

Exploring the Relationship of Job Insecurity, Moral Disengagement, and Job Embeddedness on
an Accountant's Unethical Behavior

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FOREST S. PATRICK JR.

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By

FOREST S. PATRICK JR

Approved by the Doctoral Committee:

<small>DocuSigned by:</small> <i>Marie Bakari</i> <small>0F16EBB525784DB...</small>	DBA, MBA	01/24/2020 12:20:48 MST
Dissertation Chair: Marie Bakari	Degree Held	Date
<small>DocuSigned by:</small> <i>Kenny Roberts</i> <small>226932AABE2D400...</small>	PhD, MBA	01/23/2020 15:10:41 MST
Committee Member: Kenny Roberts	Degree Held	Date
<small>DocuSigned by:</small> <i>Leila Sopko</i> <small>1F89B29081C9435...</small>	Ph.D., MBA	01/23/2020 12:26:45 MST
Committee Member: Leila Sopko	Degree Held	Date

Abstract

Unlike the fraud triangle theory which suggests individuals commit unethical behavior when they feel pressure, perceive an opportunity, provide rationalization, the fraud diamond theory suggests that despite feeling those outside factors, a fraudulent act will not occur unless the individual is capable of committing the act. Due to an accountant's unique role within an organization, they are more capable than the average employee for acting in an unethical manner. Despite the research recognizing various factors impacting unethical behavior, there was a research knowledge gap with the body of literature as to whether the independent variables of job insecurity, moral disengagement, and job embeddedness would directly impact the unethical behavior of professional accountants. Therefore, this quantitative, correlational study sought to understand the influences of job insecurity, job embeddedness, and moral disengagement upon accountants' ethical decision-making in a business environment of professional accountants. The online survey sampled 122 professional accountants in the state of Georgia. Data were collected using four research instruments related to Hellgren et al., (1999) job insecurity scale, Mitchell et al., (2001) job embeddedness scale, Detert et al., (2008) moral disengagement scale, and Umphress et al., (2010) unethical pro-organizational behavior (UPB) scale. Both linear and multiple linear regression were used to determine the strength of the relationships in the data. The regression analysis indicated that both moral disengagement and job embeddedness are significantly associated with the unethical behavior of accountants; however, there was not a significant association with job insecurity and unethical behavior in accountants. With respect to job embeddedness, significant association with unethical behavior was limited to its dimensions of sacrifice organization, links organization, and fit organization. In the end, the results of the statistical analysis of data supported hypothesis two and hypothesis three but not hypothesis one.

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Chapter 1: Introduction

Fraud in business has far-reaching political and monetary consequences (Gunz & Thorne, 2017). With the 2014 Gross World Product estimated at over \$74 trillion, the Association of Certified Fraud Examiners (ACFE, 2016) estimates that global businesses lose nearly 5% of their annual revenues, or \$3.7 trillion, due to fraudulent behavior. A recent survey indicated that, between 2013 and 2015, fraud in the United States increased by almost 10%, with 75% of all companies surveyed experiencing some level of fraud and over 80% of that fraud occurring by employees within the company (Kroll, 2016). Although fraud might occur when employees feel pressure, have an opportunity, and use rationalization, researchers agree that not all employees are capable of committing fraud (Indarto & Ghozali, 2016; Rasha & Higson, 2012; Wolfe & Hermanson, 2004). Within the area of corporate fraud, the FBI (2017) recognizes that accounting fraud represents the majority of losses, which reduces investor confidence and causes incalculable damage to the economy. With respect to oversight, the government created governing bodies to provide accountability and consistency within the accounting profession, such as the Financial Accountings Standards Board (FASB).

The purpose of the FASB is to create a conceptual framework that provides a “coherent system of interrelated objectives and fundamentals . . . expected to lead to consistent standards” (Baker, 2017, p. 109). Furthermore, FASB’s conceptual framework would safeguard the public interest and facilitate the flow of valuable resources within the economy (Baker, 2017). However, without ethical behavior on the part of accountants, there is little reason to expect this conceptual framework to be effective. By definition, accountants are the “watchdogs” of corporations, appointed by ownership to maintain controls, provide accurate information, and prevent fraudulent acts (Alzola, 2017, p. 707). In fact, the American Institute of Certified Public

Accountants (AICPA) maintains, through its Code of Professional Conduct, that a member should uphold the minimum level of ethics established by the International Ethics Standards Board for Accountants' (IESBA) Code of Ethics for Professional Accountants (AICPA, 2018). Under the IESBA Code of Ethics, accountants should exhibit the fundamental principles of “integrity, objectivity, professional competence, due care, confidentiality, and professional behavior” while maintaining the profession’s responsibility to the public (IESBA, 2018). Additionally, the Committee of Sponsoring Organizations of the Treadway Commission (COSO, 2017) believes that accountants should oversee their organization’s internal controls, which consist of control environment, risk assessment, control activities, information and communication, and monitoring activities. To reinforce these standards, Congress passed the Sarbanes-Oxley Act of 2002 (SOX) to promote greater transparency of financial information while requiring companies to adopt more stringent internal control policies and thereby reduce fraudulent behavior within companies (Donelson, Ege, & McInnis, 2017). Despite these good intentions, researchers are finding that legislation such as SOX might actually reduce incentives for detecting control weaknesses within organizations, thereby negating the original goal of restoring investor confidence in companies’ financial information (Rice, Weber, & Biyu, 2015).

Because accountants are responsible for producing reliable financial information that protects corporate investors and members of society (Gunz & Thorne, 2017), a sound internal control structure is critical. Still, even the most effective internal control structures can fall short of stopping fraud because internal controls cannot prevent unethical behavior. Some researchers found a significant correlation between identified control weaknesses and undetected fraud within organizations; however, they did not present evidence that explains “how” and under “what circumstances” accountants behave unethically (Donelson et al., 2017; Lawrence &

Kacmar, 2017; Triki, Cook, & Bay, 2017). Halbouni (2015) found that unethical behavior is lower for individuals who are high on personal integrity. Understanding how personal integrity is related to fraudulent actions could be one key in curbing unethical behavior. In addition, Halbouni (2015) found that individuals tend not to commit fraudulent acts if those acts are inconsistent with their personal code of ethics. Gokce (2017) found that Machiavellian individuals tend to manipulate others aggressively for their own objectives regardless of the morality of the decision. Triki et al. (2017) discovered that accountants with higher Machiavellian values are more susceptible to unethical behavior than are accountants with lower Machiavellian values. Despite these findings, researchers have continually tried to understand whether it is possible to encourage ethical behavior for accountants (Baïada-Hirèche & Garmilis, 2016; Bobek, Hageman, & Radtke, 2015; Dalton & Radtke, 2013; Lail, MacGregor, Marcum, & Stuebs, 2017).

In trying to determine what causes unethical behavior by accountants, Cressey (1953) leveraged theories such as the fraud triangle, which suggests that accountants might behave unethically if they feel pressure, perceive an opportunity, and can rationalize the unethical nature of the fraud away. In a more recent study, Wolfe and Hermanson (2004) suggested that these three conditions are not enough for a fraud to occur; that is, a fourth criterion is that the individual must also be capable of committing a fraud. The labeled this four-factor perspective the fraud diamond theory (Wolfe & Hermanson, 2004). This additional component requires that individuals possess the “expertise needed to exploit fraud opportunities, ability to coerce others to commit or conceal fraud, and the ability to lie effectively” (Boyle, DeZoort, & Hermanson, 2015, p. 579). Opportunity in the fraud triangle refers to organizational weaknesses, whereas capability in the fraud diamond refers to the personal characteristics necessary to take advantage

of the opportunity (Boyle et al., 2015). In addition, some researchers leveraged both the fraud triangle and the theory of planned behavior to help understand whether accountants would report unethical behavior through whistleblowing (Brown, Hays, & Stuebs, 2017). Likewise, Lawrence and Kacmar (2017) explored the effects of job insecurity on the unethical behavior for employees by leveraging self-regulation theory and boundary conditions of adaptability and job embeddedness. However, the shortfall in this research was that the total sample population of engineers, architects, and accountants were able to commit financial fraud because they were “professionals who served clients” (Lawrence and Kacmar, 2017, p. 49), as opposed to a sole focus on accountants, who would have been capable of committing fraud within an organization or manipulate financial numbers that might mislead the public. It is interesting that the researchers concluded that highly embedded employees were more likely to commit fraud within their organization than individuals who were highly adaptable when faced with an outside pressure, such as job insecurity (Lawrence & Kacmar, 2017). Furthermore, their research did not consider whether morally disengaged accountants, embedded in their job, would engage in unethical behavior because of the pressure, opportunity, rationalization, and capability that exists within their position (Lawrence & Kacmar, 2017).

Although Lawrence and Kacmar (2017) used this research to provide insightful information related to the unethical behavior within organizations, more information is necessary to focus on the specific problem of accounting fraud within organizations because of the magnitude of the problem. Questions arise as to whether job insecurity impacts the ability of an accountant to behave unethically. Although many types of accounting fraud can occur (Self, Fudge, Sullivan & Harrington, 2016), it is unclear whether accountants would behave more or less ethically if they had high or low levels of job embeddedness within the organization or if

they had disengaged themselves morally. Because of this, questions remain as to the impacts of job insecurity, job embeddedness, and moral disengagement on accountants' ethical behavior.

Statement of the Problem

With estimates of fraud closing in on nearly \$4 trillion annually (ACFE, 2016), several researchers have suggested that additional impacts of corporate accounting fraud include financial harm to both investors and stakeholders (Kukreja & Gupta, 2016), an erosion of trust between stakeholders and management (Vladu, Amat, & Cuzdriorean, 2017), and the loss of company reputation (Jehn, & Scott, 2015). The general problem is that researchers do not fully understand how to reduce accounting fraud within organizations. Possible antecedents for individuals who commit accounting fraud include abnormal personality types (Ramamoorti & Epstein, 2016); the existence of opportunity, pressure, and/or rationalization; the work climate; the organizational structure; the lack of legal enforceability of the statutes for fraud; and the nation's political climate (Huber, 2017). Researchers have found conflicting results as to why fraud is occurring. These results include a lack of organizational support in reporting fraudulent behavior (Brown et al., 2017), a lack of internal control (Kukreja & Gupta, 2016), and accountants' failure to maintain a proper level of professionalism (Lail et al., 2017). Lawrence and Kacmar (2007) explored the impact of job insecurity on employees' ethical behavior; however, the study sampled engineers and architects in addition to accountants even though these individuals might not be capable of committing fraud within an organization. The fraud diamond theory suggests that individuals might engage in fraudulent behavior if they feel pressure, perceive an opportunity, provide rationalization, and are capable of committing a fraudulent act (Wolfe & Hermanson, 2004). Based in the fraud diamond theory and using survey instruments involving job insecurity, job embeddedness, and moral disengagement, the present

study sampled 122 of the 37,830 professional accountants in the state of Georgia (see Appendix A) to understand the influences of job insecurity, job embeddedness, and moral disengagement upon accountants' ethical decision-making in a business environment (Bureau of Labor Statistics [BLS], 2018). As evidenced by Lail et al. (2017), business leaders and legislators need to determine the best methods for encouraging ethical behavior among accountants.

Purpose of the Study

The purpose of this quantitative, correlational study was to determine the extent to which job insecurity, job embeddedness, and moral disengagement affected the ethical behavior of accountants by examining relationships between factors known to influence unethical behavior in the fraud diamond theory. According to Creswell (2018), a quantitative method of research is necessary to assess the relationship strength and comparability analysis between variables. I used an exploratory, quantitative design to obtain and analyze data from a sample of 122 professional accountants from businesses in Georgia. Job insecurity was measured through a 7-point scale developed by Hellgren, Sverke, and Isaksson (1999), and job embeddedness was measured with Mitchell et al.'s (2001) 6-point embeddedness scale. Moral disengagement was measured with Detert, Trevino, and Sweitzer's (2008) 24-item scale, and unethical pro-organizational behavior (UPB) was measured through a 7-point scale utilized by Umphress et al. (2010). It was necessary to establish a quantitative hypothesis that would address the fraud diamond theory's assumptions for unethical behavior among professional accountants who experience job insecurity, job embeddedness, and moral disengagement.

Theoretical Framework

The objective of this quantitative correlational replication study was to determine whether job insecurity, job embeddedness, and moral disengagement affected the ethical

behavior of accountants by examining relationships between the fraud diamond theory and unethical behavior. The fraud diamond theory (Wolfe & Hermanson, 2004) is a key theory providing insight into an individual's moral behavior and proposes four main tenets that allow individuals to commit unethical behavior: pressure, rationalization, opportunity, and capability (Wolfe & Hermanson, 2004). Within the framework of this theory, pressure relates to internal or external incentive or desire to commit fraud, opportunity relates to an exploitable system control weakness, rationalization allows justification of fraudulent behavior more than its associated risks, and capability means that the individual with the necessary skills and aptitudes is available to commit the fraudulent act (Wolfe & Hermanson, 2004).

The first three tenets of the fraud diamond theory originated through Cressey's (1953) fraud triangle theory, which focused on the reasons why people commit fraud. Cressey identified that fraudulent behavior would occur when individuals experienced a financial crisis that they were unable to share with others (pressure), when they had the ability to execute a fraudulent action (opportunity), and when they were able to justify the action (rationalization). Cressey discovered that most fraudulent offenders were known as normal, honest people with a clean background—they were able to justify their actions due to their position of trust and reduced likelihood of discovery. Cressey pointed out that the pressure that individuals feel does not have to be “real” pressure, only “perceived” pressure. This is important because individuals who feel job insecurity (whether real or perceived) could feel pressure to commit fraudulent acts. Although pressure can be a reason for committing fraud, not everyone who feels pressure commits fraud (Lister, 2007). Much like pressure, opportunity can be real or perceived and identifies an internal control weakness within an accounting system (Abdullahi, Mansor, & Nuhu, 2015). According to Cressey—and a point that emphasizes the importance of a strong

internal control structure—fraud is more likely to occur in situations where the perpetrator is at low risk for being caught. The third factor of Cressey’s fraud triangle theory centers on the perpetrator’s ability to rationalize his or her unethical behavior. Essentially, rationalization is the “justification that the unethical behavior is something other than criminal activity . . . if an individual cannot justify their actions, it is unlikely that he or she will engage in fraud” (Abdullahi et al., 2015, p. 33). Ultimately, an individual’s ethical values and unique situation affects his or her decision-making process related to fraud (Abdullahi et al., 2015). In fact, both personal character and external factors (i.e., job insecurity) can impact an individual’s ethical behavior (Abdullahi et al., 2015).

The final element of the fraud diamond theory is capability (Abdullahi et al., 2015). This element is important because not all employees are capable of committing fraud (Abdullahi et al., 2015). According to Wolfe and Hermanson (2004), if an individual is not capable of committing a fraudulent act, then it is unlikely that fraudulent activity will occur regardless of any pressure, opportunity, or rationalization. Ultimately, without the necessary skills and ability to commit fraud, the individual will not be able to commit such an act (Wolfe & Hermanson, 2004). For this reason, it is important to understand the ethical behavior of accountants because they not only feel pressure, perceive opportunity, and utilize rationalization but also possess the necessary capability to commit a fraudulent act.

Nature of the Study

The purpose of this quantitative correlational study was to evaluate whether job insecurity, job embeddedness, or moral disengagement affected the ethical behavior of accountants from businesses in the state of Georgia. To present demographic data, descriptive statistics were generated to present a clear analysis of the information (Eddy, 2016). Inferential

statistics were used to test the quantitative research hypothesis by leveraging a dedicated statistics section (Simpson & Lord, 2015). This quantitative analysis was essential to understand the relationships unique to morally disengaged, job-embedded accountants who were experiencing job insecurity. Prior findings by Lawrence and Kacmar (2017) established that job insecurity leads to emotional exhaustion. These periods of emotional exhaustion facilitate unethical behaviors in individuals, in alignment with self-regulation theory, which supports the notion that these stressors decrease individuals, ability to self-regulate their capacity for moral behavior (Baumeister, 1998). Whereas these findings focused on three classes of workers (accountants, architects, and engineers), the present study focused solely upon accountants due to their role within an organization and to test the element of capability from the fraud diamond theory.

When collecting these data, it was necessary to survey current accounting professionals from businesses to determine whether demographic or behavioral differences existed. An online survey was used to gather participants' demographic information and other data. This information was used to run descriptive and correlational statistical tests to determine any relationship between the variables of interest. To allow for greater generalization of the results, it was important to leverage quantitative analysis for this study (Creswell, 2018). Quantitative research allows for the measurement of behaviors to occur through predeveloped scales so that statistical conclusions can determine the strength of relationships between variables (Creswell, 2018). This allows the researcher to accept or reject each hypothesis based upon the participant responses recorded through the survey instruments (Creswell, 2018). In contrast, a qualitative research method would require an interpretation of unmeasurable data (Creswell, 2018). The results of these data are not as generalizable because they rely upon the researcher's

interpretations rather than statistically testing a hypothesis (Creswell, 2018). Therefore, quantitative research was a more reliable method to address the research questions in the present study.

A correlational, exploratory-research survey design was used to address the hypotheses within this study (Creswell, 2018). A correlational design is important to determine the extent of the independent variables in contributing to accountants' unethical behavior (Creswell, 2018). The target population consisted of professional accountants from businesses in Georgia. The G*Power 3.1 software (Faul, Erdfelder, Buchner, & Lang, 2009) was used to perform an a priori power analysis for linear multiple regression using a medium effect size, $f = 0.15$, an alpha significance of .05, and power of 0.95 to determine the sufficient sample size for this study. The results from the G*Power Analysis indicated that it was necessary to sample 119 participants to gain sufficient data to understand whether the independent variables of job insecurity, job embeddedness, and moral disengagement affected the ethical behavior of professional accountants in Georgia. Job insecurity was measured with a 7-point scale developed by Hellgren et al. (1999). Job embeddedness was measured through Mitchell et al.'s (2001) 6-point embeddedness scale, and moral disengagement was measured through Detert et al.'s (2008) 24-item scale. Finally, UPB was measured through a 7-point scale utilized by Umphress et al. (2010). Finally, it was important to capture demographic characteristics, such as gender, age range, ethnicity, and years of experience, to determine whether the sample was generalizable to and representative of the total population of professional accountants.

Research Questions

The purpose of the quantitative correlational study was to examine whether accountants who faced job insecurity would become too emotionally fatigued over the fear of losing their job

to prevent unethical behavior from occurring. Three research questions (RQs) were developed to help explore these relationships to determine what factors affected accountants' unethical behavior:

- RQ1.** What is the extent of the relationship between job insecurity and unethical behavior in accountants?
- RQ2.** What is the extent of the relationship between moral disengagement and unethical behavior in accountants?
- RQ3.** What is the extent of the relationship between job embeddedness and unethical behavior in accountants?

Hypotheses

In contrast to Lawrence and Kacmar's (2017) study, which sampled accountants, engineers, and architects, this modified replication study focused solely on accountants. As mentioned in the discussion of the fraud diamond theory, accountants have more capability to commit fraud than other employees. Because of this, the present study reexamined Lawrence and Kacmar's hypotheses but strictly as they applied to accountants to see whether this provided additional insight into accounting fraud (see H1 through H3 below).

- H1₀** There will not be a positive relationship between job insecurity and unethical behavior for accountants.
- H1_a** There will be a positive relationship between job insecurity and unethical behavior for accountants.
- H2₀** There will not be a positive relationship between moral disengagement and unethical behavior for accountants.

- H2_a** There will be a positive relationship between moral disengagement and unethical behavior for accountants.
- H3₀** There will not be a positive relationship between job embeddedness and unethical behavior for accountants.
- H3_a** There will be a positive relationship between job embeddedness and unethical behavior for accountants.

Significance of the Study

Because of the high and increasing fraud levels among accountants in the United States, more information is necessary to discover the reasons behind this behavior (ACFE, 2016; Kroll, 2016; FBI, 2017). Because of an accountant's unique role within an organization, they are capable of committing fraud at a higher level than other employees (Alzola, 2017; COSO, 2017; Cressey, 1953; Wolfe Hermanson, 2004). According to the fraud diamond theory, not all employees are capable of committing fraud (Wolfe Hermanson, 2004); however, accountants maintain a key role within an organization that allows them the capability of fraud on many levels. Whether accountants commit fraud due to internal control fallacies (Rice et al., 2015) or other circumstances (Donelson et al., 2017; Lawrence & Kacmar, 2017; Triki et al., 2017), it is important to seek to better understand accountants' unethical behavior.

Although Lawrence and Kacmar's (2017) research provided important information on the impact of job insecurity on employees' unethical behavior, their study did not concentrate specifically on accountants' behavior or on the impact of moral disengagement. Instead, their study examined accountants within the same population as architects and engineers because each occupation served clients professionally (Lawrence & Kacmar, 2017). Because this sample population diluted the findings related to the accounting profession, it was necessary to directly

sample from a population of accountants to understand whether there were specific differences in the behavior for this category compared with the category of worker presented by Lawrence and Kacmar (2017) and to determine whether moral disengagement impacted the ethical behavior for an accountant.

Definitions of Key Terms

Each term used for the study has multiple definitions that apply to different areas of research. The operational definitions below established the meanings used within the present study.

Accounting fraud. Accounting fraud represents any kind of accounting transaction, action, or unethical behavior designed to deceive, falsify, manipulate, defraud, steal, misappropriate company assets, or conduct unethical conduct toward a company's investors, owners, auditors, managers, or analysts (FBI, 2017).

Job embeddedness. Job embeddedness embodies a situation in which the more connections that an individual has at work, the more he or she feels connected to the organization with deep levels of attachment (Lawrence & Kacmar, 2017).

Job insecurity. Job insecurity epitomizes the intense feeling of worry that people experience when they face the potential of nonvoluntary job loss (Lawrence & Kacmar, 2017).

Moral disengagement. Moral disengagement refers to an individual's ability to remove unethical behavior from preestablished internal moral standards to rationalize an unethical act without feeling guilty (Moore, 2015).

Unethical pro-organizational behavior. This is a type of unethical behavior is premeditated to profit the organization rather than the individual (Lawrence & Kacmar, 2017).

Summary

Although many theories have attempted to explain why accountants act unethically, the literature lacks substantive information related to the effects of job insecurity and its impact on accountants' unethical behavior. Despite the fact that accounting fraud is substantial and increasing in occurrence (ACFE, 2016; Kroll, 2016), researchers are still unsure of what causes accountants to behave unethically. A previous study uncovered that job insecurity can impact the unethical behavior of accountants, engineers, and architects who serve clients professionally, but lumping the three types of professionals together prevented the authors from drawing conclusions specifically about accountants (Lawrence & Kacmar, 2017). Because not all employees are capable of committing fraud (Wolfe & Hermanson, 2004) and given that accounting fraud is extremely high and prevalent on many levels (FBI, 2017), it is necessary to explore the relationships of job insecurity, job embeddedness, and moral disengagement upon the unethical behavior of accountants in particular.

Chapter 2: Literature Review

Due to the growing levels of corporate accounting fraud (ACFE, 2016), there is increasing awareness of the role of accountants' ethical behavior in protecting investors and stakeholders (Kukreja & Gupta, 2016), establishing trust with stakeholders and management (Vladu et al., 2017), and promoting company reputation (Jehn & Scott, 2015). Despite the obvious benefits of promoting ethical behavior among accountants, researchers do not fully understand how to reduce accounting fraud within organizations. Because of this, the purpose of this quantitative, correlational study is to determine the extent to which job insecurity, job embeddedness, and moral disengagement affected the ethical behavior of a sample of professional accountants.

This chapter includes a review of several main ideas that draw upon the key contributions and research of many scholars in the areas of job insecurity, job embeddedness, moral disengagement, and unethical accounting behavior. The intent of the literature review was to uncover any gaps in the existing body of scholarly knowledge and expand the knowledge to promote more ethical behavior among accountants. The sections of this literature review include unethical behavior in accounting, ethics and job insecurity, ethics and job embeddedness, ethics and moral disengagement, and a summary of material items in the literature review.

In conducting this literature review, it was necessary to review relevant literature through a search within multiple databases and search engines. Searches were conducted with Northcentral University's Roadrunner Search via the following phrases and keywords: *accounting ethics, moral disengagement, job embeddedness, job insecurity, unethical pro-organizational behavior, unethical behavior, fraud triangle, and fraud diamond*. Some of the journal searches included but were not limited to the *European Journal of Business and*

Management; Journal of Business Ethics; Journal of Academic Ethics; Journal of Accounting and Public Policy; Criminal Justice and Behavior; International Journal of Management, Accounting, and Economics; Journal of Applied Psychology; Academy of Management Journal; Journal of Leadership and Organizational Studies; Personnel Psychology; CPA Journal; International Journal of Business, Accounting, and Finance; and Behavioral Research in Accounting. After this extensive review of the literature, there was an evident lack of understanding regarding the impact of job insecurity, job embeddedness, and moral disengagement in the role of unethical behavior among accountants. The literature period for this study targeted the years 2014 through 2019 and aimed to have at least 85% of all scholarly resources from within this time period to provide seminal sources and a better context for the relevance of the study.

Theoretical Framework

To understand why an individual behaves unethically by committing fraud, Cressey (1953) created a fraud triangle theory to examine the common reasons thread for all fraudulent behavior. Cressey (1953) believed that understanding why fraud occurred could prevent future fraud from occurring. Ultimately, Cressey's (1953) study established a foundation for the underlying reasons of corporate crime by suggesting that each fraudulent activity occurs because an employee feels pressure, has an opportunity, and uses rationalization to justify his or her actions (see Figure 1).

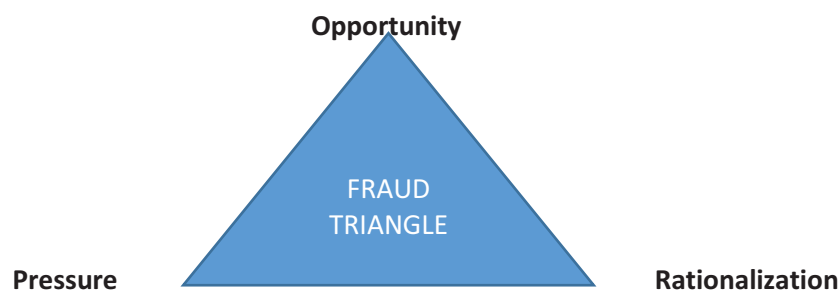


Figure 1. The fraud triangle model.

According to Cressey (1953), employees generally feel pressure when they experience a problem they are unable or unwilling to share with others (Cressey, 1953). Furthermore, the employees must possess an opportunity to commit fraudulent behavior with the personal characteristics that release their feelings of guilt for their unethical behavior (Cressey, 1953). Cressey's participants were all inmates who had been convicted of embezzlement; they were middle-aged men who had held a position of trust within their organization (Cressey, 1953). Despite this finding regarding gender, the workforce has changed in the decades since Cressey's study: Women comprised less than 34% of the labor force in 1950, but this number had jumped to nearly 60% by 2012 (Weinstein, 2017). In addition, Weinstein (2017) suggested that females made up an even smaller percentage of trusted or leadership positions during the time that Cressey performed his original study. Because of this, it is hard to determine whether gender itself plays a significant role in the unethical behavior among accountants; however, recent research suggests that females engage in fraud at lower rates than males (Liao, Smith, & Liu, 2019). Regardless, because these middle-aged men held positions of trust, job embeddedness might be a key factor and is an area worthy of research.

Although the fraud triangle theory provided a significant glimpse into the world of fraudulent behavior with respect to financial crimes, the model was unable to address each kind of fraudulent behavior. In studying the fraud triangle, Wolfe and Hermanson (2004) felt that,

although the fraud triangle addressed many symptoms of fraud, it left out a critical component for those individuals responsible for fraudulent actions, as evidenced by the crime's continually increasing occurrences and magnitude. Wolfe and Hermanson (2004) believed that a fraudulent act could not occur if individuals simply felt pressure, perceived an opportunity, and provided rationalization—the individual had to also be capable of committing a fraud. This perspective added a fourth component to the fraud triangle, thereby transforming it into the fraud diamond theory (pressure, opportunity, rationalization, and capability). Boyle et al. (2015) found that individuals are capable of committing fraud if they possess expertise in their field, can coerce others to aid in the fraudulent act, and can lie successfully.

In addition, Boyle et al. (2015) discovered that, unlike the opportunity in the fraud triangle, which represented organizational weaknesses, capability in the fraud diamond depended more on the perpetrator's individual characteristics needed to take advantage of the opportunity. In addition, researchers determined that auditors using the fraud diamond theory “provide significantly higher fraud risk assessments than auditors” using the fraud triangle model in their fraud risk assessment approach (Boyle et al., 2015, p. 580). Researchers have identified six major capability dimensions: “an individual's position or function within the entity, intelligence/expertise, confidence/ego, ability to coerce others, ability to lie, and ability to manage stress” (Boyle et al., 2015, p. 581). In considering the fraud diamond component of capability, researchers found fraud to occur more often in smaller to midsize organizations because of “staffing and budget limitations” on internal control structures because these organizations relied on fewer people to do more tasks, thereby enabling their capability (Suh, Nicolaides, & Trafford, 2019, p. 86). Likewise, other researchers found that the intention to

commit fraud was higher when all four elements of the fraud diamond theory were present (Yusof, & Lai, 2014).

Critics of the fraud triangle or fraud diamond theory have argued that they overemphasize individual factors of fraud occurrence rather than focusing on any “social and organizational factors” (Huber, 2017, p. 30). Another point of emphasis is that the fraud triangle focuses on embezzlement or theft rather than the fraud itself and does not consider legal or accounting measures related to fraud (Huber, 2017). The major criticism of these theories is that they are too simplistic to explain all types of fraud, but neither theory claimed to be an all-encompassing source of knowledge for fraudulent behavior (Lokanan, 2018). Some researchers think that the triangle elements of pressure, opportunity, and rationalization are much like the elements of heat, fuel, and oxygen to start a fire, whereas other researchers believe that all elements are substitutable for other factors, as they do not believe this to be an all-encompassing list (Schuchter & Levi, 2016). Likewise, little research has been conducted to the relationship strength between the four variables (opportunity, pressure, rationalization, and capability) and whether any of the factors have a stronger influence on fraud than the others (Lokanan, 2018). Ultimately, it is important to view the fraud triangle and diamond theories as a framework in guiding conclusions regarding fraudulent behavior because they allow insight into the “behaviors that aid fraudulent behavior” (Lokanan, 2018, p. 60). Researchers have found that all “situational and moral components are all critical for gaining an understanding of the unethical behavior that could eventually lead to fraud” (Lokanan, 2018, p. 70). Despite the shortfalls of theory, the goal is to better understand why one person commits a fraudulent act whereas another person, in the same position, does not commit a fraudulent act (Morales, Gendron, & Guénin-Paracini, 2014).

Although the fraud triangle and fraud diamond theories do not provide solutions to all fraudulent activities, these theories identify two main thought processes regarding fraud. The first thought process centers on fraud as an individual lapse in morality and views people and organizations as accountable (Morales et al., 2014). Second, no person is immune to surrendering to temptation and committing a fraudulent act (Morales et al., 2014). Schuchter and Levi (2016) found that financial incentive was not enough to commit a crime but that most individuals possessed a “fraud-inhibiting inner voice” that would become quieter over time to eventually allow those individuals to commit a fraudulent act. Essentially, the fraud triangle and fraud diamond “sustain normalizing patterns that aim to shape identities of risky individuals whose frail morality needs to be tightly controlled and disciplined by the organization” (Morales et al., 2014, p. 192). In the end, both the fraud triangle and the fraud diamond are useful and “appropriate” in understanding most financial criminal acts even though they are unable to provide an answer for every unethical act of fraud (Schuchter & Levi, 2016, p. 108).

Modern History of Accounting

The origins of accounting began either 6,000 years ago, 500 years ago, or 100 years ago depending on whether one is referring to either the early economic origins of accounting, comprehension of accounting, or the development of accounting theory, respectively (Mukhametzyanov, Nugaev, & Muhametzyanova, 2017). For the purposes of this study, it was important to examine the significance of the development in accounting theory over the last 100 years. This period coincided with the introduction of the first CPA exam in the United States, which took place a little over 100 years ago in 1917, thereby signaling a new level of professionalism in the industry (King, Case, & Senecker, 2017). In the early part of the 20th century, accounting theorists sought to address questions regarding the purpose, preparation,

measurement, and definitions of key terms found within the financial statements (Baker, 2017). During that period, this was a critical part in the process of understanding because a consensus had not been reached regarding the principles, rules, or concepts for financial reporting (Baker, 2017). Despite the early efforts of the Interstate Commerce Commission in 1887 to promote accounting regulations for railroads, railroads resisted adopting these standards because they preferred their current accounting methodologies (Baker, 2017). This resistance to adoption was common among other industries; accounting standards and regulations were not in place, so executives and accountants preferred their own methods regardless of whether there was uniformity or comparability across companies (Baker, 2017).

Walton (1909, p. 452) wrote about the need for a “supreme tribunal” to make rulings or decisions that must be followed by other practitioners in the industry that prevented individuals from following “a law unto himself.” During this same time, the American Institute of Accountants (1934) found that balance sheets were a “reflection of individual judgments and that their value is therefore to a large extent dependent on the competence and honesty of the persons exercising the necessary judgment” (p. 6). It was becoming obvious to regulators that, without independent standards, it was hard to hold accountants to a professional or ethical norm. Baker (2017) asserted that the “effort to reduce diversity in accounting practice eventually led to the creation of the FASB’s conceptual framework.” Furthermore, the diversity of accounting theory and practice was a major contributor to the financial crisis of the late 1920s, spurring the creation of the Securities and Exchange Commission (SEC) in 1934 and becoming the catalyst for a reduction in diversity of accounting standards and the movement toward uniformity under a conceptual framework (Baker, 2017).

The Securities Acts of 1933 and 1934 required companies to produce “accurate and complete information” with “financial statements prepared in accordance with generally accepted accounting principles (GAAP)” (Baker, 2017, p. 114). The laws allowed the SEC to dictate accounting standards to all companies when preparing their financial reports (Baker, 2017). Over time, the American Institute of Accountants became the AICPA, which helped to establish the FASB and stressed the need for uniform principles in accounting, particularly for producing financial statements that are useful in making decisions for external parties, such as investors or creditors (Baker, 2017). However, the AICPA failed to develop a different approach to accounting theory, which led to the development of FASB’s conceptual framework (Baker, 2017). Within the FASB’s conceptual framework are the assumptions, principles, constraints, qualitative characteristics, elements, and objectives of financial reporting (Baker, 2017). However, underpinning the qualitative characteristics of the FASB conceptual framework is faithful representation of data, which means that financial reporting should be complete, neutral, and error free (Baker, 2017). Information that is unreliable can never be useful to the end user. An unethical accountant may produce incomplete, biased, or error-filled financial reports that would allow them to profit in some manner from the errant information. Baker (2017) argued that “accounting practices and standards affect the behavior of enterprises, governments, and individuals” (p. 119) and, for this reason, it is important to understand how this process developed.

Despite the progress during the past century related to a rule-based GAAP approach, there has been a recent push toward a more principle-based standard approach with the new International Financial Reporting Standards (IFRS; Guillaume & Pierre, 2016). The new, principle-based approach under IFRS would allow accountants to use more professional

judgment rather than requiring them to follow a prescribed set of rules established by GAAP (Guillaume & Pierre, 2016). At first glance, this appears to lose some of the progress made within the accounting rules industry over the past century. For a principle-based approach to be effective, accounting professionals must exhibit “prudence” and “sound judgment” (Guillaume & Pierre, 2016, p. 66). Furthermore, according to a Big Four firm, for IFRS to be successful, reporting needs to be consistent and reliable (Guillaume & Pierre, 2016). If the transition from GAAP to IFRS is successful, there will be a stronger reliance upon the ethical values of accountants than ever before in history due to the potential global impact.

An interesting finding from the literature is that work and core self-evaluations (positive emotions individuals have of themselves) do not impact their application of rules-based decisions in accounting; however, an accountant’s work location and core self-evaluation do impact their application of a principle-based decision in accounting (Prather-Kinsey, Boyar, & Hood, 2018). Researchers have also found, when testing accountant knowledge regarding new IFRS revenue recognition requirements versus old GAAP knowledge regarding revenue recognition, that a significantly high percentage failed to properly apply the correct principle-based approach of IFRS, instead choosing the incorrect rule-based approach of GAAP (Bierstaker, Kopp, & Lombardi, 2016). The same study also found that, due to a higher level of subjectivity in judgment, accountants needed a higher level of technical experience to properly use a principle-based approach rather than a rule-based approach (Bierstaker et al., 2016). Furthermore, researchers found that, due to this higher level of subjectivity in judgment, accountants could use their “inherent flexibility” in standards to “misrepresent or reduce the transparency of the financial results,” such as understanding their debt ratios by classifying a lease as an operating asset instead of a capital asset (Cussatt, Huang, & Pollard, 2018, p. 27). In addition, this may

allow a more aggressive rather than a conservative approach toward reporting if a principle-based system allows for more judgment and subjectivity (Cussatt et al., 2018). Going forward, the question is whether adopting a principle-based approach rather than a rule-based approach could encourage accountants to engage in more UPB than they currently do given that the new guidance would allow for additional subjectivity and flexibility among their financial reporting decisions. After many years of progressing away from organizations using subjective judgment in their application of accounting data, it appears that there is a desire to regress to the previous approach, further accentuating the dire need for ethical decision-making among accountants.

Unethical Behavior in Accounting

Fraud in business is substantial, growing in magnitude, and impactful across the globe (ACFE, 2016; FBI, 2017; Gunz & Thorne, 2017; Kroll 2016). The ACFE (2016) estimated that global fraud totals almost \$4 trillion annually, and Kroll (2016) noticed a growth rate in fraud of nearly 10% in the United States between 2013 and 2015, affecting nearly 75% of all companies. Of those companies affected, over 80% involved individuals directly employed by the company (Kroll, 2016). Hidden within these statistics is the FBI's (2017) recognition that accounting fraud represents the majority of corporate fraud losses within the United States, contributing to losses in consumer confidence and incalculable damage to the economy. These alarming statistics suggest that federal legislation has not been able to completely prevent fraudulent behavior in the market. One perspective is that legislation such as SOX has been helpful in improving transparency of financial information and restoring investor confidence through the employment of a tighter internal control structure (e.g., Donelson et al., 2017); however, SOX might reduce incentives for detecting fraud, thus nullifying its original intention. With respect to ethical behavior, the AICPA requires that all member accountants adhere to the minimum ethics levels

found within the IESBA's Code of Ethics for Professional Accountants (AICPA, 2018). Furthermore, COSO established that accountants are responsible for the organization's internal controls (COSO, 2017). Essentially, this kind of responsibility makes accountants the "watchdogs" of a corporation, thereby establishing a certain level of trust and responsibility within the organization (Alzola, 2017).

Because of this position of professional responsibility and trust, management, corporate investors, and members of society depend upon the accountant's fiduciary responsibility to produce accurate and reliable financial statements (Gunz & Thorne, 2017). There is an implied level of trust between employees and organizations (Yadav, Dash, Chakraborty, & Kumar, 2018). This implied level of trust between an employer and employee creates a high-performance environment that contributes to "justice perceptions and feelings of commitment" within an organization (Weibel et al., 2016, p. 437). Conversely, employees lacking in organizational trust tend to perform their work poorly, engage in obstructive or revengeful behavior, or change employers (Weibel et al., 2016). Therefore, establishing an environment of trust tends to promote longevity in the workforce, potentially embedding employees within their organizations and reducing turnover (Purba, Oostrom, Born, & Van Der Molen, 2016). Although it is important to retain trusted workers within an organization, this level of trust provides employees with opportunities to commit fraud that would not exist otherwise. The employee's realization of this opportunity could introduce factors that are widely accepted to contribute to fraudulent behavior, as examined by Cressey (1953) in his "fraud triangle theory."

Despite the good intentions of requiring an internal control structure and the level of trust and responsibility bestowed upon accountants, unethical accountants might still find reasons to behave fraudulently and ways to breach internal control systems. Researchers discovered that

internal control weaknesses are synonymous with undetected fraud in organizations; however, these same researchers could not find a statistical correlation between these factors and the reasons accountants commit fraud or the methods they use to do so (Donelson et al., 2017; Lawrence & Kacmar, 2017; Triki et al., 2017). One researcher, Halbouni (2015), discovered that individuals with higher levels of personal integrity were unlikely to commit unethical behavior. Similarly, Halbouni (2015) found that individuals generally would not commit unethical acts inconsistent with their own personal code of ethics. However, accountants possessing higher levels of Machiavellian ethics were more likely to engage in unethical behavior compared to their counterparts with lower Machiavellian values (Triki et al., 2017). Gocke (2017) identified individuals with higher Machiavellian values as being more susceptible to aggressively manipulating others to accomplish their personal desire without respect to the decision's morality. Questions remain as to whether it is even possible to encourage ethical behavior for accountants (Baïada-Hirèche & Garmilis, 2016; Bobek et. al., 2015; Lail et al., 2017). Therefore, it may be necessary to develop critical internal control structures within organization environments and hire trusted accountants who have high levels of personal integrity who seek morality within their decision framework.

When discussing internal controls and ethics, it is necessary to describe the COSO framework, the AICPA Code of Professional Conduct, and the IESBA Code of Ethics for Professional Accountants. Although having internal controls does not prevent every fraudulent act, it is necessary and vital to an organization's overall control framework. According to the COSO framework, an internal control system cannot be effective without five major components working in conjunction to achieve the organization's stated purpose and goals (COSO, 2017). Those five areas include the control environment, risk assessment, control activities, information

and communication, and monitoring activities (COSO, 2017). When considering the control environment, it is necessary that the business maintains a commitment to high levels of ethics and integrity with the ability to hire individuals who share these values (COSO, 2017). Within the risk environment, it is important that the business assess the potential fraud risks that exist and to leverage the firm's control activities to mitigate those risks by establishing effective procedures and internal controls (COSO, 2017). Furthermore, once controls exist, it is necessary to communicate and provide information related to the internal control structure, both internally and externally, while monitoring to ensure that corrective actions occur for any control deficiencies found within the organization (COSO, 2017).

In terms of professional behavior, the AICPA developed a Code of Professional Conduct to provide "guidance and rules to all members in the performance of their professional responsibilities" (AICPA, 2018, p. 1). Any departure from the professional code must be justifiable or face disciplinary action (AICPA, 2018). Member CPAs are expected to perform all professional responsibilities with "an unswerving commitment to honorable behavior, even at the sacrifice of personal advantage" (AICPA, 2018, p. 5). Additionally, the AICPA measures integrity through an objectivity perspective of "what is right and just." The code also requires members to ask the questions "Am I doing what a person of integrity would do?" and "Have I retained my integrity?" to ensure that they follow both the "form and the spirit of technical and ethical standards" (AICPA, 2018, p. 6). Likewise, the AICPA believes that ethical conflicts emerge when members experience "internal or external pressures" and "conflicts" when using standards during the course of their work (AICPA, 2018, p. 29). Ultimately, the profession and society expect CPAs to maintain a level of trustworthy and ethical behavior to provide society

with reliable reporting and ethical actions. At a minimum, CPA members should maintain ethical behavior in accordance with the IESBA's Code of Ethics for Professional Accountants.

When reviewing the IESBA's Code of Ethics for Professional Accountants, the primary purpose is to reflect "the profession's recognition of its public interest responsibility" by establishing principles based upon "integrity, objectivity, professional competence and due care, confidentiality, and professional behavior" (IESBA, 2018, p. 6). According to the IESBA, integrity is being "straightforward and honest in all professional and business relationships" (IESBA, 2018, p. 18). Furthermore, objectivity means that accountants are free of bias and conflict, and professional competence and due care include acting in compliance with all standards and requirements (IESBA, 2018). Confidentiality requires accountants to show respect for any sensitive professional or business information acquired through interaction with the organization; furthermore, CPAs are expected to comply with laws and regulations at all times while avoiding any behavior detrimental to the profession (IESBA, 2018). In the end, the highest levels of integrity and ethical behavior are imperative for CPAs within their industry and for providing confidence in financial systems worldwide.

Unethical Pro-Organizational Behavior

Unethical behavior can occur when individuals act to benefit themselves or the business that employs them (Lawrence & Kacmar, 2017). Self-interested unethical behavior is behavior that departs from the normal set of moral standards that a person exhibits or from an organization's established moral standards for "positive personal gain" (Alexandra, Torres, Kovbasyuk, Addo, & Ferreira, 2017; Lawrence & Kacmar, 2017, p. 46). This kind of behavior might include falsifying expenses, plagiarism, stealing office supplies, or any form of misappropriation of assets (Lawrence & Kacmar, 2017). Unethical pro-organizational behavior is

intended to profit the organization rather than the individual (Lawrence & Kacmar, 2017). This kind of unethical behavior includes lying to customers, falsifying information to clients, emphasizing profits more than public safety, and producing misleading financial reports (Tian & Peterson, 2016). In addition, Mahlendorf, Matějka, and Weber (2018) found that individuals were more willing to engage in UPB when bonuses or financial incentives were available. Although there are apparent differences between these types of unethical behavior, Umphress, Bingham, and Mitchell (2010) found that UPB cannot completely separate itself from self-interested unethical behavior because individuals committing unethical acts for their organization could well believe they are also benefitting themselves in some manner or capacity.

Oftentimes, the ethical demands for the profession require that “fiduciary responsibilities come first” (Mahlendorf et al., 2018, p. 83). This means that accountants might sometimes maintain independence to such a degree that it hinders them from being able to acquire sensitive information from coworkers, which might prevent them from providing a “true and fair view of the financial performance of their organization” (Mahlendorf et al., 2018, p. 83). Therefore, accountants will sometimes “compromise their fiduciary responsibilities and ethical standards” to allow their organization to benefit and achieve its objectives even if they sometimes must manipulate earnings or misreport financial information (Mahlendorf et al., 2018, p. 83). Overall, researchers have found that accountants were not as willing to commit UPB when companies were growing quickly or listed publicly or when the individuals did not identify with their organization (Mahlendorf et al., 2018). Effelsberg et al. (2014) discovered that employees are more willing to engage in UPB if they identify closely with their organization. Whether strong organizational identification is significantly related to one’s level of job embeddedness is unclear. However, if a strong relationship does exist, then it is possible to think that job-

embedded accountants would be more likely to commit UPB, which is consistent with current research (Ghosh, 2017; Lawrence & Kacmar, 2017).

Leadership matters when it comes to UPB. For instance, one study found that transformational leaders were able to create environments in which employees felt pressure to engage in UPB because of their desire to gain the approval of leadership (Tian & Peterson, 2016). Whether a person succumbs to the pressure of a transformational leader depends upon the employee's desire to please management based on factors such as "organizational identification, effective organizational commitment, promotion-goal orientation, and employee disposition toward ethical/unethical behavior" (Tian & Peterson, 2016, p. 160). These factors are related to the power-distance orientation that each accountant feels with the company leadership (Tian & Peterson, 2016). In essence, if accountants have a different set of ethical beliefs than their company, they will face greater pressure regarding their ethical judgments if they have a higher power-distance orientation with leadership (i.e., they tend to rely upon their judgments in a top-down approach to decisions) than if they had a lower power-distance relationship with leadership (Tian & Peterson, 2016). Ultimately, whether an accountant succumbs to unethical leadership may depend upon factors similar to these and could depend upon the accountant's level of job insecurity (pressure), job embeddedness (opportunity), moral disengagement (rationalization), and individual characteristics within the organization (capability).

Unethical pro-organizational behavior and job insecurity. Job insecurity is a perceived and stressful situation in which an individual feels at risk of losing their job, which, in turn, causes fatigue and weakened facilities to resist the temptation to engage in UPB (Lawrence & Kacmar, 2017). Researchers have found that companies are increasing the number of contractors and temporary employees, creating the reality of greater job insecurity for more

employees (Callea, Urbini, Ingusci, & Chirumbolo, 2016). Because of this, job insecurity is a growing concern among businesses as an employee's continued employment depends upon his or her level of performance within an organization, thereby raising their stress levels (Ghosh, 2017). Despite this growing trend, evidence has revealed a growing desire for job security by employees (Wang, Lu, & Siu, 2015). Ultimately, researchers feel that job insecurity causes UPB and is something that needs close monitoring by organizations (Ghosh, 2017; Lawrence & Kacmar, 2017).

Researchers believe that job insecurity has the ability to influence worker behavior in both positive and negative ways (Keim, Pierce, Landis, & Earnest, 2014). Job insecurity can either be objective, wherein organizational clues inform the individual of a potential crisis, or subjective, wherein the individual perceives a potential loss based on assumptions, regardless of whether those assumptions are substantiated (Lawrence & Kacmar, 2017). Researchers feel that subjective rather than objective job insecurity impacts the individual's psychological health in ways that could potentially influence their ethical behavior because it is "positively related to emotional distress and negatively related to physical and mental health" (Lawrence & Kacmar, 2017, p. 43). Depending upon personality characteristics, some individuals must expend energy to maintain a positive outlook in the face of a negative circumstance, which exhausts their ability to cope with ethical challenges because they feel powerless over the situation (Lawrence & Kacmar, 2017).

When considering the negative effects of job insecurity, researchers have found that, when employees view their job insecurity as a force occurring outside the company's control (loss of business, sales are down, etc.), employees are much more willing to engage in UPB. Employees might feel a duty to help the business to survive the hard times they are facing, which

would likely save their job in the process (Schumacher, Schreurs, Van Emmerik, & De Witte, 2016). When employees identify with the organization and fear losing their job, they will often attempt to present themselves in a favorable light to leadership by performing any acts that benefit the company regardless of their ethical values (Ghosh, 2017). From management's side, by communicating regularly with employees regarding future events within the organization, employers can reduce the stress caused by job insecurity and therefore its negative impact on employees and their UPB (Jiang & Probst, 2014).

On a positive note, job insecurity has proven to become a catalyst for positive organizational change, create higher productivity from a company's workforce, and reduce behaviors that are counterproductive to the workforce (Ghosh, 2017). Employees who are able to adapt easily might not find job insecurity as emotionally draining because they might view it as an opportunity to pursue another job or gain an additional skillset (Ghosh, 2017; Lawrence & Kacmar, 2017). In addition, reduction of job insecurity can occur when individuals have a higher internal locus of control, less role ambiguity in the organization, better communication from managers, and more organizational support (Keim et al., 2014). However, it is important to consider the impact that job insecurity could have on an employee's UPB and how that relationships might be shaped by job embeddedness (Ghosh, 2017; Lawrence & Kacmar, 2017).

Unethical pro-organizational behavior and job embeddedness. Job embeddedness is an attachment that employees feel with their organization, and strong embeddedness can reduce turnover (Mitchell et al., 2001). Embeddedness is simply having the right fit within the organization and is related to both work and nonwork factors that tie employees to their job (Mitchell et al., 2001). Individuals who experience high levels of job embeddedness might experience comfort, compatibility, and dependence with the organization, aligning their

behaviors with those expected from the organization (Lawrence & Kacmar, 2017). Ghosh (2017) referenced how employees who have higher levels of job embeddedness tend to focus on achievement during periods where they might experience job insecurity to prove their worth to management and might not recognize moral boundaries for any UPB, especially when the job insecurity occurs outside the company's control. In essence, highly embedded employees might be willing to do almost anything for the success of a company they love, regardless of the ethical implications, if that company is facing a crisis that is contributing to their personal job insecurity. Confirming this idea, Lawrence and Kacmar (2017) discovered that employees who experienced high levels of job embeddedness were more likely to commit unethical behaviors when facing job insecurity than were employees who were not highly embedded within their organization. Ghosh (2017) found a positive link between job embeddedness and UPB and that job embeddedness strengthened the connection between workers experiencing job insecurity and UPB.

Another negative effect of having high levels of job embeddedness is that these same valued relationships can corrupt good character and cause unethical behavior to occur if the connections are with individuals with poor ethics (Tillman, Hood, Lawrence, & Kacmar, 2017). Because the risk of losing relationships with coworkers and others within the organization might be strong, these types of employees will sometimes engage in UPB. Therefore, although job embeddedness can reduce turnover, some evidence suggests that it could either positively or negatively affect the ethical behavior of a worker. Conversely, employees who have a low level of job embeddedness do not experience job insecurity in the same manner as employees with a high level of job embeddedness. Although an employee with a high level of job embeddedness might experience betrayal from job insecurity and the potential for losing work within an

organization that they feel a part of, an employee with a low level of job embeddedness will not feel this sense of betrayal and will be likely to view the loss of a job as an opportunity to pursue new interests (Lawrence & Kacmar, 2017). The latter kinds of employees are also less likely to engage in UPB because this could potentially damage their character when they move on in their career (Lawrence & Kacmar, 2017). Therefore, an individual who is highly adaptable might be less likely to engage in unethical behavior when experiencing an exhausting pressure, such as job insecurity (Lawrence & Kacmar, 2017).

Unethical pro-organizational behavior and moral disengagement. Moral disengagement refers to the individual's ability to remove one's unethical behavior from their preestablished internal moral standards to rationalize the unethical act without feeling guilty (Moore, 2015). In his seminal book, Bandura (1991) described how moral disengagement occurs by allowing individuals to distort consequences (no big deal), diffuse responsibility (everyone does it), compare advantage (small compared to what others take), displace responsibility (others do it, so I should also), morally justify (there is a reason to justify the unethical behavior), euphemistically label (just borrowed, not stolen), dehumanize (corporation is large and heartless, will not miss what is taken), and attribute blame (company charges too much for other things so by taking something small it is payback). By operating with these factors of moral disengagement, an individual might justify departing from their normal ethical standards without remorse (Moore, 2015). Past researchers discovered that individuals prone to moral disengagement might display "criminal behavior, aggression and bullying, workplace misconduct, and unethical behavior" (Moore, 2015, p. 199). Despite this, the theory of moral disengagement assumes that "most moral transgressors are not inherently or globally immoral

people. . . . rather, like all others, they hold self-regulatory standards that are largely consistent with societal norms” (Chen, Chen, & Sheldon, 2016, p. 1084).

Moral disengagement is also “positively associated with Machiavellianism, trait cynicism, external locus of control and moral relativism” (Moore, 2015, p. 199). As mentioned earlier, accountants with higher Machiavellian views were more susceptible to unethical behavior than accountants with lower Machiavellian views (Triki et al., 2017)—whether this is attributable to their propensity for moral disengagement is not known. Researchers have also found that moral disengagement centers on certain personality characteristics, which include “low agreeableness, Machiavellianism, and psychopathic type traits” (Egan, Hughes, & Palmer, 2015, p. 123). Furthermore, researchers have found “positive links between job insecurity . . . and external locus of control as antecedents” (Ghosh, 2017, p. 1184). In addition, individuals who hold strong organizational identification use moral disengagement to relabel UPB as something necessary for the organization rather than something immoral, to merge personal accountability with company accountability, and to lose personal accountability due to the sacrifice for the company (Chen et al., 2016).

Bandura (1991) noted that an individual’s environment can influence a person’s propensity to disengage morally. An environment filled with job insecurity could foster moral disengagement, although further research is necessary to confirm this possibility. Furthermore, when an employee’s level of organizational identification (or job embeddedness) is high for an employee, the tendency to morally disengage is also higher (Lee, Schwarz, Newman, & Legood, 2019). Researchers have discovered that feelings of personal distress can cause employees to morally disengage and to pardon themselves from helping others in need (Paciello, Fida, Cerniglia, Tramontano, & Cole, 2013). Evidence has also shown that employee turnover can

negatively affect an individual's ethical behavior because ethical employees would want to stay at a company that is congruent with their personal ethical views (May, Chang, & Shao, 2015). Although that might be true as it relates to long-term employees disengaging morally, it does not consider long-term employees who possess strong levels of organizational identification and would engage in UPB through moral disengagement to save the organization that they love.

Unethical pro-organizational behavior and capability. In conversations with inmate accountants, Dellaportas (2013) recognized that accounting fraud cannot occur without a perpetrator possessing intimate knowledge of the organization, establishing trust with management, and having the company rely upon their work behaviors. Without the unique knowledge of the organization, the offenders would not have been able to recognize opportunities, bypass the internal control structure, and exploit opportunities that would never exist otherwise (Dellaportas, 2013). Many individuals possess knowledge; however, it is trust that provides the chance for accountants “to exploit their fiduciary position” by taking advantage of the “dependent relationship held with their victims . . . the faith placed in the offenders’ professional roles as accountants” (Dellaportas, 2013, p. 37). Capability “acts as a converter of opportunity into reality” because the individual must first recognize the fraud before bringing it to fruition (Azam, 2018, p. 59).

Regarding fraudulent activities, researchers have found that “an opportunity must ultimately reach down and become psychologically available to individual actors or it will remain merely a theoretical possibility” (Coleman, 2001, p. 63). It seems undeniable that top-level financial management jobs transform the quantity and magnitude of fraudulent opportunities that exist in society (Coleman, 2001). Not every person can commit any given type of fraud, including accounting fraud. Individuals feeling pressure (motivation) to commit a crime

“require not just opportunity, but also the understanding that there is an existing opportunity to defraud” (Schuchter & Levi, 2016, p. 112). Therefore, it is necessary to distinguish the “perception and other skills, which are required to carry out activities . . . from the opportunity element itself” (Schuchter & Levi, 2016, p. 112). Wolfe and Hermanson (2004) suggested that individuals must possess a number of characteristics to commit fraud, including the individual knowledge and prospective rank within an organization to pull off the crime itself. Although many individuals might consider capability something that can change within an individual, researchers have found that it might be “difficult if not impossible” to elevate an employee’s performance by increasing their capabilities (Mitchell, Baer, Ambrose, Folger, & Palmer, 2018, p. 56). Therefore, because of its restrictive nature, the capability of committing an unethical act is not a trait that is inherent to every individual or worker within an organization.

Summary

As noted, unethical behavior in accounting is a serious problem affecting most companies in the United States (ACFE, 2016; FBI, 2017; Gunz & Thorne, 2017; Kroll 2016). Furthermore, the FBI (2017) understands that accounting fraud represents the majority of corporate fraud losses within the United States. Despite Congress’s best efforts, legislation does not always prevent unethical behavior from occurring (Rice et al., 2015). Trying to understand why unethical behavior occurs requires research using the tools found within Cressey’s (1953) fraud triangle and Wolfe and Hermanson’s (2004) fraud diamond theories, with the biggest distinguishing trait being the “capability” of the individual to perform the unethical act. Unethical pro-organizational behavior is self-interested unethical behavior that departs from the normal set of moral standards that a person exhibits or from an organization’s established moral standards for “positive personal gain” (Lawrence & Kacmar, 2017, p. 46; Alexandra et al.,

2017). Sometimes, this behavior is necessary for accountants to earn the trust of coworkers and obtain necessary information to report accurate financial reports (Mahlendorf et al., 2018). In addition, the environment can impact the degree to which UPB impacts employees (Tian & Peterson, 2016).

Furthermore, job insecurity can potentially increase the likelihood of UPB depending upon the personality characteristics of the accountant (Ghosh, 2017; Lawrence & Kacmar, 2017). The pressure from job insecurity can have both positive and negative effects on the workers involved (Keim et al., 2014). In addition, job embeddedness can potentially impact accountants' UPB depending on their personality characteristics and how those characteristics influence their behavior when they feel the pressure from job insecurity (Ghosh, 2017; Lawrence & Kacmar, 2017). Depending on whether accountants have high or low job embeddedness, they will experience either positive or negative impacts related to UPB when facing the pressure of job insecurity (Ghosh, 2017; Lawrence & Kacmar, 2017). Moral disengagement refers to the individual's ability to remove one's unethical behavior from their preestablished internal moral standards to rationalize an unethical act without feeling guilty (Moore, 2015). The literature has uncovered a connection between environmental context (Ghosh, 2017; Paciello et al., 2013) and job embeddedness (Lee et al., 2019). Finally, when addressing capability, it is important to understand that not every individual is capable of committing accounting fraud (Azam, 2018; Coleman, 2001; Dellaportas, 2013; Schuchter & Levi, 2016). This capability component affects the target population to sample in this study and makes other populations less meaningful. For this reason, it is necessary to research accountants' ethical behavior.

Chapter 3: Research Method

The purpose of this quantitative, correlational study was to determine whether job insecurity, job embeddedness, and moral disengagement affected professional accountants' ethical behavior by examining relationships between variables. The fraud diamond theory suggests that individuals must experience pressure, perceive an opportunity, rationalize their actions, and be capable of committing fraud (Wolfe & Hermanson, 2004). This study focused on professional accountants due to their unique role within an organization, their capability of committing fraud, and the significant financial losses companies have experience from accounting fraud in recent years (ACFE, 2016; Alzola, 2017; FBI, 2017; Gunz & Thorne, 2017; Kroll, 2017). Because of the capability that accountants possess within an organization to commit fraud, it was important to examine whether the pressure of job insecurity, the perceived opportunity of job embeddedness, and/or the rationalization associated with moral disengagement would affect the ethical behavior of professional accountants. Therefore, this study focused on the following research questions and associated hypotheses:

- RQ1.** What is the extent of the relationship between job insecurity and unethical behavior in accountants?
- RQ2.** What is the extent of the relationship between moral disengagement and unethical behavior in accountants?
- RQ3.** What is the extent of the relationship between job embeddedness and unethical behavior in accountants?
- H1₀** There will not be a positive relationship between job insecurity and unethical behavior for accountants.

- H1_a** There will be a positive relationship between job insecurity and unethical behavior for accountants.
- H2₀** There will not be a positive relationship between moral disengagement and unethical behavior for accountants.
- H2_a** There will be a positive relationship between moral disengagement and unethical behavior for accountants.
- H3₀** There will not be a positive relationship between job embeddedness and unethical behavior for accountants.
- H3_a** There will be a positive relationship between job embeddedness and unethical behavior for accountants.

In the remainder of this chapter, I discuss the research methodology and design, define a population, and describe the study sample, materials and instrumentation, operational definitions or variables, study procedures, data collection and analysis, assumptions, delimitations, and ethical assurances. Ultimately, chapter 3 outlines the research method and design appropriateness while summarizing these concepts and introducing chapter 4.

Research Methodology and Design

When considering research methodologies, it is important to contemplate the merits of both quantitative and qualitative methods. Both methods address research differently and answer distinct questions. Still, all quantitative research is “dependent on distinctions which are themselves nonnumerical” (i.e., qualitative), and all qualitative research is dependent upon “binaries that can be represented numerically” (Gergen, 2015, p. 211). Although this creates shades of ambiguity between methodologies, the methodologies are more suitable for answering different kinds of questions in different situations. When comparing both methods, it is important

to understand that quantitative methods involve numerical measurement and statistical analysis, whereas qualitative methods involve nonnumerical data with broader degrees of interpretation via coded responses (Leedy & Ormrod, 2019). For instance, quantitative research is used to determine the statistical degree of association or impact between variables upon the studied behavior by confirming, predicting, or establishing a theory (Leedy & Ormrod, 2019). Furthermore, quantitative research examines the attitudes and views of the sample population while describing tendencies (Yates & Leggett, 2016). Additionally, quantitative research allows the researcher to remain objective by distancing him- or herself from the sample population and weighing the effects of treatment on outcomes (Yates & Leggett, 2016).

Conversely, qualitative research “get[s] at the how and why of the story, in ways that quantitative research cannot” (Yates & Leggett, 2016, p. 225). Qualitative research is used to understand behavior patterns by exploring, describing, or explaining the observed views, methods, or context in which patterns exist (Leedy & Ormrod, 2019). Quantitative research tends to remain focused on established variables and guidelines while remaining detached and context-free during the process of data collection and statistical analysis; however, qualitative designs take a more holistic approach by not predefining variables within an established context and allow for flexible guidelines and personal subjectivity (Leedy & Ormrod, 2019). In fact, qualitative research allows “involving emerging questions and procedures, collecting data in the participants’ setting, analyzing the data inductively, building from particulars to general themes, and making interpretations of the meaning of the data” (Creswell, 2018, pp. 246–247). This loose structure provides large amounts of information that requires dissemination through coding into themes and categories before developing narratives and illustrations to convey the research findings (Leedy & Ormrod, 2019).

A quantitative method with a correlational design was used in the present study to examine the extent to which professional accountants' ethical behavior is related to job insecurity, job embeddedness, and moral disengagement. In addition to many of the reasons above, quantitative research allows for increased generalizability to a broader population base (Hannigan, 2018). Conversely, due to the level of subjectivity rather than objectivity, quantitative research lends itself more accurately toward replication (Norman, 2017). Furthermore, qualitative research maintains certain levels of bias, which are subject to the researcher's interpretation based on personal background, understanding, and context (Creswell, 2018). The quantitative correlational design was an appropriate selection to analyze the data because this represents a form of nonexperimental research which allows researchers to statistically analyze the degree of correlation or relationship between several variables instead of causality (Simpson & Lord, 2015).

A correlational design was deemed necessary for this study because it provides a statistical analysis that tests for an association between the independent variables and unethical behavior. Correlation proves the degree of association (whether it is strong or weak) in the relationship between the variables (Eddy, 2016). Furthermore, correlation helps identify how these variables relate to each other without allowing for the manipulation of independent or predictor values (Leedy & Ormrod, 2019). Because of this, the correlational design allows determining the predictor value of unethical behavior based on the independent variables of job insecurity, job embeddedness, and moral disengagement. Other forms of research involving experimental research which involves changing conditions for participants would not be appropriate for this kind of research (Eddy, 2016).

A cross-sectional study, sampling across various age groups, was beneficial for collecting descriptive statistics to determine whether certain age groups were at higher risk to engage in unethical decisions (Leedy & Ormrod, 2019). In contrast and due to time constraints, neither a longitudinal study nor an experience-sampling method was necessary for this study because they both involve following people over various points of time and situations to develop conclusions regarding ethical behavior (Leedy & Ormrod, 2019). Based on the information sought, the online survey method was better suited to collect information from the sample population of professional accountants (Leedy & Ormrod, 2019).

Population and Sample

According to the Bureau of Labor Statistics, there are 37,830 accountants in Georgia (BLS, 2018). In the United States, there is a total of 1,241,000 accountants or auditors in the industry (BLS, 2018). Nearly half of all accounting positions in the United States consist of three main areas: public accounting services (323,140 or 26.0%), management related accounting positions (133,070 or 10.7%), and state and local government accounting positions (86,930 or 7.0%). Whereas, Lawrence and Kacmar (2017) focused on professionally licensed architects, engineers, and accountants, this study will focus solely upon professional accountants residing within businesses in Georgia due to the fraud diamond theory's noted importance of capability in committing fraudulent acts within a company (Wolfe & Hermanson, 2004). Since these accounting professionals serve clients, the analysis of UPB is the measure relied upon to measure whether their unethical behaviors support the organization more than the clients they serve (Lawrence & Kacmar, 2017).

To determine sample size, the G*Power 3.1 software (Faul et al., 2009) was used to perform an a priori power analysis for linear multiple regression which resulted in a minimum

sample size of 119 participants for this study (see Appendix A). This a priori analysis used a medium effect size, $f = 0.15$, an alpha significance of .05, and power of 0.95 to quantify the sample size (Faul, et al., 2009). The survey was administered online and targeted toward businesses in Georgia. This email included sections for participant rights, confidentiality guarantees, assurances that personal answers would be opinion-based and not assessed on a correct/incorrect basis, and stated deadline (Lawrence & Kacmar, 2017). The email served as a convenience sample to choose participants based upon their “convenience and availability” (Creswell, 2018, p. 150). The Statistical Package for Social Sciences (SPSS) was used to analyze the data collected through the participant surveys.

Materials and Instrumentation

The primary instrument in this research was an online survey; however, that survey followed both a consent form and a demographic questionnaire and was used to gather important information from the participants. The online survey employed four research instruments related to job insecurity, job embeddedness, moral disengagement, and UPB. When examining the variable of job insecurity, the participants provided assessments of their personal feelings of job insecurity through a 7-item measure created by Hellgren et al. (1999), with responses occurring on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*). For job embeddedness, participants used a 6-point embeddedness measure developed by Mitchell et al. (2001), with responses occurring on a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*). Moral disengagement was measured with Detert et al.’s (2008) 24-item instrument, which was designed to capture the individual’s tendency to disengage morally (response choices ranged from 1 = *strongly agree* to 5 = *strongly disagree*). In addition, UPB was measured with a 7-point scale (1 = *strongly disagree* to 7 = *strongly agree*) utilized by Umphress et al. (2010). Finally, it was

important to capture demographic characteristics such as gender, age range, ethnicity, and years of experience to determine whether the sample was generalizable and representative of the total population of professional accountants.

After data collection, SPSS was used to examine the various descriptive statistics and variables to determine whether any correlations (Leedy & Ormrod, 2019). Because it was necessary to examine the strength of relationships between three or more variables and the ethical decision of professional accountants, the researcher employed an analysis of variance (ANOVA) to test these relationships (Leedy & Ormrod, 2019). This kind of statistical test tends to yield a significant F value that needs comparison via a post hoc analysis against means to determine whether positive associations exist between variables (Leedy & Ormrod, 2019).

Operational Definitions of Variables

Variables refer to measurable or observable “characteristics or attributes of an individual or an organization” (Creswell, 2018, p. 50). When constructing an operational definition of variables, it is necessary to define how the measurement and the methods for measurement of each variable in the study will occur (Leedy & Ormrod, 2019). The operational definitions of the variables are provided below.

Job insecurity. Job insecurity creates emotionally exhausting pressure on workers that creates lowers their ability to behave ethically (Lawrence & Kacmar, 2017). Therefore, job insecurity was treated as an ordinal-level, independent variable and was measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). After collecting the data from the online survey, scores were averaged, with lower scores indicating lower levels of job insecurity and higher scores indicating higher levels of job insecurity.

Job embeddedness. Lawrence and Kacmar (2017) found that job embeddedness enhanced unethical behavior, with workers feeling pressure due to job insecurity; however, job embeddedness simply relates to the level of attachment that employees feel to the organization where they are employed. Because of this, job embeddedness was treated as an ordinal-level, independent variable measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The scores from the online survey were averaged, with lower scores indicating lower levels of job embeddedness and higher scores indicating higher levels of job embeddedness.

Moral disengagement. Lawrence and Kacmar (2017) did not have an opportunity to examine the role of moral disengagement for individuals facing job insecurity and whether that would impact their ethical behavior. Because moral disengagement allows people to not feel guilty about engaging in unethical actions, it is important to examine the role of moral disengagement in the capacity of a job-embedded accountant who feels job insecurity. To measure this, moral disengagement was treated as an ordinal-level, independent variable and was measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Scores from the online survey were averaged, with lower scores indicating higher levels of moral disengagement and higher scores indicating higher levels of moral disengagement.

Unethical pro-organizational behavior. Because UPB allows workers to justify unethical actions in favor of the organization, it was necessary to determine whether professional accountants who were experiencing job insecurity while working in a job-embedded environment would morally disengage and commit unethical behavior (Lawrence & Kacmar, 2017). To examine this possibility, UPB was treated as an ordinal-level, dependent variable and was measured on a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Scores from the online survey were averaged, with lower scores indicating lower levels of UPB and higher scores indicating higher levels of UPB.

Control variables. To understand whether other factors were influencing unethical behavior, it was important to capture participant information related to gender, age, ethnicity, and years of experience.

Study Procedures

Upon obtaining the appropriate approval from Northcentral University's (NCU's) Institutional Review Board, the researcher approached individual accountants in Georgia via LinkedIn to obtain participants to fill out an online survey. The researcher informed the participants of their right to confidentiality, the purpose of the study, risks to participants, and guarantee of anonymity (Leedy & Ormrod, 2019; Simpson & Lord, 2015). By leveraging the G*Power 3.1 software, as recommended by Faulet al. (2009), the researcher performed an a priori power analysis for linear multiple regression that resulted in a minimum sample size of 119 participants for this study (see Appendix A). This a priori analysis used a medium effect size, $f = 0.15$, an alpha significance of .05, and power of 0.95 to quantify this sample size (Faul, et al., 2009). After determining the sample size, it was important to administer the survey tool to each of the participants and secure their responses in a confidential and protected manner before analyzing the data.

Data Collection and Analysis

Leedy and Ormrod (2019) advised that, when planning for data collection, it is important to determine what data are necessary, where to locate the data, how to obtain the data, whether the data are admissible, and how to interpret the data. The data-collection process for the present study necessitated leveraging a quantitative correlational approach to gauge the impact of one

variable upon another within the sample population of 122 professional accountants to determine whether there was an association between job insecurity, job embeddedness, moral disengagement, and ethical decision-making (Leedy & Ormrod, 2019). In quantitative research, it is necessary to identify certain variables before collecting data specific to those variables (Simpson & Lord, 2015). The present correlational study, by utilizing Likert scales, helped assess whether the variables were interrelated (Leedy & Ormrod, 2019). Other survey methods, such as interviewing, observing, and focus groups, lack statistical substance and deliver more qualitative information (Leedy & Ormrod, 2019). By using an online survey tool with proven scales, it was easier to collect and interpret large amounts of information within a condensed time frame. Similarly, surveys are an efficient and effective way to ask questions to participants, classify and code responses, summarize the responses, and draw conclusions based on statistical analysis (Leedy & Ormrod, 2019). Furthermore, to enhance internal and external validity, it is necessary to control the study procedures, maintain accurate data, and obtain a representative sample population (Leedy & Ormrod, 2019). Findings from other studies have shown that research validity and reliability will strengthen future empirical findings, establish statistical significance, and strengthen conclusions (Martin, Moualed, Paul, Ronan, Tysome, Donnelly, Axon, 2015; Simpson & Lord, 2015). Finally, Leedy and Ormrod (2019) argued that, without a truly representative sample of the population, it is impossible to generalize the results effectively.

When analyzing the data, it is necessary to perform descriptive statistics to more effectively understand the range and frequency, the measure of central tendency, and statistical ranges and standard deviations of the collected data (Leedy & Ormrod, 2019). In addition, the employment of a descriptive study allows for the researcher to provide solutions to problems by interpreting the collected data based on the strength of the relationships between the variables

(Leedy & Ormrod, 2019). A descriptive analysis in conjunction with graphical analysis strengthens the research analysis and effectively provides answers to both research questions and hypotheses (Jackson, 2016). In addition, for the present study, a correlational analysis helped identify any associations between variables and their effect upon the ethical decision-making of professional accountants (Leedy & Ormrod, 2019). Correlational research cannot prove a cause-and-effect relationship but can illuminate areas of association (Eddy, 2016). Finally, both linear and multiple regressions allowed for the analysis of the data to determine the extent of predictive influence between the variables of job insecurity, job embeddedness, moral disengagement, and ethical decision-making of professional accountants.

Assumptions

Leedy and Ormrod (2019) stated that “an assumption is a condition that is taken for granted, without which the research project would be pointless” (p. 4). In this study, a basic assumption was that it was not practical to sample every accountant within business to gain a complete population of responses. Therefore, a necessary assumption was that the sampling procedure would be representative of the total population of accountants within Georgia businesses. It was also necessary to assume that all participants in the study would answer questions in a truthful and accurate manner. Without the integrity of the respondents, the results would not be reliable.

Limitations

Leedy and Ormrod (2019) admitted that certain weaknesses or limitations exist in all research, leading to reasonable uncertainty related to the final conclusions. The limitations of the present study are discussed below. Field (2018) posited that limitations in quantitative studies include sample size; specifically, the smaller the sample, the less likely it is to reflect the entire

population. For instance, the sample could be large enough to promote diversity of perspective but not large enough to represent all of the perspectives from various accountants. In the present study, sampling only occurred in the state of Georgia, which means that the study population might not be representative of the entire accounting population of the United States.

Additionally, statistical correlation shows associations between variables rather than causation (Field, 2018). Correlational relationships can only provide so much understanding of why unethical behavior occurs but can illustrate which factors are related to unethical behavior.

Other participants, based on life experience or perspective, could withhold information or fail to answer all questions truthfully, thereby skewing the survey results. To prevent that from occurring, the use of random sampling allowed for normalization of the results to achieve a high level of representativeness (Field, 2018). Another potential limitation was the survey method because participants might have misunderstood or left blank questions, thereby negating its effectiveness. Likewise, when distributing the survey, recipients could have experienced technological or internet-access problems that prevented them from finishing a survey. Ultimately, limitations might potentially weaken the internal validity of the study; however, testing of samples can help support the reasonableness of the findings (Field, 2018).

Delimitations

Leedy and Ormrod (2019) stated that delimitations are the areas that the researcher will not cover when exploring the stated purpose of the study. The present study focused on accountants as opposed to other professions due to the fraud diamond theory, which suggests that not every employee is capable of committing fraud within an organization. Because the purpose of this study was to examine the extent to which job insecurity, job embeddedness, and moral disengagement affected the ethical behavior of accountants, these variables determined the scope

of the study and the associated research questions and hypotheses. An additional delimitation of the study was that the participants were limited to professional accountants in Georgia.

Ethical Assurances

When working with human subjects, ethical challenges always exist that could impact the conclusions of the study. The researcher must be cognizant of risky research behavior and develop safeguards to prevent harm to participants (Leedy & Ormrod, 2019). Before beginning the study, it was important to understand why the research is beneficial, what the purpose of the research is, ensure that the participants do not feel pressure, and respect all cultures (Creswell, 2018). Ethical protection falls within four major categories: “protection from harm, voluntary and informed participation, right to privacy, and honesty with professional colleagues” (Leedy & Ormrod, 2019, p. 111). The present study received approval from and adhered to the high ethical standards expected by NCU’s Institutional Review Board.

When considering protecting participants from harm, it was critical to never place participants into situations that include unnecessary mental or physical harm and to ensure that participants do not experience risks that would not be present in everyday life (Leedy & Ormrod, 2019). The participants should never feel deceived, exploited, or harmed; experience a power imbalance; or receive any benefits from the study (Creswell, 2018). Furthermore, when dealing with particularly vulnerable populations, it was critical to consider any special situations that could create additional risk (Leedy & Ormrod, 2019). It was necessary to treat all participants with courtesy and respect and to communicate any potential benefits to the participants through a debriefing session (Leedy & Ormrod, 2019). In considering voluntary and informed participation, it was important to inform participants of the nature of the study and ensure that they understand that they have the ability to withdraw from participation at any point in time

(Leedy & Ormrod, 2019). Coercion from their employers or managers should not occur— everything should be voluntary (Leedy & Ormrod, 2019). To ensure effective communication of this information, it is important to develop an informed consent form to provide all participants with a summary of the research project; the terms, risks, and conditions of the survey; and a guarantee of confidentiality and anonymity (Creswell, 2018).

When discussing the right to privacy, it was critical to ensure that no one will ever know or be able to uncover how a participant responded to a survey (Leedy & Ormrod, 2019). To ensure this, every participant received a number to identify their responses as opposed to using their name; all identifying information remains in offline storage (Leedy & Ormrod, 2019). Contact with the CPAs began through direct messaging of accountants via LinkedIn. By leveraging Survey Monkey to store the online survey responses, I was able to elect to not store IP addresses to ensure complete anonymity (SurveyMonkey, 2019). In addition, survey responses were encrypted to prevent unauthorized access of any sensitive information (SurveyMonkey, 2019). To ensure the privacy of the participants, all paper documents were scanned into a password-protected folder on an independent flash drive; all paper documents were then shredded with a personal cross-cut shredder. To further protect the privacy of these individuals, the flash drive will stay locked within a safe for 7 years. At the end of 7 years, the flash drive will be removed from the safe and destroyed. None of the information will be shared with anyone outside of my chair and Institutional Review Board committee. With respect to honesty among professional colleagues, it was necessary to expose any bias, beliefs, attitudes, or theoretical alignments that would affect the researcher's findings (Leedy & Ormrod, 2019). Doing this protects the research findings and prevents scientific fraud from occurring (Leedy & Ormrod, 2019). Furthermore, it was important to give proper credit to others for work they

perform and to present extant and current findings accurately to avoid misrepresenting information to future readers of the research (Leedy & Ormrod, 2019).

Summary

The key points in chapter 3 included the research and design methodology for this quantitative correlational research study. In addition, the population and sample were defined, and the materials and measurement instrument were described. Furthermore, chapter 3 established the operational definition of variables, along with the methods to collect and analyze the survey data. The study's assumptions, limitations, delimitations, and ethical assurance standards were also identified. Chapter 4 addresses the study's findings based on the research questions and hypotheses.

Chapter 4: Findings

The purpose of this quantitative, correlational study was to determine whether job insecurity, job embeddedness, and moral disengagement predicted the ethical behavior of the professional accountants by examining relationships among the factors known to influence ethical behavior. The research questions and the results were interpreted through the lens of the fraud diamond theory. According to the fraud diamond theory, not all employees are capable of committing fraud (Wolfe Hermanson, 2004); however, accountants maintain a key role within an organization that allows them the capability of fraud on many levels. Whether accountants commit fraud due to internal control fallacies (Rice et al., 2015) or other circumstances (Donelson et al., 2017; Lawrence & Kacmar, 2017; Triki et al., 2017), it is important to seek to better understand accountants' unethical behavior.

Multiple regression analysis was used to determine the strength of the relationships and the predictive value of the variables. The independent variables were job insecurity, job embeddedness, and moral disengagement. Within the independent variable of job embeddedness lies six subscales which were independently examined against UPB. These independent variable subscales are as follows: JE fit community, JE fit organization, JE links community, JE links, organization, JE sacrifice community, JE sacrifice organization. Lawrence and Kacmar (2017) found a relationship between job insecurity and unethical behavior among certain professionals who served clients, yet there was a lack of specific research specifically focused upon unethical behavior within the accounting profession. The target population was professional accountants from businesses within the state of Georgia. The research questions and hypotheses guided the analyses were:

RQ1: What is the extent of the relationship between job insecurity and unethical behavior in accountants?

H1_o There is not a positive relationship between job insecurity and unethical behavior for accountants.

H1_a There is a positive relationship between job insecurity and unethical behavior for accountants.

RQ2: What is the extent of the relationship between moral disengagement and unethical behavior in accountants?

H2_o There is not a positive relationship between moral disengagement and unethical behavior for accountants.

H2_a There is a positive relationship between moral disengagement and unethical behavior for accountants.

RQ3: What is the extent of the relationship between job embeddedness and unethical behavior in accountants?

H3_o There is not a positive relationship between job embeddedness and unethical behavior for accountants.

H3_a There is a positive relationship between job embeddedness and unethical behavior for accountants.

This chapter includes discussions about the data collection processes used to answer the research questions of the study and presents the findings from the data analysis by addressing whether the independent variables of job insecurity, job embeddedness, or moral disengagement impact the dependent variable of UPB for professional accountants. The control variables in this study were gender, age, ethnicity, CPA vs. non-CPA, and years of experience. Specifically, this

chapter provides the details on the reliability of scales used to measure the constructs of the study while assessing the assumptions of the main statistical method of regression analysis. In addition, this chapter provides descriptive statistics of the participant's profile, with the results from each research hypothesis, the evaluation of the findings, and the summary of the results.

Validity and Reliability of the Data

The researcher used G*Power 3.1 software (Faul, et al., 2009) to compute an a priori power analysis for linear multiple regression which resulted in a minimum sample size of 119 participants for this study (Appendix A). This a priori analysis included a medium effect size, $f = 0.15$, an alpha significance of 0.05, and power of 0.95 to quantify this sample size (Faul, et al., 2009). During the survey period, 122 part-time or full-time professional accountants stated that they understand the consent form and willingly agreed to participate in the survey.

Table 1

Reliability of Scales and Subscales

<u>Scale/Subscale</u>	<u>N of Items</u>	<u>Cronbach's Alpha</u>
JE Fit Community	5	.80
JE Fit Organization	9	.91
JE Links Community	6	.49
JE Links Organization	7	.63
JE Sacrifice Community	3	.40
JE Sacrifice Organization	10	.87
Job Insecurity	7	.78
Moral Disengagement	24	.88
Unethical Pro-Organizational Behavior	7	.80

The scales used in this study had acceptable levels of internal consistency or reliability. Cronbach's alpha values of .70 or above indicate acceptable internal consistency reliability. Based on this standard, acceptable reliability was found in relation to all subscales with the exception of JE Links Community, JE Links Organization, and JE Sacrifice Community (Table 1). Reliabilities associated with JE Links Community and JE Sacrifice Community are

considered less acceptable. The reliabilities associated with JE Fit Community and Job Insecurity were acceptable, while the reliabilities associated with JE Sacrifice Organization, Moral Disengagement, and Unethical Pro-Organizational Behavior were good, and with the reliability associated with JE Fit Organization being excellent.

Assumptions for the data. To test research hypotheses statistically, it is necessary to perform those tests under certain assumptions (Field, 2018). To support the statistical validity of the results in the regression analysis, these assumptions must be tested and validated (Field, 2018). This study uses linear regression as the primary method of data analysis for testing the study hypotheses. The assumptions for this kind of testing include determining whether there is a linear relationship between the predictors and the dependent variables (Field, 2018).

Furthermore, when testing the residuals, it is necessary to examine whether there are equal variances, homoscedasticity, and independent and normally distributed residuals (Field, 2018). In addition, it is necessary to test for low multicollinearity while examining whether dependent variables are continuous or normally distributed on an interval or ratio scale (Field, 2018). These assumptions and their validation will be explained in the sections below.

Linear relationships. For linear regression to be valid, there is an assumed linear relationship between the predictors and the dependent variables that must hold true (Field, 2018). To test the strength and significance of the linear relationship between variables, it was necessary to run bivariate correlation tests (Field, 2018). The validity of performing multiple regression analysis is supported by these tests. Therefore, it was necessary to examine the scatterplots and correlation coefficients from simple linear regression models to test the linearity assumption. To test the strength and significance of linear association between each predictor variable (job

insecurity, moral disengagement, and job embeddedness) and the dependent variable (unethical behavior), Pearson's correlation coefficients were used.

When examining the scatterplots between the predictor variables and the dependent variable, there was an evidence of a positive relationship between each. Table 2 presents the correlation results of association between each predictor and the dependent variable for each hypothesis. Job insecurity had no significant correlation with unethical behavior ($n = 122$, $r = 0.0935$, $p = .305$). Moral disengagement had a significant positive correlation with unethical behavior ($n = 122$, $r = 0.44$, $p = <.001$). With respect to the job embeddedness predictor, none of the six dimensions indicated a significant bivariate correlation ($p \geq .05$) with unethical behavior. However, due to the multidimensional nature of the predictor variable of job embeddedness, it was necessary to explore the linearity of job embeddedness at the subscale level. Therefore, multiple regression was used with each dimension of job embeddedness as the predictor variable and unethical behavior as the dependent variable.

The study uses control variables of age, gender, race, whether the respondent is CPA or not and experience in years of CPA certification. To further understand the association of the control variables to the dependent variable of unethical behavior, it was necessary to use multiple regression to examine any potential correlation that might exist. Gender, whether the respondent is CPA certified or not, each category of race and experience of CPA were binary coded and correlation analyses were performed to check whether any of these should be included in the regression model as control variables. Age and gender reported significant correlation with unethical behavior ($n = 122$, $r = -0.189$, $p = .037$ for age and $n = 122$, $r = -0.197$, $p = .029$ for gender). None of the binary coded categories of race the CPA status of the respondent, or range of experience in years of CPA certification had significant bivariate correlation with unethical

behavior ($n = 122$, $p = >.05$). Because of this, it was important to use the control variables of gender and age during regression analysis to test each individual hypothesis. Two models (simple linear and multiple linear regression with control variables) will be compared using the PRESS statistic. The appropriate model form will be chosen to interpret the results and draw inference and conclusions about the research hypothesis.

Table 2

Pearson's Correlation of Predictors with Unethical Behavior Construct

Variable	n	r	p
Job insecurity	122	0.094	.305
Moral disengagement	122	0.443	<.001
Job embeddedness (JE)	122		
JE fit community	122	0.004	.964
JE fit organization	122	0.017	.854
JE links community	122	-0.007	.940
JE links organization	122	0.072	.434
JE sacrifice community	122	-0.121	.185
JE sacrifice organization	122	-0.157	.085

Multicollinearity. Multicollinearity occurs when more than one variable in the regression model is “very closely linearly related” (Field, 2018, p. 746). When multicollinearity becomes severe enough, the regression model induces inflation of standard error of the estimators of the model parameters (Field, 2018). This situation can lead the researcher to potentially fail to reject the hypothesis associated with significance of the effect of the predictors.

Essentially, the researcher will be unable to reliably estimate the effect of each predictor variable due to the high correlation of the predictors (Field, 2018).

When Pearson correlation coefficients (between pairs of predictor variables) are greater than $\pm.9$, this is indicative of the presence of severe multicollinearity (Field, 2018).

Table 3

Variance Inflation Factor of Predictors in Regression Models

Hypothesis	Predictor or control variable	VIF
1	Job insecurity	1.059
	Age	1.034
	Gender	1.024
2	Moral disengagement	1.126
	Age	1.115
	Gender	1.018
3	Job embeddedness	
	JE fit community	1.532
	JE fit organization	2.420
	JE links community	1.280
	JE links organization	1.705
	JE sacrifice community	2.044
	JE sacrifice organization	2.485
	Age	1.412
	Gender	1.196

Despite this measurement, there are other measures that are more definitive in detecting multicollinearity besides the Pearson correlation coefficient. Another tool for detecting multicollinearity is the variable inflation factor (VIF) (Field, 2018). The VIF measures the inflation of the standard error of the model estimators compared with the case of predictor

variables being perfectly independent of each other (Field, 2018). Severe multicollinearity exists when VIF values are 10 or greater; however, it is necessary to consider any Pearson correlation coefficients when VIF values range between 6 and 10 (Field, 2018). This indicates that when approaching established VIF benchmarks, it may be necessary to examine the relationship between predictor variables with more complex analysis.

Table 3 presents the VIF values of the predictors included for testing of each study hypothesis. None of the VIF values of the predictors in the three study hypotheses were greater than 2.5, indicating that there is no severe multicollinearity in any of the regression models. Though some pairwise correlations between the predictor variables were statistically significant, they were considerably less than the threshold value of 0.90. These results clearly provide evidence that there is no problem of severe multicollinearity.

Homoscedasticity. Homoscedasticity refers to constant error variance (Field, 2018). In linear regression, the homoscedasticity assumption indicates that the error distribution of residuals is the same across the range of predictor variables (Field, 2018). Because of this, it was necessary to use a scatterplot of standardized residuals and predicted values to assess the equality of error variance assumption. When analyzing the scatterplot, it is important for the points to be random, equally spaced so as not to reveal a pattern such as cone-shaped (Field, 2018). Essentially, it is important for the distribution of standardized residuals to appear constant relative to a horizontal “zero line” if plotted versus the predicted values of the dependent variable (Field, 2018). When examining the scatterplots for each of the three regression models, the standardized residuals did not reveal a pattern and appeared relatively equally dispersed around the zero line across the range of predictors. To further test these visual inspections of homoscedasticity, it was important to run a formal test of homoscedasticity such as the Spearman

rank test (Field, 2018). When ranking these correlations, it is important to realize that when the rank correlation test shows a significant result ($p < .05$), this result indicates violation of homoscedasticity assumption.

For the first hypothesis with job insecurity predictor, the p value associated with Spearman's rank correlation test was $p = .685$. The corresponding p values for hypotheses two and three were $p = .005$ and $p = .001$, respectively. These results indicate that the constant error variance assumption is satisfied for testing of hypothesis H1. However, the Spearman rank test revealed that the constant error variance assumption was not satisfied for the regression model testing hypotheses H2 or H3. Therefore, an appropriate adjustment, like using robust standard errors or transformation of the dependent variable must be employed to adjust for the violation of the homoscedasticity assumption (Field, 2018). With respect to testing hypotheses H2 and H3, the remedied regression analysis results did not indicate any change in the direction or significance of the model effects originally reported with default standard errors. Because of this, the results of regression analysis for testing H2 and H3 can be considered valid. In terms of hypotheses H1, the homoscedasticity assumption is satisfied.

Independence of error terms. To test for independence, it was necessary to use the Durbin – Watson's (DW) test based on the DW statistic to test the null hypothesis for independent error terms (Field, 2018). If these error terms are violated, it could potentially lead to a biased and mis-specified model (Field, 2018). For the independence of error terms to be satisfied, DW test must result in non-significant results (Field, 2018). Under the null hypothesis of independence of error term, DW test statistic takes a value of 2.0 (Field, 2018). Because of this, a DW statistic close to 2.0 can be considered as a satisfactory evidence for independent of error term. Field (2018) suggested a range of DW statistic between 1.5 to 2.5 for reasonably

satisfactory evidence for error term independence. Results of the DW test for each of the three regression models revealed DW test statistic values between 1.5 and 2.5 (DW = 2.21 for job insecurity, DW = 1.989 for moral disengagement and DW = 2.237 for job embeddedness), indicating satisfactory evidence for independence of error term. Therefore, the independence of error term assumption is satisfied.

Normality of residuals. In addition, it was important to test for the normality of residuals. To do so, it was important to leverage three different methods: visual inspection of normal probability-probability (P-P) plots, histograms of the distributions of residuals, and the Kolmogorov-Smirnov (KS) goodness of fit test. For residuals to be considered normal, the KS test must report non-significant results ($p \geq .05$) (Field, 2018). For all three regression models, the histogram of standardized residuals appeared approximately symmetric and bell shaped. In addition, the normal P-P plot supported a similar conclusion in that the observed percentiles of the distribution of standardized residuals closely followed the theoretically fitted percentile value indicated by the diagonal line. Overall, the visual inspection of both the histogram and the normal P – P plot indicated that the distribution of the residuals is approximately normal. However, the result of the KS test had a $p \leq .001$ for job insecurity, $p = .144$ for moral disengagement and $p \leq .001$ for job embeddedness. This suggests that the KS test results indicate normality for testing the effect of moral disengagement but not for job insecurity and job embeddedness. A test for normality of the residuals is a function of the sample size (Field 2018). For relatively small sample sizes, the test for normality is highly sensitive (Field, 2018). Because of this, it is difficult to get perfectly normally distributed residuals, especially for small sized samples (Field, 2018). Therefore, despite the KS test indicating a departure from normality

for some models, based on the histogram and normal P – P plot, the distribution of residuals can be considered approximately normal.

Outliers, and influential observations. Outliers and influential observations were examined using standardized residuals. When examining these outliers, it is important to note high leverage points (outliers with a dependence on extreme predictor values) may have an adverse effect on results as they can skew or bias the data (Field, 2018). However, there are times when these outliers may be high leverage and influential (Field, 2018). To ensure that these points did not adversely affect the regression model results, the influential data points were diagnosed with Cook’s measure of distance variable (D) and outliers were detected using studentized residuals and studentized deleted residuals. If found, any outlier or influential observations were excluded, and the regression model was fitted and tested again.

Continuous dependent variables. When testing variables, it is important to know that the regression analysis assumes that the dependent variable is continuous, or at least measured on an interval scale (Field, 2018). The dependent variable in this study (unethical behavior) is measured using a Likert scale. Since Likert scales are interval scales, this indicates that the continuous dependent variable assumption is satisfied (Field, 2018).

Results

Profile of respondents. All 122 respondents included in this dataset stated that they currently work full-time or part-time as an accountant in the state of Georgia. All respondents were between the ages of 18 to 65 years of age, had at least 12 months of work experience as an accountant, and stated that they understand the consent form and willingly agreed to participate in the survey. Table 4 reports the frequencies associated with the measures of interest included in this study, which were all categorical. First, slightly over 62% of respondents were CPAs,

while close to 38% were not. Regarding gender, slightly over 48% of respondents were male, with close to 52% female. With respect to age, slightly over 4% of respondents were between the ages of 18 and 24, with 41% between the ages of 25 and 34. Next, 27% of respondents were between the ages of 35 and 44, while 18% were between the ages of 45 and 54. Finally, close to 10% were between the ages of 55 and 64. With respect to ethnicity, close to 83% of respondents were white or Caucasian, with close to 10% black or African American. Next, close to 2% were Hispanic or Latino, with close to 2% Asian or Asian American. Finally, slightly over 4% of respondents were of another race.

The remaining measures here related to the number of years spent working as an accountant and the number of years spent working as a CPA. Regarding the number of years spent working as an accountant, slightly over 30% worked for between one and five years, with 23% having worked for between six and 10 years. Next, close to 15% of respondents worked as an accountant for between 11 and 15 years, and with close to 10% working for between 16 and 20 years. Next, 9% worked for between 21 and 25 years, and with close to 14% having worked for more than 25 years. Finally, slightly over 30% of respondents have worked as a CPA for between one and five years, with slightly over 17% having worked as a CPA for between six and 10 years. Next, close to 3% have worked as a CPA for between 11 and 15 years, and with close to 5% having worked for between 16 and 20 years. Next, close to 3% stated they worked as a CPA for between 21 and 25 years, with close to 5% having worked as a CPA for more than 25 years. Finally, close to 38% replied with “Not Applicable” in response to this question.

Table 4

Descriptive Statistics: Frequencies: Demographic and Other Initial Questions

<u>Measure</u>	<u>N</u>	<u>%</u>
<i>Do you have your CPA?</i>		
Yes	76	62.3%
No	46	37.7%
<i>Gender</i>		
Male	59	48.4%
Female	63	51.6%
<i>Age</i>		
18-24	5	4.1%
25-34	50	41.0%
35-44	33	27.0%
45-54	22	18.0%
55-64	12	9.8%
<i>Ethnicity</i>		
White or Caucasian	101	82.8%
Black or African American	12	9.8%
Hispanic or Latino	2	1.6%
Asian or Asian American	2	1.6%
Other	5	4.1%
<i>How long have you worked as an Accountant?</i>		
1 to 5 Years	37	30.3%
6 to 10 Years	28	23.0%
11 to 15 Years	18	14.8%
16 to 20 Years	12	9.8%
21 to 25 Years	11	9.0%
More than 25 Years	17	13.9%
<i>How long have you been a CPA?</i>		
1 to 5 Years	37	30.3%
6 to 10 Years	21	17.2%
11 to 15 Years	3	2.5%
16 to 20 Years	6	4.9%
21 to 25 Years	3	2.5%
More than 25 Years	6	4.9%
NA	46	37.7%

Descriptive Statistics of Study Scales. The standard deviation, range, and minimum and maximum scores calculated and reported as measures of variability (Field, 2018). These results are presented in Table 5, which shows large variations in means, while standard deviations were fairly consistent, and with substantial variations also indicated in the ranges calculated along with the minimum and maximum values reported. Regarding the means, the highest means were found in relation to JE fit community, JE fit organization, JE sacrifice community, and JE sacrifice organization, with more moderate means found in relation to JE links community, JE links organization, and job insecurity, and with the lowest means found with regard to moral disengagement and unethical pro-organizational behavior. When interpreting the means, it makes sense that the means would be higher for JE fit community, JE fit organization, JE sacrifice community, and JE sacrifice organization as this indicates that people generally enjoy their community and their organization and that they would tend to want to not leave either because of the benefits provided.

Table 5

Descriptive Statistics: Frequencies: Scales and Subscales

<u>Statistics</u>	<u>Mean (SD)</u>	<u>Range</u>	<u>Minimum</u>	<u>Maximum</u>
JE Fit Community	4.1 (0.6)	2.6	2.4	5.0
JE Fit Organization	4.0 (0.7)	3.2	1.8	5.0
JE Links Community	2.3 (0.6)	2.7	1.0	3.7
JE Links Organization	2.3 (0.7)	3.3	1.3	4.6
JE Sacrifice Community	3.9 (0.6)	2.7	2.3	5.0
JE Sacrifice Organization	3.6 (0.7)	3.1	1.9	5.0
Job Insecurity	2.1 (0.6)	2.9	1.0	3.9
Moral Disengagement	1.6 (0.4)	1.7	1.0	2.7
Unethical P.O. Behavior	1.6 (0.5)	2.1	1.0	3.1

Note: SD = standard deviation.

Research question 1. The first question was: what is the extent of the relationship between job insecurity and unethical behavior in accountants? One hypothesis was formulated to test this relationship. The regression model associated with this hypothesis leveraged linear

regression to detect relationships between these variables. After satisfying the assumptions, reviewing the residuals and the outliers, the model fit could be tested further. The first regression model tested the relationship of job insecurity on unethical behavior.

Hypothesis 1. There was a positive correlation displayed between the scatterplot of job insecurity and unethical behavior (see Figure 2). However, the results of Pearson's correlation test indicated no significant correlation between unethical behavior and job insecurity of accountants ($n = 122$, $r = 0.0937$, $p = .305$). This implies that there is no significant pairwise association between unethical behavior and job insecurity. Since this assessment was done only as a pairwise, further exploration of the association between unethical behavior and job insecurity was attempted by performing two separate linear regression analysis models. First, with only job insecurity as the predictor, and then secondly by including age and race in the model.

Results of the simple regression of job insecurity on unethical behavior gave the fitted model as Unethical behavior score = $1.200 + 0.126$ job insecurity (Table 6). The estimate of the quantified effect of job insecurity was $b = 0.126$ which indicates that there is a positive association between unethical behavior and job insecurity. Furthermore, an increase of 1 point on job insecurity score is expected to be associated with an average increase of 0.126 points on unethical behavior score. The R squared value of the model was 0.00877. This indicates that job insecurity accounts for 0.877% of the variance in unethical behavior score. Results of the ANOVA test indicated that the overall model is not statistically significant ($F(1, 120) = 1.062$, $p = .305$). These results demonstrate that the effect of job insecurity on unethical behavior is small and statistically not significant.

Regression analysis was repeated by including job insecurity and the control variables of age and gender. Control variables of race, CPA qualification status of the respondent, and years of experience as a CPA qualified accountant were not included in the model as they indicated no significant bivariate correlation with unethical behavior. The fitted model was Unethical behavior score = $2.158 + 0.0247 \text{ Job insecurity} - 0.180 \text{ Gender}_{(\text{reference} = \text{male})} - 0.091 \text{ age} - 0.138 \text{ race}$. The estimated quantified effect of job insecurity on unethical behavior, adjusting for the effect of age and gender, is $b = 0.0247$. This implies that adjusting for age, and gender, unethical behavior and job insecurity are positively associated, and a one-point increase in job insecurity score is expected to be associated with an average increase of 0.0247 points in unethical behavior score. The R squared was 0.108; indicating that job insecurity, age, gender and race together account for 10.8% of the total variance in unethical behavior. Results of the ANOVA test indicated an overall statistically significant model ($p = .009$). However, the effect of job insecurity on unethical behavior was statistically not significant ($b = 0.0247$, $t(117) = 0.204$, $p = .839$). This indicates that even after adjusting for age, gender and race of the respondents, there is no significant effect of job insecurity on unethical behavior.

Outliers and influential observations were identified using Cook's D measure and the regression model was fitted and tested again. However, it was found that job insecurity has no significant effect on unethical behavior ($p \geq .05$). These results are valid as all the assumptions of the regression analysis were satisfied (explained in assumptions section of this chapter). Therefore, it is concluded that unethical behavior has no significant relationship with job insecurity. Hypothesis 1 is not supported.

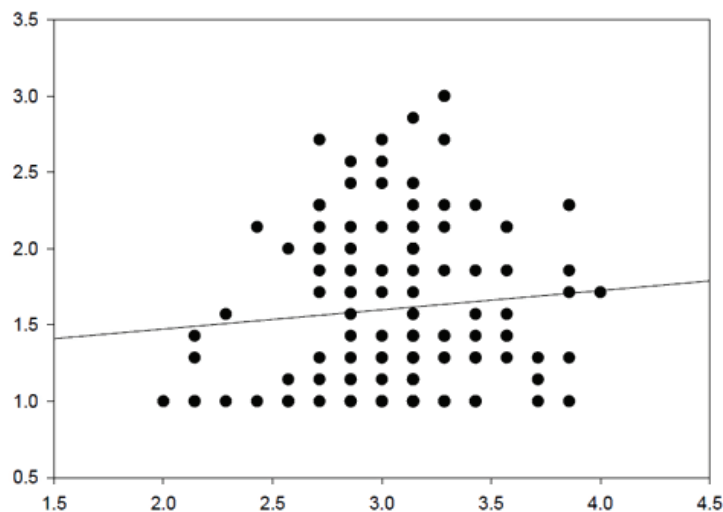


Figure 2. Scatterplot of Unethical Behavior and Job Insecurity
Note: X axis: Job insecurity score; Y axis: Unethical behavior score

Table 6

Testing the Effect of Job Insecurity on Unethical Behavior

Parameters	Constant	Job insecurity	Age	Gender
β	1.22	0.126		
t (122)	3.205**	1.031		
β	2.158	0.025	-0.091	-0.18
t (122)	4.665**	0.204	-2.011	-1.87

Upper panel: simple linear model with only job insecurity predictor

Lower panel: multiple linear regression with job insecurity, age and gender as predictors.

*significant at .05 level, **significant at .01 level

Research question 2. The second question was: what is the extent of the relationship between moral disengagement and unethical behavior in accountants? One hypothesis was formulated to test this relationship. The regression model associated with this hypothesis leveraged linear regression to detect relationships between these variables. After satisfying the assumptions, reviewing the residuals and the outliers, the model fit could be tested further. The second regression model tested the relationship of moral disengagement on unethical behavior.

Hypothesis 2. A scatter plot of the moral disengagement and unethical behavior revealed a possible positive relationship between moral disengagement and unethical behavior for accountants (see Figure 3). Additionally, the results of the Pearson's correlation test indicated a significant positive correlation between moral disengagement and unethical behavior ($n = 122$, $r = 0.443$, $p \leq .001$). This implies that there is a significant pairwise association between moral disengagement and unethical behavior.

Results of simple regression of moral disengagement on unethical behavior gave the estimated model as: Unethical behavior score = $0.55 + 0.64$ moral disengagement (Table 7). The estimate of the quantified effect of moral disengagement $b = 0.64$. This indicates that there is a positive association between moral disengagement and unethical behavior. Furthermore, it shows that an increase of 1 point in moral disengagement score is expected to be associated with an average increase of 0.64 units in unethical behavior score. The R squared value was 0.197, which means that moral disengagement accounts for 19.7% of the variance in unethical behavior score. Results of the ANOVA test indicated that the overall model is statistically significant ($F(1, 120) = 29.369$, $p \leq .001$). This indicates that there is a significant relationship between moral disengagement and unethical behavior, which was also confirmed by the results of the t test which tested the significance of the estimated parameter for unethical behavior ($b = 0.644$, $t(120) = 5.419$, $p \leq .001$). These results indicated that the association of unethical behavior with moral disengagement is positive and statistically significant.

Regression analysis was repeated by including the control variables; age and gender. Control variables of race, CPA qualification status of the respondent, and years of experience as a CPA qualified accountant were not included in the model as they had no significant bivariate correlation with unethical behavior. The fitted model was: Unethical behavior score = $0.928 +$

0.594 moral disengagement - 0.06 Gender (reference = male) - 0.068 age (Table 7). The quantified effect of moral disengagement on unethical behavior, adjusting for the effect of age and gender, was $b = 0.594$. This implies that, adjusting for age, and gender, unethical behavior and moral disengagement are positively associated. A one-point increase in moral disengagement score is associated with an average increase of 0.594 units in unethical behavior score. The R squared value of the model with the control variables was 0.218. This indicates that age, gender and moral disengagement together accounted for 21.8% of the variance in unethical behavior. The overall model was significant ($F(3, 118) = 10.935, p \leq .001$). Furthermore, the effect of moral disengagement on unethical behavior was statistically significant ($b = 0.594, t(118) = 4.733, p \leq .001$). This indicates that adjusting for age and gender, there is a significant positive effect of moral disengagement on unethical behavior.

Outlier and influential observations were identified using Studentized residual, Studentized deleted residual, and Cook's D measures. None of these measures indicated a presence of influential observations. However, based on the studentized residual and studentized deleted residual measures, six observations were reported as potential outliers. These observations were excluded from the analysis and the regression model was tested again. Results from the new model, excluding outlier observations, indicated that the effect of moral disengagement on unethical behavior was still significant. Therefore, it is concluded that, moral disengagement has significant positive relationship with unethical behavior. Hypothesis 2 is supported.

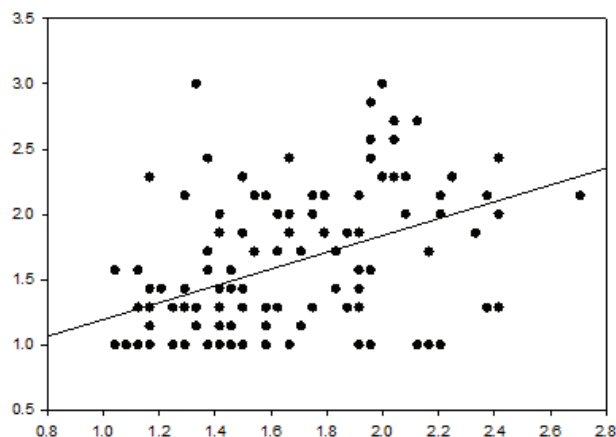


Figure 3. Scatterlot of Unethical Behavior and Moral Disengagement
Note: X axis: Moral disengagement score; Y axis: Unethical behavior score

Table 7

Testing the Effect of Moral Disengagement on Unethical Behavior

Parameters	Constant	Moral disengagement	Age	Gender
β	0.551	0.644		
t (122)	2.752**	5.419		
β	0.928	0.594	-0.068	-0.060
t (122)	3.169**	4.733**	-1.625	-0.645

Upper panel: simple linear model with only moral disengagement predictor

Lower panel: multiple linear regression with moral disengagement, age and gender as predictors.

*significant at .05 level, **significant at .01 level

Research question 3. The third question was: what is the extent of the relationship between job embeddedness and unethical behavior in accountants? One hypothesis was formulated to test this relationship. The regression model associated with this hypothesis leveraged linear regression to detect relationships between these variables. After satisfying the assumptions, reviewing the residuals and the outliers, the model fit could be tested further. The third regression model tested the relationship of job embeddedness on unethical behavior.

Hypothesis 3. A scatter plot of each of the six subscales of job embeddedness and unethical behavior indicated positive correlations for two dimensions of the job embeddedness scale. Results of the regression analysis of each of the six dimensions of job embeddedness on unethical behavior gave the estimated model as: Unethical behavior score = 1.673 - 0.303 JE Sacrifice organization - 0.198 JE Sacrifice community + 0.165 JE links organization + 0.00165 JE links community + 0.284 JE fit organization + 0.0856 JE fit community (Table 8). The R squared value was 0.111, indicating that the six dimensions of job embeddedness accounted for 11.1% of the variance in the unethical behavior construct. The results of the ANOVA test indicated significance of the overall model ($F(6, 115) = 2.383, p = .033$). Specifically, JE sacrifice organization, JE links organization, and JE fit organization dimensions of the job embeddedness construct had significant effects on unethical behavior ($p \leq .05$); whereas the effects of the other three dimensions were not significant ($p \geq .05$). The estimated slope for JE sacrifice organization was $b = -0.303$, indicating a negative association with unethical behavior. Specifically, an increase of one unit in JE sacrifice organization score was associated with an average decrease of 0.303 units in unethical behavior. The estimated slope for JE links organization was $b = 0.165$, indicating a positive association with unethical behavior. Specifically, an increase of one unit in JE links organization score was associated with an average increase of 0.165 units in unethical behavior. The estimated slope coefficient for JE fit organization was 0.284, indicating a positive association with unethical behavior. This implies that a one-point increase in JE fit community score is expected to be associated with an average increase of 0.284 units in unethical behavior score. These results indicate that the effect of job embeddedness on unethical behavior is significant for three dimensions of job embeddedness organization and not significant for the three dimensions of job embeddedness community.

Therefore, the conclusion is drawn that the effect of job embeddedness on unethical behavior is significant for three dimensions; organization sacrifice, links organization and fit organization sacrifice. Overall, hypothesis 3, which is formulated on the overall relationship of job embeddedness, is supported by empirical evidence.

The regression analysis was repeated by including the control variable of age and gender, which had significant correlation with unethical behavior. Control variables of race, CPA qualification status of the respondent, and years of experience as a CPA qualified accountant were not included in the model, as they had no significant bivariate correlation with unethical behavior. The estimated model was: Unethical behavior score = 2.520 - 0.326 JE Sacrifice organization - 0.167 JE Sacrifice community + 0.276 JE links organization - 0.0187 JE links community + 0.216 JE fit organization + 0.0619 JE fit community - 0.154 age - 0.148 gender (ref = male). The R squared value of this model was 0.204, indicating that the six dimensions of JE, along with age and gender, accounted for 20.4% of the variance in the unethical behavior construct. Results of the ANOVA test indicated significance of the overall model ($F(8, 113) = 3.623, p \leq .001$). Specifically, JE sacrifice organization, JE links organization and JE fit organization dimensions of the job embeddedness construct indicated a significant effect on unethical behavior ($p \leq .05$); whereas the effects of the other three dimensions were not significant ($p \geq .05$). The estimated slope for JE sacrifice organization was $b = -0.326$, indicating a negative association with unethical behavior. This estimate also indicates that an increase of one unit in JE sacrifice organization score was associated with an average decrease of 0.326 units in unethical behavior. Similarly, the estimated slope coefficient for JE links organization was 0.276, indicating a positive association with unethical behavior. A one-point increase in JE links organization is expected to be associated with an average increase of 0.276 units in unethical

behavior score. The estimated slope coefficient for JE fit organization was 0.216, indicating a positive association with unethical behavior. A one-point increase in JE fit organization is expected to be associated with an average increase of 0.216 units in unethical behavior score.

Comparison of results of the model, both with and without control variables, indicates a difference in the significance of the predictor variables after controlling for age and gender. The PRESS statistic for the model without control variables was 35.526 while the corresponding value for the model including control variables was 32.862. This indicates that the model including the control variables of age and gender is more appropriate. Therefore, the conclusion is drawn that the effect of job embeddedness on unethical behavior is significant for three dimensions; organization sacrifice, links organization and fit organization sacrifice. Overall, hypothesis 3, which is formulated on the overall relationship of job embeddedness, is supported by empirical evidence.

Outlier and influential observations were identified using the Studentized residual, Studentized deleted residual, and Cook's D measures. None of these measures indicated the presence of influential observations. However, based on studentized residual and studentized deleted residual measures, five observations were identified as potential outliers. These observations were excluded from the analysis and the regression model was tested again. The results from the new model excluding outlier observations indicated significance of the effect of organization sacrifice, links organization and fit organization. Therefore, it is concluded that job embeddedness has a significant relationship with unethical behavior. Hypothesis 3 is supported.

Table 8
Testing the Effect of Job Embeddedness on Unethical Behavior

Parameters	Constant	JE(1)	JE (2)	JE (3)	JE (4)	JE (5)	JE (6)	Age	Gender
β	1.673	-0.303	-0.198	0.165	0.0016	0.284	0.0856		
t (122)	4.222**	-2.980**	-1.682	2.025	0.019	2.726**	0.864		
β	2.520	-0.326	-0.167	0.276	-0.019	0.216	0.062	-0.154	-0.148
t (122)	5.581**	-3.355**	-1.468	3.060**	-0.221	2.128*	0.641	-3.04**	-1.487

Upper panel: simple linear model with only job embeddedness predictor

Lower panel: multiple linear regression with job embeddedness, age and gender as predictors.

*significant at .05 level, **significant at .01 level

JE (1) = JE sacrifice organization, JE (2) = JE sacrifice community, JE (3) = JE links organization, JE (4) = JE links community, JE (5) = JE fit organization, JE (6) = JE fit community.

Evaluation of the Findings

This correlational study examined three main variables; job insecurity, moral disengagement and job embeddedness in order to assess predictors of unethical behavior in accountants. The results from the regression analysis suggest that both moral disengagement and job embeddedness are significantly associated with unethical behavior. However, there was no significant relationship found with job insecurity. To better understand, it is important to interpret these results with respect to an existing theoretical framework: the fraud diamond theory (Wolfe & Hermanson, 2004). The fraud diamond theory was the frame of reference for this correlational research study and helps to identify central factors for why accounting fraud is committed.

The results of hypothesis 1 indicate that there was no significant relationship between job insecurity and unethical behavior for accountants. However, job insecurity is considered a form of pressure (Lawrence & Kacmar, 2017), and the fraud diamond theory posits that “pressure” is a relevant factor contributing to fraud (Wolfe & Hermanson, 2004). Furthermore, it was suggested by Lawrence & Kacmar (2017) that job insecurity may create emotionally exhausting pressure for workers which lowers their ability to behave ethically. Ultimately, Lawrence & Kacmar

(2017) demonstrated that job insecurity can impact the unethical behavior of accountants, engineers, and architects. The problem is that by examining these three professions simultaneously, it became impossible to draw conclusions about accountants alone. The results of hypothesis 1 in this study indicate that when accountants are tested alone, job insecurity does not, in fact, influence morality. Therefore, this link was not supported by the results of the regression analysis. Because of this, it is possible that perhaps job insecurity should not be considered relevant as a “pressure” factor for accounting professionals. Lister’s (2007) research supported the idea that not everyone who feels pressure goes on to commit fraud. This lack of correlation between job insecurity (pressure) and unethical behavior (potential for fraud) from hypothesis 1 would support that premise. In addition, Wolfe and Hermanson (2004) also suggested that without the fourth criteria “capability,” an external factor such as pressure would not be enough to promote fraudulent activity. As mentioned earlier, the lack of a statistically significant relationship between job insecurity and unethical behavior supports this premise.

Conversely, in terms of hypothesis 2, the regression analysis revealed a significant positive relationship between moral disengagement and unethical behavior in accountants. Rationalization is identified as a key contributing factor to fraud in the fraud diamond theory (Wolfe & Hermanson, 2004). Moral disengagement occurs when a person rationalizes and disassociates themselves away from their own immoral choices; thereby, allowing for the individual to behave in an unethical manner (Moore, 2015). The significant positive relationship demonstrated in the regression analysis for hypothesis 2 suggests that moral disengagement (rationalization) is indeed connected to unethical behavior in accountants. Furthermore, an accountant must be “capable” of engaging in moral disengagement for the likelihood of unethical behavior to occur. Boyle et al. (2015) suggests that within the fraud diamond theory, the

fraudster must exhibit the capability necessary to take advantage of an opportunity for the increased likelihood that a fraud will occur. Boyle et al. (2015) also found that external factors were less linked to capability in the fraud diamond theory than were a fraudster's individual characteristics. This is consistent with the results of the regression analysis. In the end, it appears that moral disengagement is a personal characteristic. However, when that personal characteristic is present in accountants, it is significantly linked to unethical behavior. The understanding of the association between moral disengagement and unethical behavior could be a central component in preventing unethical behavior and fraud in accounting.

Finally, Hypothesis 3 examined the effect of job embeddedness on moral decision making. During the regression, it was found that there was a significant positive relationship between job embeddedness and unethical behavior in accountants. Lee et al. (2019) found within the fraud diamond theory that when an employee has high job embeddedness (organizational identification), they will disengage morally at a higher rate. This is consistent with the results of the regression analysis. Likewise, Lawrence and Kacmar (2017) demonstrated that highly embedded employees were more likely to commit fraud within their organization than individuals who were highly adaptable when faced with job insecurity. Similarly, this result was echoed in the outcomes of this research, as job embeddedness (i.e. sacrifice organization, links organization, and fit organization) was significantly related to unethical behavior for these accounting professionals; however, the results of hypothesis 1 were not supported. Furthermore, Effelsberg et al. (2014) discovered that if an employee identifies closely to their organization, they are more willing to engage in UPB than someone who does not identify closely within their organization. In addition, Mitchell et al., (2001) found that a worker's organization and community were significant factors in reducing the intent of an

employee to leave their company; however, when it comes to professional accountants, this research uncovered that only the organizational factors for job embeddedness have a significant impact upon unethical behavior and community factors for job embeddedness were found to not have a significant impact upon unethical behavior. Because there is a significant correlation between sacrifice organization, links organization, fit organization, and unethical behavior suggests that these are indeed risk factors for unethical behavior in accountants. When examined holistically, the results of the hypotheses 1, hypothesis 2, and hypothesis 3 in this research study help to establish the connection between an individual's personal values, their environment, and their susceptibility to unethical behavior (Abdullahi et al., 2015).

Summary

The purpose of this quantitative, correlational study was to determine the extent to which job insecurity, job embeddedness, and moral disengagement affected the ethical behavior of accountants by examining relationships between factors known to influence unethical behavior in the fraud diamond theory. The three predictor variables were job insecurity, moral disengagement, and job embeddedness. Linear regression was used to test the research hypotheses. Ultimately, the results of the regression analysis indicated that both moral disengagement and job embeddedness are significantly associated with unethical behavior in accountants. In relation to job embeddedness, significant association with unethical behavior was limited to its dimensions of sacrifice organization, links organization, and fit organization. With respect to the other dimensions of the job embeddedness construct, its association with unethical behavior was not significant. In addition, there was not a significant association with job insecurity and unethical behavior in accountants. In the end, the results of the statistical analysis of data supported hypothesis 2 and hypothesis 3 but not hypothesis 1.

Chapter 5: Implications, Recommendations, and Conclusions

The problem addressed in this study is whether it is possible to better understand whether the influences of job insecurity, job embeddedness, and moral disengagement affect the ethical decision-making of accountants in a business environment. (Jehn, & Scott, 2015; Kukreja & Gupta, 2016; Lawrence and Kacmar, 2007; Vladu, Amat, & Cuzdriorean, 2017). Due to the magnitude of annual fraud losses (ACFE, 2016) and the lack of consensus regarding the reasons for accounting fraud (Brown et al., 2017; Huber, 2017; Kukreja & Gupta, 2016; Lawrence and Kacmar, 2007; Ramamoorti & Epstein, 2016), it was necessary to explore unethical behavior from the perspective of the fraud diamond theory. The fraud diamond theory suggests that individuals might engage in fraudulent behavior if they feel pressure, perceive an opportunity, provide rationalization, and are capable of committing a fraudulent act (Wolfe & Hermanson, 2004). Furthermore, Lawrence and Kacmar (2007) discovered that job insecurity had a negative impact upon employees' ethical behavior; however, the study sampled engineers and architects in addition to accountants even though these individuals might not be capable of committing fraud within an organization. Because of this, the researcher used linear and multiple linear regression to determine if the predictor variables of job insecurity, moral disengagement, and job embeddedness could be used to predict the dependent variable of unethical behavior in professional accountants.

A quantitative, correlational research design was used to collect and analyze the data for the study. The survey population consisted of sampling 122 professional accountants in Georgia to understand the influences of job insecurity, job embeddedness, and moral disengagement upon accountants' ethical decision-making in a business environment. Because the survey consisted of professional accountants found solely within the state of Georgia, the ability to generalize this

sample outside of this particular demographic may pose some limitations which future research could help illuminate. As determined by an a priori power analysis for linear multiple regression, the sample for this study consisted of a minimum sample size of 119 participants. Despite the actual number of participants exceeding this number there could be bias in the results because of the small number of participants in the study which would reduce the generalizability of the results.

The collection of data was guided by the research principles described in the Belmont Report; however, before collection of the research data could occur, it was necessary for the researcher to obtain certification through the Collaborative Institutional training Initiative (2019) to ensure compliance of the rules of research with human subjects. Data collection began after receiving approval from Northcentral University's IRB committee. Survey Monkey was used to collect the data through an online anonymous survey. Before beginning the survey, participants were required to sign the informed consent form. Participation in the survey was voluntary as none of the participants received any benefits or incentives for their participation in the survey. Because this quantitative, correlational research study was nonexperimental, there was a minimized risk to the participants of this study. This chapter includes a discussion of the hypotheses, logical conclusions based on the research findings, determination as to whether these findings relate to the research problem and purpose, and whether there is a contribution to the existing body of knowledge. In addition, there will be recommendations for how to best apply this study and additional areas of future research to consider. Finally, a summary of significant areas in this research study will be concluded in this chapter.

Implications

Despite the growing magnitude of global corporate accounting fraud in business (ACFE, 2016; FBI, 2017; Gunz & Thorne, 2017; Kroll 2016), researchers do not fully understand how to reduce accounting fraud within organizations (Donelson et al., 2017; Lawrence & Kacmar, 2017; Triki et al., 2017). However, there is more awareness today regarding the role of accountants' ethical behavior in protecting investors and stakeholders (Kukreja & Gupta, 2016), establishing trust with stakeholders and management (Vladu et al., 2017), and promoting company reputation (Jehn & Scott, 2015). Despite these facts and similar to other professions, Cressey (1953) would suggest that accountants find themselves subject to pressures, opportunities, rationalizations that sometimes cloud their judgment in ethical matters. Notwithstanding these conditions, accountants are positioned uniquely within their jobs to have the capability (Wolfe and Hermanson, 2004) to commit a fraudulent act unlike many individuals in other professions. Within the context of the body of research regarding ethical behavior in business, there have been many studies suggesting links of individuals in other occupations behaving unethically to serve their own self-interest (Alexandra, Torres, Kovbasyuk, Addo, & Ferreira, 2017; Lawrence & Kacmar, 2017) and individuals willing to behave unethically to serve the interests of their own company (UPB) (Lawrence & Kacmar, 2017; Mahlendorf et al., 2018; Tian & Peterson, 2016; Umphress et al., 2010). Since there is some basic overlap between self-interested unethical behavior and UPB (Umphress et al., 2010), it was important to focus on UPB for the purposes of testing unethical behavior among accountants.

Within this context, Lawrence and Kacmar (2017) discovered that there was a significant link between job insecurity leading to emotional exhaustion to produce unethical behavior among professionals (engineers, architects, and accountants). Furthermore, Lawrence and

Kacmar (2017) used the same study population to determine that employees who were highly embedded within their company were more likely to commit unethical behavior than highly adaptable employees when they felt job insecurity. With respect to moral disengagement and accountants, there was little direct research regarding the unethical behavior for an accountant willing to morally disengage in their profession. The research discoveries presented in this study provide additional understanding in the role of job insecurity, moral disengagement, and job embeddedness and their direct association with the unethical behavior of a professional accountant. By providing empirical-based evidence regarding the independent variables (job insecurity, moral disengagement, job embeddedness) upon the dependent variable (unethical behavior), this quantitative correlational study contributes to the field of academic research by providing a deeper understanding of the existing literature gap that exists between these variables. This understanding could potentially be useful in the job screening of accountants prior to their hiring within an organization thereby reducing the risk of hiring individuals capable of committing fraud at a higher risk than their counterparts.

The results of this quantitative correlational study provide support for the fraud diamond model showing that accountants are capable of committing unethical behavior when they morally disengage or have high levels of job embeddedness within their organization while job insecurity was not found to be an individual predictor of unethical behavior within accountants. Since the fraud diamond model relies more on the perpetrator's individual characteristics needed to take advantage of an opportunity (Boyle et al., 2015), it is important to understand the outcomes of moral disengagement since Lokanan (2018) suggested that these factors were important to gain an understanding of unethical behavior. Additionally, Lokanan (2018) found that situational factors (i.e. job insecurity or job embeddedness) were important in understanding unethical

behaviors. Ultimately, the hypotheses below revealed that some of these assertions for unethical behavior were confirmed based on the results of the data received in this study while other assertions for unethical behavior did not hold true.

Hypothesis 1: There is not a positive relationship between job insecurity and unethical behavior for accountants. A linear regression analysis was used to develop a model to determine whether a significant relationship existed between job insecurity and unethical behavior in accountants. For this question, the null hypothesis was supported; therefore, the findings indicate that the presence of job insecurity does not predict a significant relationship with an accountant's ability to engage in unethical behavior. The results for hypothesis 1 indicated a lack of power and a smaller sample size to make a determination on whether job insecurity would have a significant relationship with the unethical behavior of accountants. Because of this, this finding remains open to interpretation. Other researchers such as Lawrence and Kacmar (2017) discovered that job insecurity can create emotional exhaustion leading towards unethical behavior in accountants, engineers, and architects. However, in this study, when accountants were examined alone, there was not a significant link between job insecurity and unethical behavior. This is consistent with Lister's (2007) research which supported the idea that not everyone who feels pressure commits fraud.

Due to a high degree of reliability, the measurement of the predictor variable of job insecurity occurred via the 7-item measure created by Hellgren et al. (1999). One aspect that was not measured in this study was whether job insecurity creates emotional exhaustion in accountants. If job insecurity in accountants did produce emotional exhaustion, then there may have been a link with unethical behavior in accountants as researched by Lawrence and Kacmar (2017). Because of this, it is possible that job insecurity could indirectly contribute towards

unethical behavior in accountants, but that was beyond the scope of how it was measured for this research study.

Hypothesis 2: There is not a positive relationship between moral disengagement and unethical behavior for accountants. A linear regression analysis was used to develop a model to determine whether a significant relationship existed between moral disengagement and unethical behavior in accountants. For this question, the null hypothesis was rejected; therefore, the findings indicate that the presence of moral disengagement does predict a significant relationship with an accountant's ability to engage in unethical behavior. Although moral disengagement was found to be a significant predictor of unethical behavior in accountants, the model predicted that approximately 20% of the variance in unethical behavior was due to the study's measure of moral disengagement. This means that moral disengagement can predict unethical behavior to a degree; however, it should not be the only factor to consider as to why accountants engage in unethical behavior. This percentage value may indicate that other reasons may influence the behavior of accountants to engage in unethical behavior either because they are more closely related to unethical behavior or there are better constructs to measure the results. Despite this fact, the 20% model variance was the largest percentage of explanation towards unethical behavior of any of the three predictor variables (job insecurity, moral disengagement, and job embeddedness) upon the unethical behavior of accountants.

This significant finding aligns itself directly with the fraud diamond model because of its rationalization and capability components (Wolfe & Hermanson, 2004). Moore (2015) indicated that moral disengagement occurs when a person rationalizes and dissociates themselves away from their own immoral choices to allow for unethical behavior to occur. In addition, Boyle et al., (2015) believes that capability must exist to take advantage of an unethical opportunity;

therefore, the accountant must be capable of engaging in moral disengagement for the fraud to occur. Furthermore, Boyle et al., (2015) believes that a perpetrator's individual characteristics are more important than any external factor presented. This aligns itself consistently with the findings in the regression analysis as job insecurity (external factor) did not significantly impact unethical behavior to the same degree that moral disengagement (internal characteristic) impacted unethical behavior among accountants. According to the results of this survey, when an accountant possesses the personal characteristic of moral disengagement, it is significantly linked to unethical behavior. This finding could prove pivotal in helping to understand and prevent fraudulent behavior from occurring in accounting.

Hypothesis 3: There is not a positive relationship between job embeddedness and unethical behavior for accountants. A linear regression analysis was used to develop a model to determine whether a significant relationship existed between job embeddedness and unethical behavior in accountants. For this question, the null hypothesis was rejected; therefore, the findings indicate that the presence of job embeddedness (at the organization level) does predict a significant relationship with an accountant's ability to engage in unethical behavior. However, the findings indicate that the presence of job embeddedness (at the community level) does not predict a significant relationship with an accountant's ability to engage in unethical behavior. Although job embeddedness was found to be a significant predictor of unethical behavior in accountants, the model predicted that approximately 11% of the variance in unethical behavior was due to the study's measure of job embeddedness. This means that job embeddedness can predict unethical behavior to a degree; however, it should not be the only factor to consider as to why accountants engage in unethical behavior. This percentage value may indicate that other reasons may influence the behavior of accountants to engage in unethical behavior either because

they are more closely related to unethical behavior or there are better constructs to measure the results.

In relation to the fraud diamond model, Lee et al., (2019) discovered that employees who had high job embeddedness (organizational identification) would tend to morally disengage at a higher rate than employees with low job embeddedness. Furthermore, Lawrence and Kacmar (2017) discovered highly embedded employees were more likely to engage in unethical behavior than employees who were highly adaptable when faced with the pressure of losing their job and Effelsberg (2014) found that the more closely an employee identifies with their organization, the more willing that employee is to engage in UPB. These results were consistent with the outcomes of the regression analysis related to job embeddedness (organizational level) being significantly related to unethical behavior in accountants; however, job embeddedness at the community level did not appear to have a significant impact upon an accountant's unethical behavior within the organization. Ultimately, it appears that the risk factors of job embeddedness for accountants related to unethical behavior are sacrifice organization, links organization, and fit organization.

Recommendations

This study examined the relationships between the predictor variables of job insecurity, moral disengagement, job embeddedness and their impact upon the dependent variable of unethical behavior. Due to the amount of fraud globally, these findings are meant to help identify potential traits within accountants that influence unethical behavior. Because of this, this section explores recommendations for practice and recommendations for future research.

Recommendations for practice. Despite the number of both qualitative and quantitative studies regarding unethical behavior among accountants, there was little in the literature that

specifically explored the impact of job insecurity, moral disengagement, and job embeddedness and their impacts upon unethical behavior with accountants. Lawrence and Kacmar (2017) provided the closest examination of the impact of job insecurity upon a worker's emotional exhaustion thereby linking it to unethical behavior. In addition, Lawrence and Kacmar (2017) found that there were two mitigating factors for how workers would deal with pressure from job insecurity and their emotionally drained state with those factors being workers who were highly adaptive or highly embedded within their job. Interestingly, the highly adaptable individuals were able to avoid unethical behavior despite the stress induced pressures from job insecurity while highly embedded individuals were further stressed from the pressures from job insecurity and more susceptible to unethical behavior (Lawrence and Kacmar, 2017). Despite these findings, the researchers from this study did not examine the impact of moral disengagement upon ethical behavior. The major problem with this study is that it did not specifically focus on the behavior of accountants but instead diluted the survey participants to include accountants, engineers, and architects. By doing this, it was impossible to draw conclusions specifically related to how an accountant would be impacted by the three predictor variables of job insecurity, moral disengagement, and job embeddedness.

The findings from hypothesis 1 revealed that job insecurity does not impact the ethical behavior of accountants when they are surveyed alone. Because of this, there is the likelihood that job insecurity is not a relevant "pressure" factor for accounting professional. Despite the fact that Ribeiro, Bosch, and Becker (2016) found that accountants experience pressure that can produce job turnover, it does not necessarily mean that this pressure on professional accountants will translate into unethical behavior as Lawrence and Kacmar (2017) suggested and Ghosh (2017) indicated all types of workers may consider. Since most professional accountants work in

pressure-filled environments (Ribeiro et al., 2016), it is important for accountants in industry to realize that job insecurity does not necessarily promote unethical behavior among accountants.

However, the findings from hypothesis 2 indicated that there is a statistically significant relationship between moral disengagement and unethical behavior among professional accountants. Wolfe and Hermanson (2004) discussed how “rationalization” impacts the ethical decision-making of individuals while recognizing that the individual must be “capable” of committing the fraudulent act. Boyle et al., (2015) indicated that an individual’s personal characteristics were a more important predictor of fraud than any external factors which may surround the individual. Because internal characteristics are so important to ethical behavior and moral disengagement can represent an internal characteristic of both rationalization and capability, it is extremely important for hiring managers of accountants to consider testing for moral disengagement during the hiring process. Because of the strong statistical link, this might be an extremely important personal characteristic to test for in any accounting firm since it could be instrumental in preventing future unethical behavior in accountants.

Likewise, the results from hypothesis 3 indicated that there is a statistically significant relationship between moral disengagement and unethical behavior among professional accountants. However, this statistically significant relationship related to only half of the variables of the job embeddedness survey. The job embeddedness subscales that were statistically significant to unethical behavior were sacrifice organization, links organization, fit organization. Interestingly, these variables were solely found related to the organization in which the accountant worked. The nonrelated variables were related to job embeddedness at the community level. This implies that an organizational environment has a much more significant impact upon unethical behavior for accountants than does the environment in which they live.

Consistent with the research of Lawrence and Kacmar (2017) is the fact that individuals that are more highly embedded within their organization will commit unethical behavior depending upon the level of pressure they face at their job. Likewise, Lee et al., (2019) found that individuals with high levels of job embeddedness would disengage morally at higher rates than those with low job embeddedness. For applicability in practice, it is important to recognize those individuals who are embedded deeply within the organization are more than likely established professionals within their jobs and may be impacted by the overall culture of the firm more than employees that are not highly embedded. These individuals may have been in their roles long and have more tenure than the normal employee (Dechawatanapaisal, 2018). Additionally, there was a statistically significant negative relationship between age as it related to impact of job embeddedness to unethical behavior. In other words, the older a person is, the less probability there will be that they will commit an unethical act. These two concepts of someone establishing job embeddedness and age appear to be contradictory in nature; however, a younger individual can be at a company for a longer period of time than an older individual. Essentially, the statistics would suggest that a younger, highly embedded employee would be at a statistically higher risk to commit unethical behavior than an older, highly embedded employee.

Recommendations for future research. During this study, a statistically significant correlation was established between the independent variables of moral disengagement and job embeddedness and the dependent variable of unethical behavior among professional accountants. Despite the independent variables providing a limited variance explanation of the impact on unethical behavior in accountants, they still provide statistical support for predicting the unethical behavior in accountants. This is important for businesses when they hire or evaluate current personnel as it may indicate that certain individuals are a higher fraud risk than others.

This kind of information could be helpful for both internal and external auditors during their testing and engagement.

In terms of future research, it would be interesting to revisit Lawrence and Kacmar's (2017) research study to determine whether engineers and architects were more affected by job insecurity than accountants were affected by job insecurity based on the results of this study. This could help explain whether accountants are able to handle pressure (i.e. job insecurity) better than other occupations or whether this was simply a difference in sample populations. Another limitation in this study relates to the generalizability of its results due to a sample population of accountants within the state of Georgia. Despite the sample of 122 being sufficient for this study, expanding this sample population could yield better geographic and demographic results thereby allowing for these results to be more generalizable to the overall population of professional accountants. Whether these results would hold true within a single organization or expand to another city or state remains to be seen and will be left open for future researchers to explore.

Unlike Lawrence and Kacmar (2017), a connection of job insecurity to emotional exhaustion was not explored. Neither were boundary conditions of job embeddedness or adaptability placed within this research model. Instead job insecurity and job embeddedness were used as direct predictors of unethical behavior for accounting professionals. Future research could explore whether there is a link between job insecurity and unethical behavior among accountants when emotional exhaustion is induced because of the job insecurity that is felt among the accounting professional. Likewise, whether unethical behavior in an accountant would be reduced if that person were an adaptable individual as opposed to an individual embedded within an organization could be explored in future research. In addition, there was a

significant difference between the job embeddedness categories of organization and community as it relates to the unethical behavior of accountants. Future research could explore why the organizational level of job embeddedness has a more significant impact upon unethical behavior for professional accountants than does the community level of job embeddedness.

Furthermore, despite the fact that there was significant statistical support for both moral disengagement and job embeddedness (organizational level) to produce unethical behavior in professional accountants, the use of a qualitative study to further examine these independent variables and their detailed impact to unethical behavior among accountants could be very useful for future research in testing these theories (Field, 2018). Qualitative research could potentially identify additional factors and influences that contribute to the unethical behavior in professional accountants that could be useful in preventing fraudulent behavior in the workplace. Likewise, it would be interesting for future research to test whether ethical education (at college or in the workplace) would help to curb moral disengagement in professional accountants.

Another limitation of the study is the population of accountants who were surveyed. Despite accountants having “capability” to commit a fraudulent act in a firm and the fact that not all employees are “capable” of committing a fraudulent act in a company, there exists the potential that there are other employees who are “capable” of committing a fraudulent act at a company but are not accountants. For this reason, it would be interesting for future research to consider other occupations as potential contributors of unethical behavior within an organization despite the fact that they are not accountants.

Conclusions

The purpose of this quantitative, correlational study was to determine the extent to which job insecurity, job embeddedness, and moral disengagement affected the ethical behavior of

accountants by examining relationships between factors known to influence unethical behavior in the fraud diamond theory. This study contributed to the current body of knowledge regarding unethical behavior among accountants as it demonstrated a significant correlation between moral disengagement and job embeddedness (on the organizational level). In addition, this study revealed that job insecurity did not have a direct impact upon the unethical behavior of professional accountants. The framework of the fraud diamond model was supported through moral disengagement being both a component of “rationalization” and “capability” and job embeddedness representing an “opportunity” to commit unethical behavior. In these results, the “pressure” or job insecurity did not indicate a significant relationship with the unethical behavior of accountants.

The recommendations for practice were discussed previously and recommendations given for practitioners to consider. It was important for practitioners to understand that the pressure of job insecurity does not appear to have an impact the unethical behavior of accountants. Likewise, because of the strong statistical support regarding the link for moral disengagement to influence unethical behavior in accountants, it is very important for screening of potential applicants to occur on the front-end to determine whether they would be a good fit for the business or CPA firm. Furthermore, because employees who are embedded within the organization are likely to have been there longer, it is important for the businesses who employ these workers to consider the pressures they may face and even their age as younger workers tend to be more prone to unethical behavior than their older counterparts.

The recommendations for future studies were also explored. Recommendations for future research included determining if the unethical behavior of engineers and architects are impacted more significantly than accountants due to job insecurity. In addition, future research

may expand the sample size to increase generalizability to a more diverse population than what this survey was able to observe. Future research could also explore whether emotional exhaustion from job insecurity does impact the unethical behavior of accountants and whether being adaptable would reduce its affects. Furthermore, it would be interesting to explore why there was such a significant difference for job embeddedness between the subscales of organization and community. In addition, the use of qualitative research would be helpful in trying to understand the factors explored in this survey and other factors which could impact unethical behavior in accountants. Finally, future research could explore whether education could help curb moral disengagement in professional accountants and whether other occupations are at high-risk for unethical behavior in organizations.

Ultimately, the impact of moral disengagement upon the unethical behavior of professional accountants cannot be ignored. Screening for this kind of individual personality trait is extremely important for organizations as they seek to hire qualified accountants. The risk of fraud within an organization is too great to allow unethical accountants within distance of an unethical act. In addition, the role of the organization may impact some of the best and most-respected (embedded) workers within the organization. For this reason, it is necessary to consider every person regardless of rank or loyalty within the organization as a potential suspect for fraud (professional skepticism). Screenings should be given during pre-employment and periodically throughout the course of employment to gauge the climate within an organization and diffuse any potential threats to individuals or to the organization. Fraud is a difficult thing to prevent; however, with the right mix of internal controls and professional accountants, the mitigation of fraud can occur.

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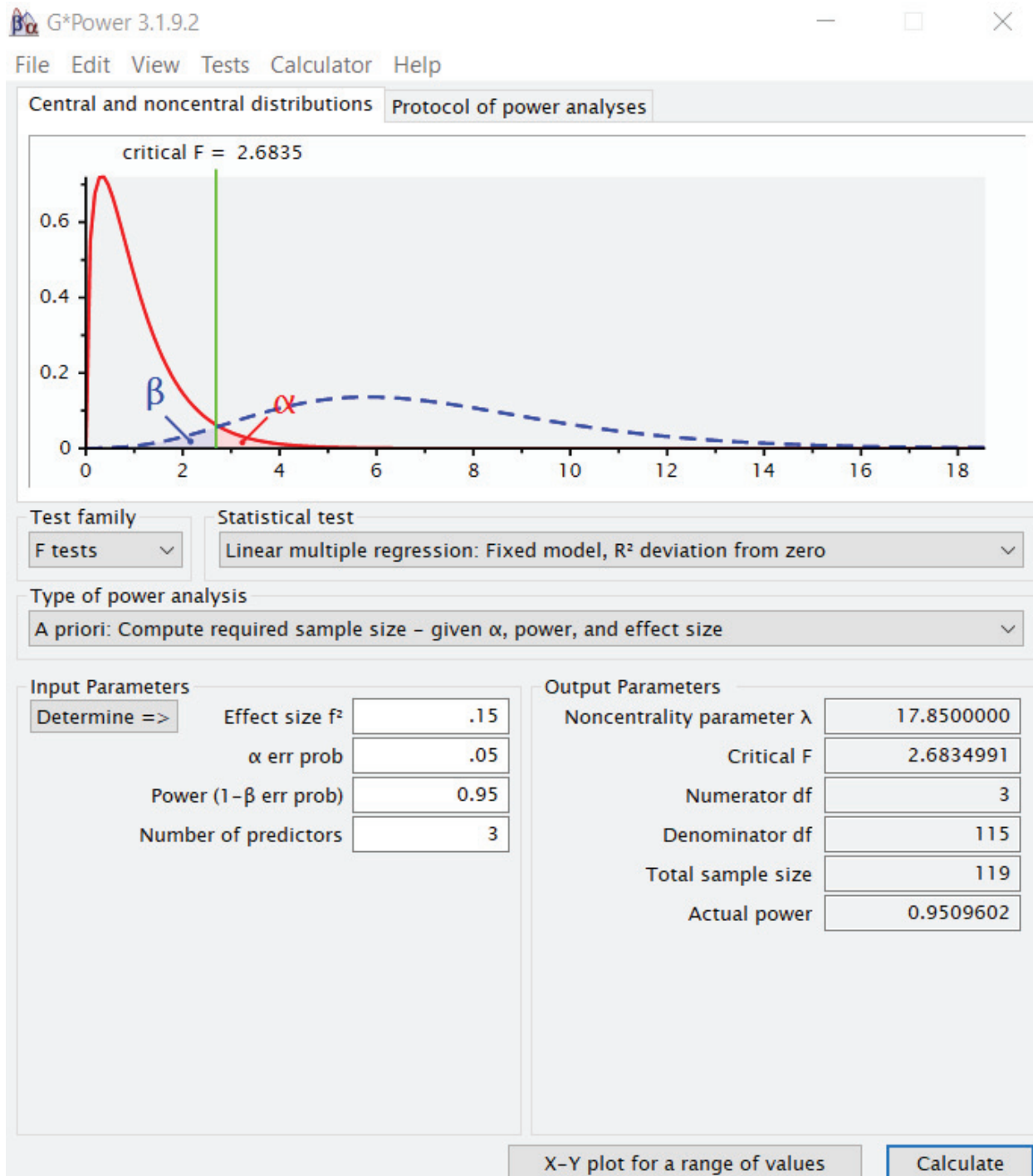
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Appendix A: A Priori G* Power Analysis



Appendix B: Informed Consent Form

Exploring the Impact of Job Insecurity on an Accountant's Unethical Behavior

Introduction:

My name is Stephen Patrick. I am a Doctoral Candidate pursuing a Doctorate of Philosophy (Ph.D.) in Accounting at Northcentral University (NCU). I am researching whether job insecurity affects the ethical behavior of accountants. I am conducting this research as part of my doctoral degree. Your participation is completely voluntary. I am seeking your consent to involve you and your answers in this study.

There may be reasons you might *not* want to participate in the study. One reason could be the amount of time required to take the survey. Another reason could be fear of exposing private information. There may be reasons you might want to participate in the study. A reason may be to prevent unethical behavior with accountants in the future. However, you are not required to participate. I am here to address your questions or concerns during the informed consent process.

PRIVATE INFORMATION

Certain private information may be collected about you in this study. I will do my best to protect your private information. Even with this effort, there is a chance that your private information may be accidentally released. The chance is small but does exist. You should consider this when deciding whether to participate.

Activities:

If you participate in this research, you will be asked to:

1. Take a survey which should require about 20 minutes of your time.
2. Submit the results through Survey Monkey.

Eligibility:

You are eligible to participate in this research if you:

1. Are an Accountant (whether a CPA or not)
2. Are currently working or have worked as an accountant
3. Freely agree to participate in this study

You are not eligible to participate in this research if you:

1. Are NOT an Accountant (whether a CPA or not)
2. Have NEVER worked as an accountant
3. Do NOT freely agree to participate in this study

I hope to include 119 participants in this research.

Risks:

There is minimal risk with this study. A possible risk would be stress from answering questions that ask your opinion. To be clear, you may stop the study at any time.

Benefits:

There are no direct benefits to you for taking part in this research. No incentives are offered. To be clear, your participation will help us to understand whether job insecurity impacts the ethical behavior of accountants. This research could help improve future work environments for accountants.

Confidentiality:

The information you provide will be kept confidential to the extent allowable by law. No personal information will be collected. I will keep your name separate from your answers. I will secure your data on a password-protected computer. All survey results will be used as a group rather than in individual form. I will have sole access to the data. The data will not be given out to any third party in any form. The Institutional Review Board (IRB) may also review my research and view your information.

I will keep your data for 7 years. Then, I will delete electronic data and destroy any paper data.

Contact Information:

If you have questions for me, you can contact me at: F.Patrick1597@o365.ncu.edu or 678-571-1287.

My dissertation chair's name is Dr. Marie Bakari. She works at Northcentral University and is supervising me on the research. You can contact her at: mbakari@ncu.edu or 757-508-4109.

If you contact us you will be giving us information like your phone number or email address. This information will not be linked to your responses if the study is anonymous.

If you have questions about your rights in the research, or if a problem has occurred, or if you are injured during your participation, please contact the IRB at: irb@ncu.edu or 1-888-327-2877 ext. 8014.

Voluntary Participation:

Your participation is voluntary. If you decide not to participate, or if you stop participation after you start, there will be no penalty to you. You will not lose any benefit to which you are otherwise entitled.

Future Research

Any information collected from you during this research may **not** be used for other research in the future. This is true even if identifying information is removed.

Participant Waiver of Written Consent:

Do you understand this consent form and willingly agree to participate in this survey?

Yes – Go to the actual Survey

No – Ends Survey on Disqualification Page

Appendix C: Survey Questions

I. **JOB EMBEDDEDNESS – Mitchell et al. 7 Point Likert Scale with some yes/no questions, and some open ended questions**

Screening Questions

- 1) Are you a CPA? – can I survey the difference in CPA vs non CPA
- 2) How long have you been a CPA?
- 3) How long have you worked as an Accountant?
- 4) What is your gender?
- 5) What is your age? (Provide Ranges)
- 6) What is your ethnicity?

II. **JOB EMBEDDEDNESS – Mitchell et al. 7 Point Likert Scale with some yes/no questions, and some open ended questions**

FIT – COMMUNITY

- 7) I really love the place where I live
- 8) The weather where I live is suitable for me
- 9) This community is a good match for me
- 10) I think of the community where I live as home
- 11) The area where I live offers the leisure activities that I like

FIT – ORGANIZATION

- 12) I like the members of my work group
- 13) My coworkers are similar to me
- 14) My job utilizes my skills and talents well
- 15) I feel like I am a good match for this company
- 16) I fit with the company's culture
- 17) I like the authority and responsibility I have at this company
- 18) My values are compatible with the organization's values
- 19) I can reach my professional goals working for this organization
- 20) I feel good about my professional growth and development

LINKS – COMMUNITY

- 21) Are you currently married?
- 22) If you are married, does your spouse work outside the home?
- 23) Do you own the home you live in?
- 24) My family roots are in this community
- 25) How many family members live nearby?
- 26) How many of your close friends live nearby?

LINKS – ORGANIZATION

- 27) How long have you been in your present position?
- 28) How long have you worked for this company?
- 29) How long have you worked in the accounting industry?
- 30) How many coworkers do you interact with regularly?
- 31) How many coworkers are highly dependent on you?
- 32) How many work teams are you on?
- 33) How many work committees are you on?

SACRIFICE – COMMUNITY

- 34) Leaving this community would be very hard
- 35) People respect me a lot in my community
- 36) My neighborhood is safe

SACRIFICE – ORGANIZATION

- 37) I have a lot of freedom on this job to decide how to pursue my goals
- 38) The perks on this job are outstanding
- 39) I feel that people at work respect me a great deal
- 40) I would sacrifice a lot if I left this job
- 41) My promotional opportunities are excellent here
- 42) I am well-compensated for my level of performance
- 43) The benefits are good on this job
- 44) The health-care benefits provided by this organization are excellent
- 45) The retirement benefits provided by this organization are excellent
- 46) The prospects for continuing employment with this company are excellent

III. JOB INSECURITY – Hellgren 5 Point Likert Scale

JOB INSECURITY

- 47) I am worried about having to leave my job before I would like to
- 48) There is a risk that I will have to leave my present job in the year to come
- 49) I feel uneasy about losing my job in the near future
- 50) My future career opportunities in the organization are favorable
- 51) I feel that the organization can provide me with a stimulating job content in the near future
- 52) I believe that the organization will need my competence also in the future
- 53) My pay development in this organization is promising

IV. MORAL DISENGAGEMENT – Detert – 5 point Likert Scale

MORAL DISENGAGEMENT

- 54) It is alright to protect your friends
- 55) It's OK to steal to take care of your family's needs
- 56) It's OK to attack someone who threatens your family's honor
- 57) Sharing test questions is just a way of helping your friends
- 58) Talking about people behind their backs is just part of the game
- 59) Looking at a friend's homework without permission is just "borrowing it"
- 60) Damaging some property is no big deal when you consider that others are beating up people
- 61) Stealing some money is not too serious compared to those who steal a lot of money
- 62) Compared to other illegal things people do, taking some things from a store without paying for them is not very serious
- 63) If people are living under bad conditions, they cannot be blamed for behaving aggressively
- 64) If someone is pressured into doing something, they shouldn't be blamed for it
- 65) People cannot be blamed for misbehaving if their friends pressured them to do it.
- 66) A member of a group or team should not be blamed for the trouble the team caused
- 67) If a group decides together to do something harmful, it is unfair to blame any one member of the group for it.
- 68) You can't blame a person who plays only a small part in the harm caused by a group
- 69) People don't mind being teased because it shows interest in them.
- 70) Teasing someone does not really hurt them
- 71) Insults don't really hurt anyone
- 72) If someone leaves something lying around, it's their own fault if it gets stolen
- 73) People who are mistreated have usually done things to deserve it.
- 74) People are not at fault for misbehaving at work if their managers mistreat them

- 75) Some people deserve to be treated like animals
- 76) It is OK to treat badly someone who behaved like a “worm.”
- 77) Someone who is obnoxious does not deserve to be treated like a human being.

V. UNETHICAL PRO-ORGANIZATIONAL BEHAVIOR – Umphress – 7 point

Likert Scale

UNETHICAL PRO-ORGANIZATIONAL BEHAVIOR

- 78) If it would help my organization, I would misrepresent the truth to make my organization look good.
- 79) If it would help my organization, I would exaggerate the truth about my company’s products or services to customers and clients
- 80) If it would benefit my organization, I would withhold negative information about my company or its products from customers and clients
- 81) If my organization needed me to, I would give a good recommendation on the behalf of an incompetent employee in the hope that the person will become another organization’s problem instead of my own.
- 82) If my organization needed me to, I would withhold issuing a refund to a customer or client accidentally overcharged.
- 83) If needed, I would conceal information from the public that could be damaging to my organization
- 84) I would do whatever it takes to help my organization.