960). The New Science of Managerial Decision. New York: Harper.

Spetzler, C. S., Winter, H. and Meyer, J. (2016). *Decision quality : value creation from better business decisions*. WILEY.

Suchotzki, K., Verschuere, B., Van Bockstaele, B., Ben-Shakhar, G., & Crombez, G. (2017). Lying Takes Time: A Meta-Analysis on Reaction Time Measures of Deception. *Psychological Bulletin*, *143*(4), 428–453. https://doi.org/10.1037/bul0000087

Sutherland, E.H., (1983). White collar crime: The uncut version. Yale University Press, New Haven and London.

Svensson, G. and Wood, G. (2005). 'Business ethics in TQM: the qualities and spectrum zones of a case illustration'. *The TQM Magazine*, 17:1, 19–34.

Sweeney, J. (1995). The moral expertise of auditors: An exploratory analysis. *Research on Accounting Ethics.* 1: 213 – 34.

Tabachnick, B. G., & Fidell, L. S. (2018). Using multivariate statistics (7th ed.). Pearson.

Trevino, L.K. (1992). Experimental Approaches to Studying Ethical-Unethical Behavior in Organizations. *Business Ethics Quarterly, 2*(2), 121–136.

Tse, A. C. B. and Au, A. K. M. (1997). Are New Zealand Business Students more Unethical Than non-Business Students?, *Journal of Business Ethics*, 16(4), 445-450.

Uysal, O. O., (2010). Business ethics research with an accounting focus: A bibliometric analysis from 1988 to 2007. *Journal of Business Ethics,* 93(1), 137–160.

Van der Linden, W. J. (2006). A Lognormal Model for Response Times on Test Items. *Journal of Educational and Behavioural Statistics*, 31, 181–204.

Vaughan, D. (1999). The dark side of organizations: Mistake, misconduct, and disaster *Annual Review of Sociology*, 25 (1999), pp. 271-305

Verschuere, B., Köbis, N.C., Bereby-Meyer, Y., Rand, D., & Shalvi, S. (2018). Taxing the Brain to Uncover Lying? Meta-analyzing the Effect of Imposing Cognitive Load on the Reaction-Time Costs of Lying, *Journal of Applied Research in Memory and Cognition*, 7(3), 462-469. https://doi.org/10.1016/j.jarmac.2018.04.005.

Weber, J. (1992). Scenarios in business ethics research. *Business Ethics Quarterly*, 2(2), 137–160.

Weick, K., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. Organization Science, 16(4): 409–421.

Zhong, C.-B., Ku, G., Lount, R., & Murnighan, J. (2010). Compensatory Ethics. *Journal of Business Ethics*, 92(3), 323–339. https://doi-org.ezproxy.lib.uconn.edu/10.1007/s10551-009-0161-6

III PAPER 2: PROFESSIONAL ACCOUNTANTS AND ETHICAL DECISION MAKING, THE TIME FACTOR

Ancient manuscripts and hieroglyphics record the stories of how mankind has grappled with ethical dilemmas for centuries. One of the most well-known cases involves the dilemma faced by Eve in a beautiful garden. She was tempted by the potential of gaining deity-level enlightenment in exchange for the compromise of her integrity. When given the proposition, she took time to rationalize against the original instructions and made an unfortunate decision leading to dire consequences. Her companion, Adam, soon joined the folly. This internal struggle is no respecter of persons. Often without invitation, we find ourselves pulled in a direction away from what we know is proper in exchange for a misrepresented benefit (King James Bible, 1769/2017). This article addresses the concept of time taken for deliberation which ultimately leads to rationalizing as it applies to ethical decision making in professional accountants.

In the area of professional accounting, CPAs are bombarded with opportunities for ethical decision making. Charged with tremendous responsibility for carefully handling sensitive financial information, the proper guidance and training in ethical decision making is essential. The accounting profession largely looks to the American Institute of Certified Public Accountants (AICPA) Code of Professional Conduct (CPC) for guidance. Currently, the AICPA has 431,000 members and is adopted by 43% of the state accounting boards (Baranek and Kinory, 2020). Ethical training in the code is intertwined in university accounting curriculum, licensure requirements, and continuing professional education (CPE) courses. The CPC is comprised of six Principles which inform other enforceable rules and regulations. The six Principles are *Responsibilities*, *Public Interest*, *Integrity*, *Objectivity and Independence*, *Due Care*, and *Scope and Nature of Services*. They are summarized as follows:

Principle 1, *Responsibilities*, advises members to cooperate with the profession. "Members also have a continuing responsibility to cooperate with each other to improve the art of accounting, maintain the public's confidence, and carry out the profession's special responsibilities for self-governance."[23]

Principle 2, *Public Interest,* charges members to serve the accounting profession's public, "*clients, credit grantors, governments, employers, investors, the business and financial community, and others who rely on the objectivity and integrity of members"* by providing a system of commerce that operates in an orderly fashion.[24]

Principle 3, *Integrity,* is the common thread throughout the principles. Without the value of integrity, all efforts towards fulfilling the other principles fail. The code states, "*Integrity is an element of character fundamental to professional recognition. It is the quality from which the public trust derives and the benchmark against which a member must ultimately test all decisions."*[25] This is evidenced through behavior exhibiting bold honesty.

Principle 4, *Objectivity and Independence*, directs members to be free of conflicts of interest. This is accomplished with transparency and candid, open behavior which does not succumb to peer pressure. The code states, "*The principle of objectivity imposes the obligation to be impartial, intellectually honest, and free of conflicts of interest. Independence precludes relationships that may appear to impair a member's objectivity in rendering attestation services".*[26]

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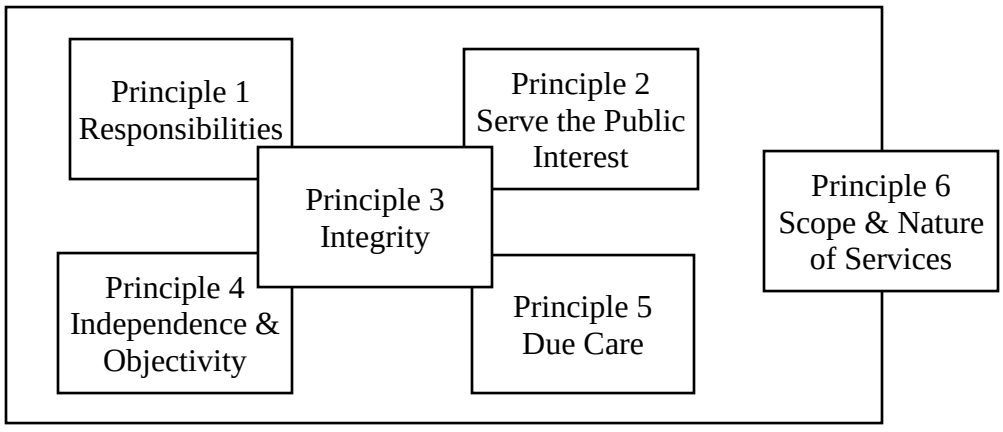
[23] AICPA Code of Professional Conduct., 0.300.020.02
[24] Ibid., 0.300.030.02
[25] Ibid., 0.300.040.02
[26] Ibid., 0.300.050.02

Principle 5, *Due Care,* guides members to, *"observe the profession's technical and ethical standards, strive continually to improve competence and the quality of services, and discharge professional responsibility to the best of the member's ability".*[27] Two distinguishing attributes are firm competence and diligence in providing services Firm competence entails the collective resources uniquely attributed to an organization. Diligent service denotes earnest effort and consistency when performing assigned duties.

All six Principles play an important role as a framework in providing ethical guidance to professional accountants. Four of the six Principles possess distinct attributes. However, some level of overlap exists. The Principle, *Integrity,* serves as a common thread woven throughout the other principles. Further, the Principle, *Scope and Nature of Services,* possesses an all-inclusive property, encompassing the other five Principles. It directs CPAs to "…*observe the Principles of the Code of Professional Conduct...."*[28]

Figure 1: Conceptual Layout of Six Principles of the AICPA Code of Professional Conduct



[27] Ibid., 0.300.060.01
[28] Ibid., 0.300.070

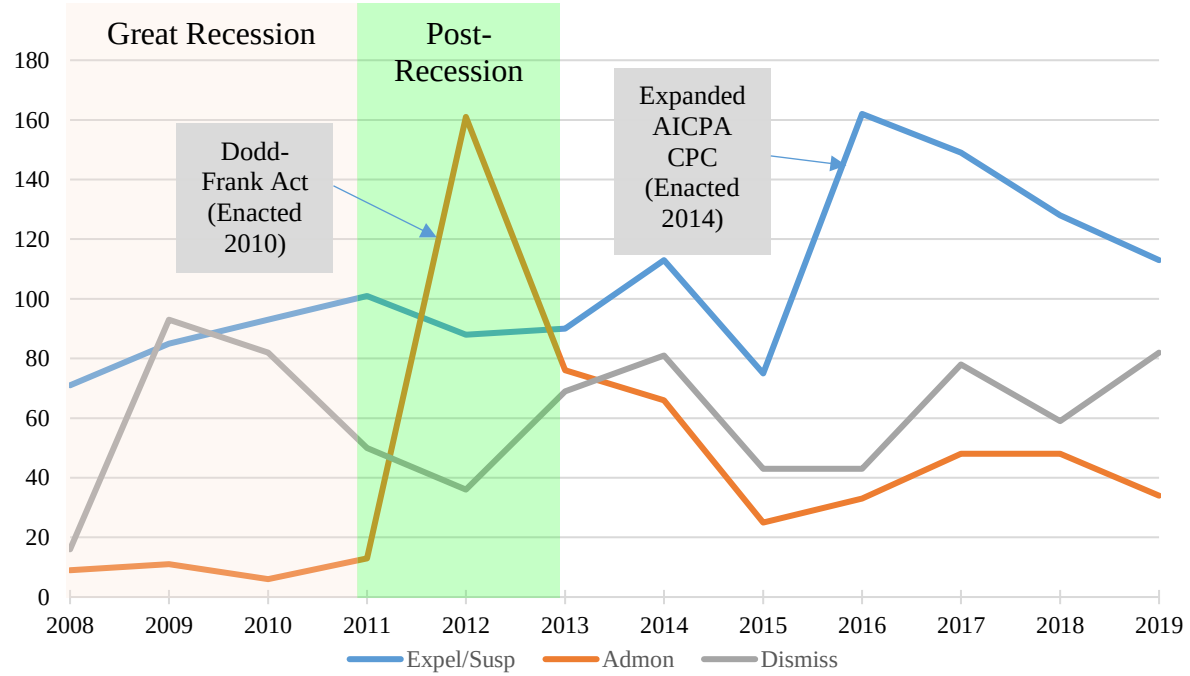
If AICPA members are found in violation of the code, they may be expelled, suspended, or admonished after a hearing by the AICPA Joint Trial Board. Hearings are not required if the member's license has been suspended or revoked, faced a conviction of a crime that is punishable by imprisonment for more than one year, or in the case of certain fraudulent activities involving income tax filings. In these cases, the board may permanently expel or temporarily suspend a member automatically. Suspension from the AICPA may last for a period up to two years. During which time, the member may not openly demonstrate any signs of affiliation with the AICPA. For lesser offenses that do not warrant expulsion or suspension, the board publicly admonishes a member who violates the code.

Publication of expulsions, suspensions, and admonishments is mandatory. Details of disciplinary violators and their offenses are published on an open report available at the AICPA website. Figure 2 presents a summary of disciplinary actions, along with cases dismissed, from 2008 to 2019. The trendline shows clear inflection points explained by specific events. Given that members who are disciplined must be adjudicated, the number of disciplines is a lagging indicator of previous events. For instance, the data shows that case dismissals were prevalent in 2009. Shortly thereafter in 2011, expulsions and suspensions were greater than admonishments and case dismissals. This was the time period during (2008 – 2010) and following (2011 – 2013) the Great Recession when many accountants came under increased scrutiny. Therefore it makes sense that dismissals, which tend to happen more rapidly, spiked before the greater punishments of expulsions and suspensions. Expulsions and suspensions typically require more time than dismissals as the outcome of the case takes time to be reviewed and declared by the prosecuting jurisdiction. Further, a study by Jenkins, Popova, and Sheldon (2018) found that disciplinary actions during the recession and post-recession era involved violations of Principle 2

where the CPAs failed to serve the public interest. In 2010, the Obama administration passed the Dodd-Frank Wall Street Reform and Consumer Protection Act in an attempt to enact tighter government regulations over banks and other financial institutions. This added to the attention of CPA behavior leading to an increase in admonishments from 2011 to 2012.

Figure 2 also shows that expulsions and suspensions spiked to an unusually high level from 2015 to 2016. Just prior to this increase, the AICPA released the revised and expanded CPC. The expansion included a transformation of nonauthorative guidance into authoritative standards. Additionally, the existing guidance was given a broader scope. The revised CPC was organized into a more intuitive, codified user-interface. Two conceptual frameworks were added, one for public accounting and the other for business members. The frameworks provide a way of identifying, evaluating and resolving threats to compliance with rules that are not explicitly stated in the CPC.

Figure 2 Number of AICPA Disciplinary Actions Over Time



III.1 Recent Code Violations

Further examination of the public AICPA disciplinary actions report reveal details about how members failed to uphold the Principles of the CPC. Violators range from CPAs operating a small independent investment advisory firm to powerful accountants in executive leadership at the Big Four to C-suite executives in global manufacturing. Below are some recent cases:[29]

GEORGIA CARPET MOGULS VIOLATE AICPA RESPONSIBILITIES PRINCIPLE

An example of disregarding the principle of Responsibilities through lack of self-governance is found in the case of a global carpet designer and manufacturer based in Georgia with annual revenue around $1 billion. The violations were found by the Securities and Exchange Commission (SEC) through the use of risk-based data analytics that detects potential accounting and disclosure violations resulting from earnings management. From the second quarter of 2015 through the second quarter of 2016, the company reported earnings per share (EPS) that did not reflect true performance. The Chief Accounting Officer (CAO), a licensed CPA, instructed his employees to record unsupported accounting adjustments to the company's bonus accrual accounts including expenses related to an independent consultant and stock-based compensation.

The Chief Financial Officer (CFO), a CPA operating under a license that lapsed in 2004, also instructed the CAO to book more entries that did not comply with Generally Accepted Accounting Principles (GAAP). For example, after learning of a required payment of a $725,000 death benefit, the CFO directed a $500,000 reduction to the management bonus accrual account. This resulted in the management bonus accrual account and related expenses being

[29] The following cases are derived from the public list of disciplinary actions at the AICPA. However, names are removed because the AICPA also removes names from public records to allow for restitution after a period of time.

understated by approximately $1.58 million, or 5% of pre-tax income for Q2 2015. As a result, EPS was artificially inflated causing an appearance of out-performing analysts' estimates and overall growth.

This type of behavior resulting in inflated earnings and EPS continued for five consecutive quarters. Consequently, investors received inaccurate information because of the company's violation of the federal securities law enacted by the SEC. The report found that the company lacked sufficient internal controls to detect fraudulent behavior. The company did not require sufficient documentation to support changes to accounts. It was commonplace for the finance staff to book changes with only an email or oral directive. Internal audit functions failed to properly test the accounts. During the investigation by the SEC in 2017 and 2018, the staff produced falsified documents supporting the prior adjustments. Furthermore, throughout 2015 and 2016, both the CAO and the CFO exercised their stock options under the inflated valuations.

The SEC found the CAO and CFO in violation of multiple rules due to their lack of self-governance. In a settlement, the company agreed to pay $5,000,000 in penalties to the U.S. Treasury. The CAO was fined $45,000 with a three year suspension of practicing as an accountant, and the CFO was fined $70,000 with a one year suspension of practicing as an accountant.

It is easy to see how deliberation time escalated the commitment of the CAO and CFO in their deceptive practices. How is it that two intelligent leaders can come to the conclusion that the "borrow from Peter to pay Paul" method of accounting as effective?

NEW YORK REGISTERED INVESTMENT ADVISOR VIOLATES AICPA DUE CARE PRINCIPLE

An example of disregarding the principle of due care in the realm of competence is found in the case of an AICPA member operating in a New England state. The member, the founder and president of an SEC Registered Investment Advisory firm, and a licensed CPA since 1996, held himself out as a CPA during a period that his license was either lapsed or expired. The AICPA report states that the member failed to maintain his CPE requirements for two years, 2014 - 2016. For this offense, he was fined and admonished in the fall of 2020. The question remains as to why he made this unethical decision. Did he simply forget to take the CPE courses, or did his workload restrict time for the CPE courses? As of the writing of this article, though the name of the violator remains on the list of AICPA disciplinary actions, his license is still current at the state board. His firm's website boasts of tax minimization services and a promise to act in good faith by providing all relevant facts to clients. Further, a recent internet search of the violator's name returns no other public mention of the offense. Instead, the top hit linked to a recent article and photo of the violator ringing the bell on Wall Street. This is a case of reputation management in action.

KEEPING AN EYE ON EY, VIOLATIONS OF THE OBJECTIVITY AND INDEPENDENCE PRINCIPLE

In 2016, Ernst & Young (EY) earned the title of being the first SEC enforcement resulting from a failure of auditor independence due to close personal relationships. The firm agreed to pay $9.3 million in a settlement because their audit partners became too close to their clients (SEC, 2016).

One violation occurred when a senior partner on the engagement team held a close friendship with the CFO of the public company under audit. The auditor was instructed to foster a closer relationship with the client due to the uncertainty of the account. As a result, the EY auditor and the client company's CFO formed a friendship, and even spent the night at each other's houses on occasion. The families vacationed together. The auditor bonded with the CFO's son and took him to sporting events. Numerous electronic messages were exchanged. After discovery by the SEC, EY settled by paying $4.975 million. The auditor agreed to pay $45,000 and was suspended from practice for three years (SEC, 2016).

Another violation was cited when an EY audit engagement partner became romantically involved with the chief accounting officer (CAO) of the public company under audit. Another EY auditor became aware of the relationship, but failed to inquire further and report his concern. At the time, EY asked engagement teams certain questions to determine independence, including familial ties, employment, or financial arrangements with the client. Relationships that were nonfamilial, close and personal, such as this case of romantic involvement, was not listed as a threat to independence. After investigation, the SEC settled with EY for $4.366 million. The client, the EY auditor in the romantic relationship, and the EY auditor who failed to report the situation, all agreed to pay $25,000. The two EY auditors faced suspension from practicing before the SEC for three years. The client was suspended from practicing for one year. The SEC concluded that EY did not take proper steps to detect or prevent the partners' relationships with the clients (SEC, 2016).

In the case of the auditor who failed to report the relationship, was there a moment where something did not feel proper? Did he take time to review the principle of independence and not

just the explicit rules? In the case of the auditor and the client who became romantically involved, was it the lure of the romance that rationalized away the voice of reason?

KPMG LEADER VIOLATES PUBLIC INTEREST PRINCIPLE

In the case of a CPA associated with the 2015 Public Company Accounting Oversight Board (PCAOB) and KPMG audit investigation scandal, the principle of public interest was violated. The CPA in question worked as the head of the Department of Professional Practice (DPP) at KPMG. The role of the DPP in providing service support is to, "increase the quality and efficiency of the companies' financial reporting processes and accordingly accelerate the strategic decision making processes." In this case, the CPA received knowledge that another KPMG employee, who recently left the PCAOB, possessed confidential information. The information disclosed specific KPMG audits that were targeted for a "surprise" investigation by the PCAOB. In prior years, KPMG had been scrutinized by the PCAOB for multiple audit failures. Therefore, this list of targeted audits could help KPMG better prepare. In addition to acquiring the confidential lists, KPMG continued recruiting employees from the PCAOB. The firm subsequently channeled more resources towards the audits destined for investigation to improve results. It was an on-going and systemic effort by multiple employees. However, in 2017, a KPMG partner finally blew the whistle when she received early notice that one of her audits would be reviewed and manipulated prior to PCAOB inspection.

The question remains, when the CPA received the list of targeted audits, what prompted him to rationalize away his ethical reasoning? Did he simply dismiss his prior knowledge of ethical behavior? Had he not allowed his auditors enough time to perform audits well? Had he not taken time to review and instruct other divisions of KPMG in effective audit practices? If the

mission is to "increase the quality and efficiency of financial reporting" and "accelerate the strategic decision making processes," could it be that the decision making was too accelerated due to work overloads? In looking at the KPMG Audit Quality report of 2015, the cover proudly describes KPMG Audit Quality as a, "hands-on process of maintaining integrity, independence, ethics, objectivity, skepticism and quality performance." However, no one realized that the true meaning of "hands-on" included having hands-on confidential information.

On March 19, 2019, the CPA was found guilty on "Count Two (conspiracy to commit wire fraud), and Counts Three, Four, and Five (wire fraud in 2015, 2016, and 2017, respectively)" for stealing confidential information from the PCAOB.[30] He was ultimately sentenced to prison for one year and one day, and three years of supervised release. The restitution amount has not yet been determined. His CPA license was involuntarily surrendered and his AICPA membership was terminated on December 13, 2019 on the grounds of "conduct indicating lack of fitness to serve the public as a professional accountant."[31]

III.2 Rationalization: The Common Thread

Though contextually, these cases are vastly different, the commonality is that they faced a dilemma, allowed time for deliberation, engaged in rationalization, and made a poor ethical decision. A recent study repeated multiple times over four years observed the amount of time it took an early-career professional accountant to make a decision when presented with an ethical dilemma (Livingston, 2021). The study was based on the proposition of the Fraud Triangle Theory developed by D.L. Cressey in 1973. Cressey theorized that fraud requires three

[30] United States v. Middendorf, 18-CR-36 (JPO), (S.D.N.Y. Sep. 9, 2019)
[31] https://www.tsbpa.texas.gov

components: Opportunity, Pressure, and Rationalization. Of the three, rationalization demands the passage of time for deliberation.

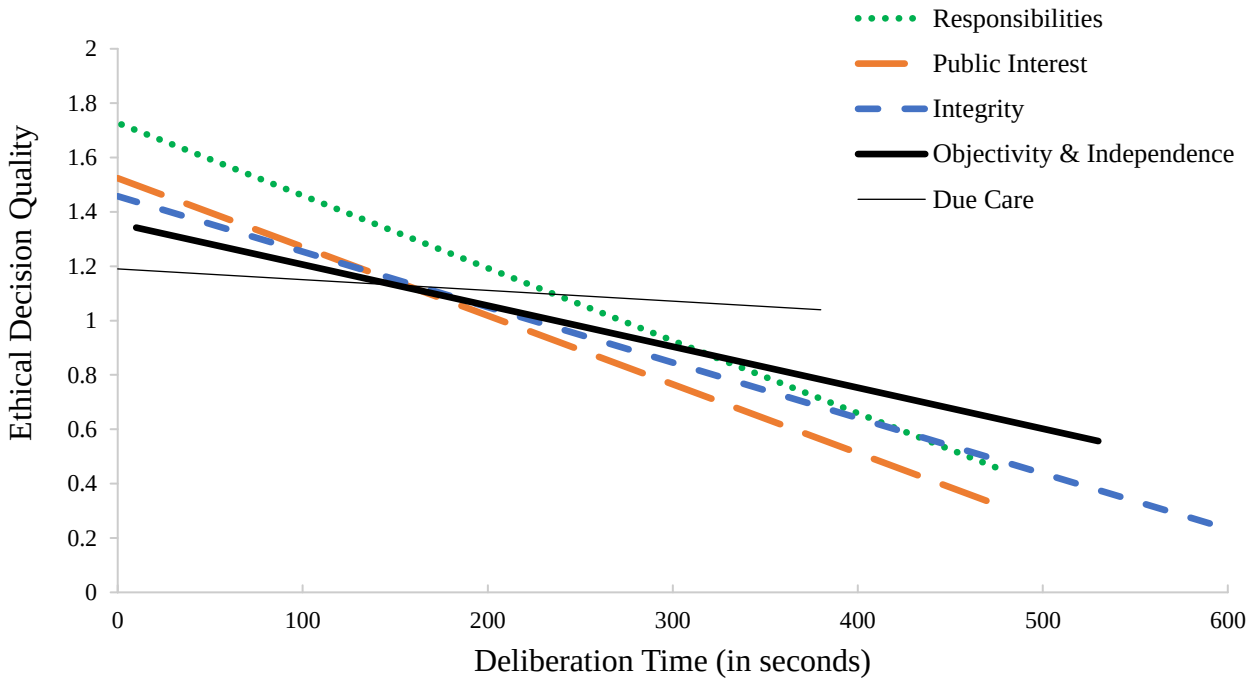
Prior work in this area of deliberation time and rationalization has shown conflicting results (Livingston, 2021). In the case of quick decisions due to time pressure, ethicality suffers. Yet, in the case of excessive time allowed for decision-making, ethicality also declines. It is well-known that time for decisions is a concern for the accounting profession. Crushing workloads such as is evident during tax season and period-end financial reporting often cause enormous stress on CPAs. Additionally, flexibility resulting from an increase of remote work arrangements, such as was noted during COVID-19, may allow CPAs more discretion as to when decisions are made. As a result, time for deliberation is lengthened.

Figure 3 shows that the decline in ethical decision quality as deliberation time increased for decisions based on specific principles. Both Responsibilities and Public Interest resulted in high scores in a short amount of time, yet declined steeply as time passed. The two attributes that are derived from the Responsibilities principles are self-governance and cooperation. As a CPA, self-governance is expected to be practiced on a continuum, beginning with personal decisions impacting the decision maker themselves, moving through the firm-level decisions, and extending to decisions impacting the profession as a whole. Cooperation within the profession occurs in the context of proactive decision making when knowledge arises that impacts the operations of the firm. Public Interest speaks largely to maintaining operations that are in the best interest of the stakeholders, such as providing trustworthy public financial reporting. Since responses to both of the principles are initially strong, could it be that decisions related to these principles would benefit from increased exposure to the CPC as the knowledge would serve to validate and affirm reflexive decisions?

Integrity reported the most significant impact due to a decline in scores from lengthy deliberation periods. Integrity requires honesty in all behavior and decisions. As shown in Figure 1, by design, Integrity is a prerequisite basis interwoven through the substance of all the CPC principles. Without Integrity, all other principles are impossible to meet.

Objectivity and Independence also reported a decrease in ethical decision making as deliberation time increased, yet it decreased at a slower rate than Responsibilities, Public Interest, and Integrity. The two attributes present in this principle are candor and peer pressure. Candor entails direct, forthright and unambiguous communication. Peer pressure arises when influential forces from outside sources present alternatives which attempt to persuade decision makers to a specific position. In accounting curriculum, especially Audit and Assurance coursework, students are repeatedly exposed to the essentiality of objectivity and independence. Therefore, it is possible that the elevated level of exposures results in a less compromising behavior as deliberation time increases.

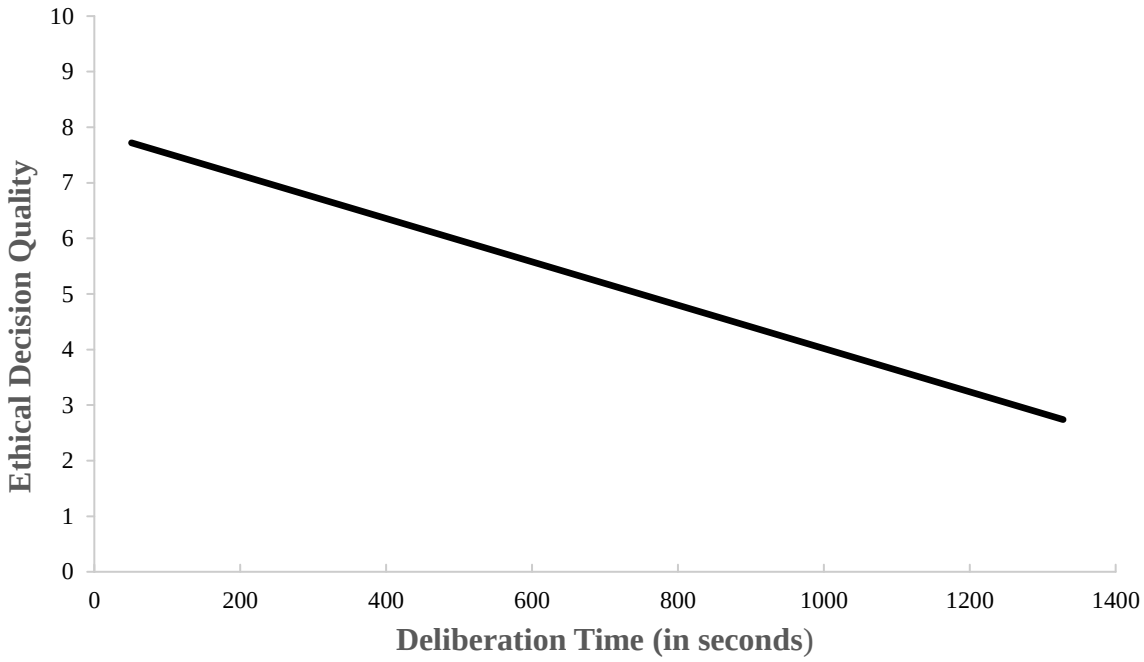
Figure 3 Principles 1 – 5 Impact of Deliberation Time on Ethical Decision Quality



Due Care saw little impact with a relatively flat trendline. Attributes of Due Care include firm competence and diligent service. Firm competence entails the collective resources uniquely attributed to an organization. Diligent service denotes earnest effort and consistency when performing assigned duties. To achieve the principle of due care in practice, ethical decision making incorporates skills acquired through both education and experience to deliver diligent service. If firms fail in this area, they will quickly develop an unfavorable reputation. Given that Due Care seems to cover the broad idea of a firm's viability, it makes sense that this principle remains relatively stable as deliberation time increases.

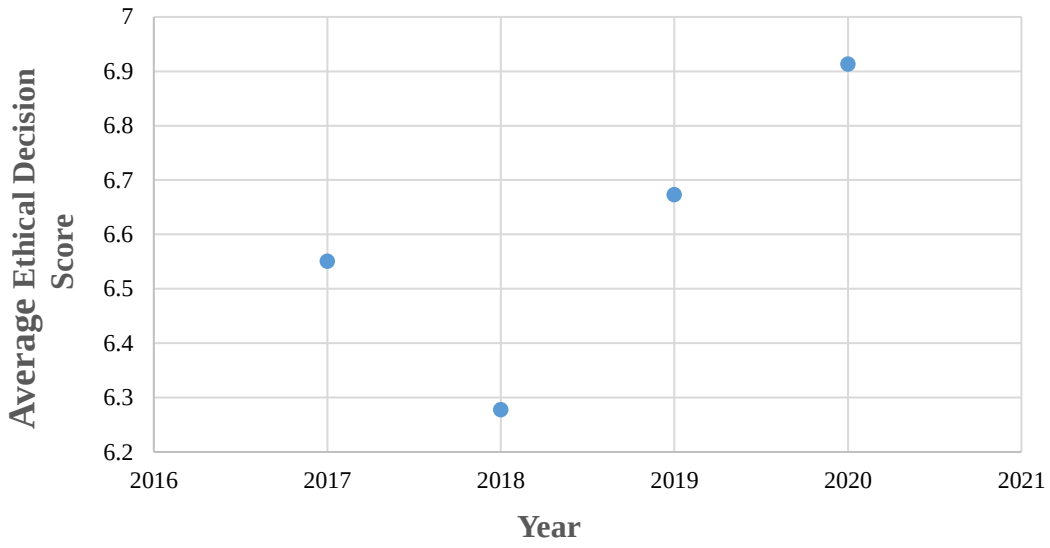
Given the nature of Principle 6 as an encapsulation of all prior principles, a separate analysis demonstrates the overall effect of the elapse of time on ethical decision quality as measured by Principles 1 through 5 collectively in Figure 4 below:

Figure 4 Principle 6, Overall Impact of Deliberation Time on Ethical Decision Quality



Additional research by Livingston (2021) finds that decision ethicality has increased since 2017, with the exception of 2018, as shown in Figure 5. The year 2020 resulted in a dramatic increase in ethical decisions. This could be attributed to the exogenous shock from the COVID-19 pandemic resulting in the displacement of the accounting work environment. Though the cause of the decrease in 2018 was not studied specifically, it is known that the study sample had more years of professional experience than the other three years.

Figure 5: Participants' Average Ethical Decision Score by Year



Since research shows that too little time leads to reduced decision quality, as measured through audit failures, and too much time for deliberation results in rationalization and lower ethical decisions, the obvious solution is to reevaluate workload allocations. Historically, audit caseload is determined by the auditor's area of expertise and estimated audit hours based on the size of client. In taxation, returns are allocated based on staff experience with the most complicated filings assigned to senior staff. Many firms are using workforce optimization software solutions. Though the software may, in a practical sense, delegate time for ethical decision making by assigning the proper amount of audits and tax returns to the staff, it does not address ethicality wholistically. In addition to workload optimization, other time-agnostic strategies may be used to foster an overall strong ethical culture, offsetting potential effects from time variations.

III.3 Strategies for a Fostering a Strong Ethical Culture

In light of all the responsibility assumed by the accountants, what can the profession do to foster a culture of good ethical decision making despite the variation in time? This problem is

not isolated to firm partners, rather it is a concern that should be addressed universally in accounting education, by individual CPAs, and by accounting firms collectively.

Most AICPA ethical violations involve behavior that an automated internal control system would not detect. The majority of fraud violations are revealed by a whistleblower, someone who did not rationalize their ethical knowledge away (AFE, 2021). Given this, the assumption is made that basic internal control mechanisms exists and will operate to deter and detect some unethical behavior. However, there are additional strategies supplemental to internal controls which serve to foster an ethical culture in the accounting profession. Various strategies should be adopted at all levels of the profession, from accounting educators, to individual CPAs, and accounting firms alike.

III.3.1 Ethics in Accounting Education

The first exposure to accounting ethics typically occurs in an undergraduate program. Therefore, educators play a vital role in emphasizing the importance of ethical behavior. Educators should consider incorporating specific curriculum addressing the AICPA CPC, including practical applications through case studies focused on moral dilemmas and implications for violating the code. Further, educators should incentivize students to participate in related community projects. Ideas for student projects include serving in the Volunteer Income Tax Assistance (VITA) program or teaching the AICPA 360 Degrees of Financial Literacy program to underprivileged populations. Further, universities can establish a branch of the National State Boards of Accountancy Center for Public Trust society on campus.

III.3.2 Individual CPA Ethics

The onus of establishing a high ethical culture is not only on firm partners, but on individual CPAs operating at all staff levels. As stated in the preamble of the AICPA CPC, " By accepting membership, a member assumes an obligation of self-discipline above and beyond the requirements of laws and regulations."[32] Therefore, it is essential for a CPA to recognize personal strengths and weaknesses. In the face of an ethical dilemma, it is important to continually question our own motives. If uncertainty persists, consider speaking with a member of the Professional Ethics Division at the AICPA. A hotline exists to guide members in the application of the AICPA CPC in various contexts. Further, for those CPAs in a management role, consideration must be given regarding the influence over employees. This influence includes observation of the managers' own ethical decisions, not just how well accounting functions are executed. In other words, do not just set the rules, but demonstrate the rules through high ethical behavior.

III.3.3 Firm-Level Ethics

In addition to workload optimization, firms may create a high ethical culture with elements of both negative and positive reinforcement. The following strategies may be employed no matter the size of the firm:

- Ensure a clearly articulated program is in place to encourage or incentivize reporting of unethical behavior, or whistle-blowing. Staffers should know how they may escalate a concern involving ethical dilemmas.

[32] AICPA Code of Professional Conduct, 0.300.010.01

- Continue to provide opportunities, both compulsory and voluntary, for training in effective ethical decision making relying upon beneficial content such as the AICPA CPC.
- Organize related community service opportunities for staffers. Allowing people to serve together in an uncompensated volunteer function builds trust and understanding.
- Actively engage the staff. This is especially important as many staffers are working remotely due to the COVID-19 pandemic. A quick check-in via video conference on a routine basis communicates that you are present and available to discuss situations.
- Hire character, train skill. Select individuals who embody moral character and the ability to learn easily.

Oftentimes it is easy to neglect the topic of ethical decision making as it happens frequently and silently. However, the accounting profession ceases to function if the cornerstone of ethics is compromised. It is a profession contingent upon the ethical behavior of its members to follow the six Principles of the CPC with an, "unswerving commitment to honorable behavior, even at the sacrifice of personal advantage."[33]

[33] Ibid., 0.300.010.02

REFERENCES

American Institute of Certified Public Accountants (AICPA). Disciplinary Actions. Retrieved from https://www.aicpa.org/forthepublic/disciplinaryactions.html

American Institute of Certified Public Accountants (AICPA). 2014. Code of Professional Conduct. Effective December 15, 2014. Retrieved from https://pub.aicpa.org/codeofconduct/ethicsresources/et-cod.pdf

Association of Certified Fraud Examiners, (2021). 2020 Global Study on Occupational Fraud and Abuse. *CPATrendlines.com.*

Baranek, D., Kinory, E., (2020). Statewide Adoption of the AICPA Code of Professional Conduct: A Review of Recent AICPA Disciplinary Actions. Accounting and Finance Research. 9:1. DOI: https://doi.org/10.5430/afr.v9n1p16.

Cressey, D.R., (1973). Other People's Money. *Montclair*. Patterson Smith, 30.

Jenkins, J. G., Popova, V., & Sheldon, M.D. (2018). In Support of Public or Private Interests? An Examination of Sanctions Imposed Under the AICPA Code of Professional Conduct. *Journal of Business Ethics*, 152(2), 523–549. https://doi.org/10.1007/s10551-016-3308-2

King James Bible. (2017). King James Bible Online. https://www.kingjamesbibleonline.org/ (Original work published 1769).

Livingston, R. W. (2021). *The Impact of Deliberation Time on Ethical Decision Quality: A Study of Early-Career Professional Accountants* [Unpublished doctoral dissertation]. Georgia State University.

VITA

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Ricki is married to her husband Greg, and they both enjoy time with their family, church ministry, and international travel.