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THE INFLUENCE OF LEADERSHIP STYLE AND PERSONAL COSTS ON FRAUD

WHISTLEBLOWING INTENT

by

Tonya D.W. Smalls

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctorate of Business Administration

In the

Coles College of Business

Kennesaw State University

Kennesaw, GA

2015

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Tonya D.W. Smalls 2015 The following is a Dissertation presented to the graduate faculty of the Coles College of Business, Kennesaw State University, in partial fulfillment of the requirements for the degree of Doctorate of Business Administration.

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ACKNOWLEDGMENTS

I'm blessed to have a strong support system. I thank all of the family, friends, and mentors that supported me throughout my doctoral program.

I give very special acknowledgments to my husband, Anthony Smalls, III, for consistently being a source of motivation throughout our marriage and especially while I was pursuing my doctorate degree. I appreciate Tony, and our sons, Jordan and Donovan, for encouraging me, understanding me, supporting me, and loving me unconditionally. I'm so thankful for their smiles and their ability to make me laugh. I'm grateful for their instincts to give me hugs when I need them the most. I appreciate them keeping me grounded and focused on the important things in life.

I have the best parents and grandparents. I would like to thank my parents, Ruby Jones and Ronnie Wonnum, for always encouraging me to pursue my dreams, providing a comforting source of reinforcement when I needed additional support, and serving as my loudest cheering section in the game of life. My parents have a unique way always making me feel special and capable of doing great things, without pressuring me to be special or great. I appreciate them for raising me to be humble, respectful, thankful, and intellectually curious. Special thanks to my grandmothers, Florida Smith and Mattie Ingram, for constantly reminding me of the power of prayer and the importance of staying connected with love ones no matter how busy life may seem.

I would like to thank all of the educators and mentors that have played a role in developing my career path and my passion for numerous aspects of the field of Accounting. I was a student at C.L. Harper High School in Atlanta, Georgia, when I took my first accounting class. Mr. Leo Shingles was my accounting teacher, and the positive feedback I received from him while taking his course inspired me to consider accounting as a major in college. Ms. Jacqueline Stephens has been a trusted mentor since I was in high school. I thank her from the bottom of my heart for supporting, counseling and encouraging me for over twenty-five years. She played a key role in ensuring I went to college, specifically Clark Atlanta University, and I'm forever grateful to Jackie for her excellent guidance. My accounting professors in college, especially Professor Virgil Carr who was one of my most influential role models at Clark Atlanta University, motivated me to seriously consider accounting/auditing as a profession and inspired my interest in academia. I was further inspired to consider becoming an accounting professor while

pursuing my MBA at Emory University and being taught by great professors like Dr. Gregory Waymire.

Throughout my career I have been fortunate to be surrounded by very experienced professionals, positive role models and mentors like Dr. Kasim Alli, Dr. Rajul Gokarn, Carolyn Holcomb, Catherine Mickle, Avery Munnings, and Michael Picchi. While I was being taught and coached by these individuals, I'm certain they did not realize how their work ethic, accomplishments, and love for accounting and/or teaching would impact my life. I appreciate these individuals for helping me shape and achieve my professional and educational goals.

I'm extremely fortunate to have been selected as a student in Cohort 3 of the Coles DBA Program. I have established lifelong friendships that I will cherish forever. I'm honored to have shared class time, worked long nights (sometimes sleepless nights) completing assignments, participated in studied groups, attended devotional meetings, and pursued the goal of completing a doctoral program with the most caring, genuine, dedicated, reliable, supportive, thoughtful, and intelligent professionals. I give thanks to George Allen, Shalonda Bradford, Morten Brante, Chuck Casto, Kelli Crickey, Lee Macenczak, Scott Manley, Donna Pearson, Christine Sutton, Frank Thompson, and Ralph Williams for making the experience so enjoyable. I owe a tremendous amount of gratitude to Reid Cummings, Robert Forrester, and Lisa Ludlum. Reid, Robert, and Lisa were a special source of strength and support that helped me "Keep Calm and Carry On" throughout the program, but especially while the four of us were taking our courses designed specifically for our accounting and finance concentrations. Reid, Robert, Lisa, and I worked so well together while maintaining our sense of humor and winding down occasionally by spending a small fortune working our way through a long list of fine dining restaurants in the Atlanta area.

The faculty and staff of the Coles DBA program are amazing individuals. I would like to thank all of the scholars that taught our courses. The KSU faculty and network of Global Scholars that support the program are exceptional. I'm so thankful to have met and learned from so many excellent scholars from various disciplines. I would like to give kudos to Susan Cochran and Dr. Juanne Greene for their exceptional work ethic, organizational skills, and welcoming personalities. Thanks to Dr. Joe Hair, Dr. Neal Mero, and Dr. Torsten Pieper for the time and dedication each of them have devoted to the DBA program in general and specifically to their respective tenures as Executive or Academic Director of the DBA program. They are stellar individuals and were consistently accessible and resourceful when I had questions or needed guidance. Thanks to Dr. Divesh Sharma for being an excellent Accounting Discipline Coordinator. Divesh was instrumental in helping me identify a topic for my dissertation and was a great source of guidance. I appreciate all of the energetic time you spent motivating Reid, Robert, Lisa and me during our accounting seminars. I would also like to thank Dr. Gabriel Ramirez for his passionate style of teaching the finance focused seminars. I'm thankful for his willingness to spend extra time with us when we were working through challenging assignments. I'm especially grateful for the support he provided me. During the program, Gabriel helped me identify the need to make some significant work/life balance adjustments. His feedback was honest and insightful. He helped reinforce the importance of focusing and re-prioritizing my various responsibilities so I could move forward and successfully complete the doctoral program.

I'm forever grateful to Dr. Richard Clune for mentoring me and serving as a source of wisdom as I considered returning to school to obtain my doctorate and while I was a doctoral student. Throughout the numerous years I have known Rich, he has always been a source of knowledge, truth, and support. We initially crossed paths at Coopers & Lybrand (which is now PricewaterhouseCoopers) in the late 1990s, at the very beginning of my professional career. Over the years, I have continued to be motivated by Rich's positive energy and effective leadership style. I was inspired early in my career to model my leadership behavior after his supportive, engaging, and empowering approach to managing teams, and his willingness to be generous with his time and knowledge. I'm thankful for Rich's friendship and I'm honored to call him a colleague.

I was blessed with an amazing Dissertation Committee. I've thanked Dr. Dana Hermanson, Dr. Jeffrey Cohen, and Dr. Jennifer Schafer numerous times in person, via email, and via Skype. I really appreciate them working with me and helping me accomplish my goal of obtaining my doctorate. I sincerely thank them for their guidance, constructive feedback, responsiveness, and support. I hope to have the opportunity to work with each of them again in the future.

I'm very thankful for the opportunity to have met Dr. Dana Hermanson during my doctoral program at KSU. In addition to being one of my accounting professors during the program, he is my Dissertation Committee Chair and mentor. I'm thrilled to have had the opportunity to work under Dana's guidance while I was pursuing my doctorate. He is truly inspiring. Dana is a great role model, and his approach to research is refreshing and motivating. He guided me as I further explored and developed my dissertation topic, and encouraged my interest in using an experimental research design. Before I met Dana, I thought I would only be interested in teaching when I transitioned to academia. However, my exposure to Dana's work ethic, thirst for knowledge, and eagerness to explore various areas of research has completely elevated my understanding and appreciation of how fulfilling the combination of teaching and researching can be. I sincerely appreciate Dana's guidance, patience, knowledge, assistance, and insight. I'm honored and humbled to have had the opportunity to work with Dana during my doctoral program.

In addition to the members of my Dissertation Committee, I would like to give special thanks to Dr. Carol Bishop, Dr. Todd DeZoort, Dr. Richard Riley, and Dr. Rob Wilbanks for providing helpful feedback and recommendations while I was designing my survey instrument.

I also would like to thank Emory University, Kennesaw State University, University of Georgia, and University of Tennessee at Chattanooga for allowing me the opportunity to ask their executive/professional MBA students to participate in my study. I greatly appreciate all of the students that agreed to participate in my study. I especially appreciate all of the encouragement, coordination assistance, and support I received from Dr. Gregory Waymire (Emory), Dr. Bruce Clements (KSU), Dr. Satya Chakravorty (KSU), Dr. Dana Hermanson (KSU), Dr. Alison Keefe (KSU), Dr. Richard Daniels (UGA), and Dr. Anne Wilkins (UTC).

I'm so thankful for my husband, children, parents, grandparents, siblings, in-laws, aunts, uncles, cousins, sorority sisters, friends, mentors, colleagues, and the other numerous individuals that have provided their positive energy, constructive feedback, motivational words, technical expertise, sense of humor, helping hands, empathy, patience, and/or words of wisdom while I have pursued my doctorate. I know that my ability to accomplish this goal is the result of an abundance of blessings, hard work, perseverance, prayer, fortitude, and the strongest support system imaginable.

ABSTRACT

THE INFLUENCE OF LEADERSHIP STYLE AND PERSONAL COSTS ON FRAUD WHISTLEBLOWING INTENT

by

Tonya D.W. Smalls

Using an experimental approach, this study examines employees' intention to report occupational fraud through various channels based on the leadership style (transformational or transactional) of the manager and the expected personal costs (either high or low) of reporting. The study also focuses on the influence of value congruence between the manager and the employee, as well as trust factors that motivate employees to report occupational fraud. In examining these issues, I consider two types of occupational fraud schemes (misappropriation of assets and financial statement fraud). Unexpectedly, the results indicate leadership style and/or personal costs do not have a significant influence on reporting intention under most models examined in this study. The findings indicate that age, gender, and/or responsibility to report are significant factors influencing reporting intentions in several models analyzed in this study.

Key Words: Employee whistleblowing; transactional leader; transformational leader; personal costs; age; gender; responsibility; misappropriation of assets; financial statement fraud; ethics.

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CHAPTER 1 - INTRODUCTION

The Association of Certified Fraud Examiners (ACFE, 2014) estimates that a typical company loses 5 percent of its revenues to occupational fraud each year. Occupational fraud is defined by the ACFE (2014, 6) as "the use of one's occupation for personal enrichment through the deliberate misuse or misapplication of the employing organization's resources or assets" and is primarily grouped into the three following categories: misappropriation of assets, financial statement fraud, and corruption. Of all of the fraud cases included in the ACFE (2014, 5) study, "77% of the fraud cases were committed by employees working in one of the following six departments: accounting, operations, sales, executive/upper management, customer service, purchasing, and finance." A review of corporate fraud cases between 1996 and 2004 shows that 18.3% of fraud cases were detected and brought forward by employees blowing the whistle (Dyck et al., 2010; Kaptein, 2011), and the detection of fraud is more likely to be accomplished by a whistleblowing tip (42% of cases) than by any other detection method (ACFE, 2014).¹

Although tips represent the most common avenue by which fraud is detected, the establishment of whistleblower policies and procedures may not be adequate to encourage employees to report wrongdoing. The Ethics Resource Center (2013) reports an increase in retaliation against employee whistleblowers from 2007 to 2013 in

¹ The Association of Certified Fraud Examiners 2014 Global Fraud Study reports that the second and third most common methods of detecting fraud are management review (16.0%) and internal audit (14.1%). Fraud detection by external audits ranks seventh at 3.0%.

organizations with whistleblower policies. The organization's culture of credibility will instill employee beliefs that will support or dissuade employee whistleblowing behaviors, and leadership behavior is a key determinant of employee perceptions and beliefs (Berry, 2004; Ethics Resource Center, 2013). Oumnlil and Balloun (2009) report that the cultural environment influences ethical decision making and ethical issue recognition, and organizational culture influences an employee's decision to whistleblow on wrongdoing (Berry, 2004; Ethics Resource Center, 2013)

Although there are various leadership types, leadership has been broadly conceptualized as either transformational or transactional (Burns, 1978; Bass & Riggio, 2006), and current research on leadership has been dominated by transformationaltransactional leadership theory (Judge & Piccolo, 2004). "Transformational" leaders engage the emotional involvement of their followers to build higher levels of commitment, identification, and trust in the leader and the leader's mission (Jung & Avolio, 2000). Transformational leaders typically encourage and empower followers to make their own decisions, and this builds the followers' trust in their leader (Avolio & Bass, 1995). This influence on decision making may also impact an employee's intent to report fraud, since transformational leaders affect followers' performance positively, enhance the organizational citizenship behaviors of employees such as helping behavior and conscientiousness, and are more effective in helping followers cope in stressful situations (Bass & Riggo, 2006). In contrast, "transactional" leaders tend to motivate followers based on contingent reinforcement and acquire "conditional trust" from followers via reliable execution of exchanges and contracts (Jung & Avolio, 2000; Bass, 1985; Meyerson, Weick, & Kramer, 1996). Transactional leadership can be effective, but a leader's commitment to followers' personal development is not involved, and it does not involve a strong emotional attachment to the leader (Jung & Avolio, 2000). A transactional leader is unlikely to help followers cope in uncertain conditions or stressful situations, is less effective than a transformational leader in a crisis or unstable situations, and has less influence on a follower's organizational behavior and commitment (Bass & Riggio, 2006). As a result, an employee may be less likely to report fraud under a transactional leader.

In response to the need for additional research on the role of management in the whistleblowing process (Carcello, Hermanson, & Ye, 2011), this study first explores the influence a manager's leadership style has on an employee's intent to report suspected fraud to that manager, as well as to other parties. The specific leadership styles assessed in this study are transformational leadership and transactional leadership. I predict a greater willingness to report suspected fraud to a transformational leader than to a transactional leader. The mediating effects of value congruence and trust factors on the influence of leadership style on intent to report fraud are considered as well. I expect, based on the results reported in Jung and Avolio (2000), that transactional leadership will have an indirect effect on the intent to report fraud when mediated by value congruence and trust. The results of Jung and Avolio (2000) also lead to the expectation that transformational leadership will have a direct effect on the intent to report fraud when mediated by value congruence and trust.

Second, the influence of personal costs (either high or low) on intent to report fraud, as well as the interaction between personal costs and leadership style, also is 3

examined in this study. Consistent with prior research on the influence of personal costs (Schultz, Johnson, Morris, & Dyrnes, 1993; Kaplan & Whitecotton, 2001) on ethical decision making, and the issue-contingent model of ethical decision making (specifically the magnitude of consequences component) (Jones, 1991; Cohen & Bennie, 2006), I expect a greater willingness to blow the whistle when personal costs are low. More importantly, I expect that the negative effect of high personal costs will be reduced in the presence of transformational leadership (an interaction between leadership style and personal costs, which has not been examined previously).

Finally, in examining the effects of leadership style and personal costs, I consider two different fraud settings (ACFE, 2014) – asset misappropriation (employee misuses or steals the company's resources such as a false billing scheme) and financial statement fraud (employee intentionally omits material information or causes a misstatement in the company's financial reports such as understating reported expenses or inflating reported assets). Previous research on an employee's intent to report fraud has examined whistleblowing intentions related to misappropriation of assets and fraudulent financial reporting. The current study also examines whistleblowing response to each of these two categories of occupational fraud.

Consistent with this set of fraud types, Near, Rehg, Van Scotter, and Miceli (2004) call for additional research on the influence of type of wrongdoing on whistleblowing. As it relates to the influence of fraud type on the intent to report fraud, Kaplan, Pany, Samuels, and Zhang (2009) report that misappropriation of assets has a stronger influence than fraudulent financial reporting on intent to anonymously report fraud. However, Kaplan and Schultz (2007) report that fraud type does not have a significant influence on reporting intentions. The current study addresses reporting intention by fraud type to understand the effects of the manipulated variables within different fraud settings.

An experimental, 2x2 (leadership style – transformational or transactional, personal costs – high or low), research design is used. Leadership style and personal costs are manipulated between-subjects. In addition, the participants evaluate two independent fraud cases, with the fraud types (fraudulent financial reporting or misappropriation of assets) presented in random order. Previous studies have used MBA students to examine reporting intentions (Ayers & Kaplan, 2005; Kaplan & Schultz, 2007; Kaplan, Pope, & Samuels, 2010, 2011). Likewise, the participants in this study are Executive MBA and/or part-time MBA students.

Carcello et al. (2011) report that the additional protections and incentives given to whistleblowers by the Dodd-Frank Act will likely enhance the role of whistleblowers as an important internal mechanism in discovering corporate fraud. The Sarbanes-Oxley Act (SOX) also provides increased protection and prohibits employers from retaliating against individuals who report fraud (Iyer & Watkins, 2008). Despite such protections, the personal costs of whistleblowing can be quite significant.

While the MANCOVA results point primarily to Age and Responsibility as being associated with intent to report, some other results emerge in the individual ANCOVAs. Specifically, the present study finds that leadership style alone does not have a direct significant influence on reporting financial reporting internally or externally. Reporting misappropriation of assets internally is not directly influenced by leadership style. Leadership style does have a significant influence on reporting misappropriation of assets externally. The results of this study indicate the interaction of leadership style and personal cost is significant in certain situations, such as reporting financial reporting fraud internally to a controller or reporting misappropriation of assets externally to the SEC. The findings of this study also document that leadership style influences concern about personal costs when reporting misappropriation of assets to a controller. The results of this study extend our current understanding of the effect that leadership style has on whistleblowing intent in low personal cost versus high personal cost environments.

The findings of this study also indicate that age, gender, and/or responsibility to report a wrongful act are significant factors influencing the intent to report fraud in many of the models analyzed in this study. Age has a positive influence on the participants' intent to report fraud internally (Table 8), a negative influence on the participants' intent to report fraud externally (Table 11), and a negative influence on a typical manager's intent to report fraud externally (Tables 7 and 9). Both gender (i.e., female participants) (Tables 5, 6, and 10) and responsibility (Tables 5 and 7) have positive influences on reporting fraud.² This study extends prior research on the factors influencing internal employee whistleblowing and further examines the role of leadership in establishing a culture that encourages reporting unethical behavior, such as occupational fraud. Trompeter, Carpenter, Desai, Jones, & Riley (2013) cite whistleblowing as an anti-fraud measure designed for fraud deterrence and detection, assert that whistleblowing can affect an organization's control environment, and call for research on fraud detection methods auditors can use to identify fraud. The study of how leadership influences employee whistleblowing also is relevant to auditors because it has the potential to

 $^{^2}$ See later discussion of heteroskedasticity in certain models and the effect on the results if I use an alternate approach to analyze the data. For example, the model in Table 6 is not significant using the alternate approach.

enhance auditors' understanding of the impact of the tone at the top on occupational fraud prevention and detection.

CHAPTER 2 - LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Literature Review

Dyck, Morse, and Zingalas (2010) study all reported corporate fraud cases in large U.S. organizations between 1996 and 2004, and report that fraud is not typically detected by corporate governance mechanisms, such as the SEC or auditors, but by other factors that complement each other like the media and employees. Employees are a critical (Miceli, Near, & Dworkin, 2008) and increasingly important (Miceli & Near, 2005) source for detecting wrongful acts (Kaptein, 2011; ACFE, 2014). Specifically, the latest ACFE study (ACFE, 2014) reports that 43% of occupational fraud cases are discovered through tips and 50.9% of the tips are from employees. Carcello et al. (2011) call for research that provides insight into the role of top management in supporting or possibly impeding the effectiveness of whistleblower programs. Previous studies on factors influencing an employee's intent to whistleblow have not examined the role of leadership behavior from the perspective of a specific leadership style (i.e., transformational versus transactional) and the influence leadership style has on an employee's intent to blow the whistle on fraud. This study provides insight into how management's leadership style and employee personal costs impact fraud detection as a result of the influence these factors have on an employee's intent to blow the whistle on fraud.

The previous studies of an employee's intent to whistleblow have focused on factors influencing the intent, such as the existence of anonymous reporting channels, procedural safeguards in anonymous reporting channels, the presence or absence of confrontation with transgressors, reporting to an internal or external auditor, and whether

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the auditor actually inquires about wrongdoing (e.g., Kaplan & Schultz, 2007; Kaplan et al., 2009; Kaplan et al., 2010; Kaplan et al., 2011). More broadly, the literature on the intent to blow the whistle on wrongdoing is clustered around four primary themes: (1) Anonymous and Non-anonymous Reporting Channels, (2) Internal and External Reporting Channels, (3) Ethical Organizational Culture, and (4) Personal Cost. The following sections discuss the literature within each of these four themes, recognizing that the studies discussed often include other variables beyond the main theme. Anonymous and Non-anonymous Reporting

Three studies have directly examined anonymous and non-anonymous reporting channels. First, Ayers and Kaplan (2005) examine an employee's intent to report wrongdoing by an outside consultant using an anonymous or non-anonymous reporting channel. The independent variables in this study were the perceived seriousness of the wrongdoing, personal cost and personal responsibility of reporting the wrongdoing which were adopted from Schultz et al. (1993), and moral equity, relativism, and contractualism which are ethical dimensions in the multidimensional ethics scale (MES) developed in Reidenbach and Robin (1990). This study was completed by 74 graduate business school students in a between-subjects experiment in which one set of subjects received one version of the case (consultants increase profitability \$300,000 by using inexperienced staff with lower bill rates) and the other set of subjects received an alternative version of the case (consultants overbill the client \$300,000 to recoup costs associated with taking longer to complete assignment because consultant misunderstood a portion of the assignment). The findings of Ayers and Kaplan (2005) indicate that personal costs and perceptions of seriousness are significantly related to reporting anonymously and nonanonymously. The influence of personal costs on reporting intentions in the anonymous and non-anonymous reporting channels were similar even though the personal costs were lower in the anonymous reporting channel compared to the non-anonymous channel. Personal responsibility and moral equity judgments are significantly related to reporting non-anonymously, but not anonymously. The influence of relativism and contractualism was not significant in either the non-anonymous or anonymous reporting environments. The findings of Ayers and Kaplan (2005) indicate intentions to report anonymously are impacted by cost-benefit considerations. The current study further explores and expands knowledge on the influence personal cost has on intentions to report fraud using an anonymous reporting channel.

Second, Kaplan and Schultz (2007) examine intent to report questionable acts by exploring response to different type of fraudulent acts and focus on the availability of an anonymous or non-anonymous reporting channel in the organization. In addition to the anonymity of the reporting channel, the study examined whether the quality of the organization's internal audit department influenced reporting intentions. In this study, 93 evening MBA students participated in a within-subjects experiment and responded to three different scenarios involving financial reporting fraud, theft, and false representations by consultants. The findings of Kaplan and Schultz (2007) indicate that internal audit department quality does not influence whether an anonymous or nonanonymous reporting channel is used. However, when an anonymous reporting channel is available, individuals are less likely to use a non-anonymous reporting channel. The findings also indicate that the type of wrongdoing influences reporting intentions because the reporting intention results varied by scenario (similar for financial reporting fraud and misappropriation of assets fraud type scenarios; reporting intentions by fraud types are higher than the false representation by consultant scenario). These results by fraud type are consistent with Kaplan et al. (2010), which did not find significant variation in reporting intention by type of fraudulent act.

Third, Kaplan et al. (2009) further examine the intent to anonymously report fraud and explore the influence that externally versus internally administering (along with other procedural safeguards) an anonymous hotline has on fraud reporting. This study uses 91 evening MBA students in a between-subjects experimental design. The strength of procedural safeguards (which are either weak or strong) and the fraud type (misappropriation of assets or financial reporting fraud) are used as predictors of reporting intention. Characteristics that distinguished between strong or weak procedural safeguards related to whether the hotline was administered externally (considered strong) or internally (considered weak), the operating hours the hotline was available for use, mechanisms in place to follow-up on hotline calls, and description of controls in place to safeguard information reported. The results of the study unexpectedly show that reporting intentions were higher when procedural safeguards were weaker. Kaplan et al. (2009) speculate that participants may view reporting to an externally administered hotline as reporting to an outsider, and are less reluctant to report fraud internally versus externally regardless of the procedural safeguards. Kaplan et al. (2009) also report that the intent to report fraud was higher for the scenario involving misappropriation of assets than the scenario related to financial reporting fraud.

Overall, this area of research indicates that an anonymous reporting channel is likely to be used more than a non-anonymous reporting channel when these two different options are available. The findings in this area of research on the influence of fraud type on reporting intentions (Kaplan & Schultz, 2007; Kaplan et al., 2009) are inconsistent. The findings of Kaplan and Schultz (2007) related to the influence of fraud type on reporting intentions are consistent with the findings in the next section. Inconsistencies in prior research provide an opportunity to further explore the influence that fraud type has on reporting intentions. The present study seeks to expand the literature by examining the influence fraud type has on intent to anonymously report fraud.

Internal and External Reporting Channels

Whistleblowing via internal channels is less threatening to a company as compared to external reporting, which could potentially lead to scrutiny from the public or legal intervention (Miceli, Near, & Schwenk, 1991). Previous research on whistleblowing has explored the internal-external reporting issue from a variety of perspectives. First, Kaplan et al. (2009) examine internal versus external reporting as it relates to the administration of the hotline. The results of Kaplan et al. (2009) indicate that reporting intentions to an internally administered hotline were significantly stronger than reporting intentions to an externally administered hotline. The findings were unexpected because the internally administered hotline had weaker procedural safeguards than the externally administered hotline

Second, Kaplan et al. (2010) specifically examine environments and circumstances that influence an individual's intention to internally report fraud. They examine the impact of unsuccessful social confrontation (such as speaking directly to an individual who committed the fraudulent act and the discussion does not result in the transgressor providing a non-fraud justification or self reporting the fraud committed) with one's supervisor and the influence this has on the individual's intention to report fraud (misappropriation of assets or fraudulent financial reporting) to the supervisor's supervisor or to internal audit. Kaplan et al. (2010) find that employees experiencing a social confrontation that is not successful are more likely to pursue powerful internal report recipients, whereas reporting to the supervisor's supervisor was viewed as the preferred channel when social confrontation did not occur. The study also finds that reporting intention did not vary based on the type of fraudulent act.

Third, Kaplan, Pope and Samuels (2011) study whether reporting intentions are stronger when an auditor makes inquiries or does not make inquiries to an employee, and whether the auditors are internal or external. The results of the study, using 207 evening MBA students, show that reporting intention to an inquiring auditor is greater than reporting intention to a non-inquiring auditor. The reporting intention to an internal auditor is stronger than reporting intention to an external auditor. There is an interaction effect between inquiry and auditor type, specifically that inquiry strengthens the reporting intentions to an external auditor. There is an internal auditor. There is no significant difference in reporting intentions for fraud type (misappropriation of assets or fraudulent financial reporting).

Overall the research in this area indicates that individuals are more likely to report wrongdoing internally than externally. The preference for internal reporting is present in findings associated with the administration channel of an anonymous reporting hotline and the type of auditor who is the report recipient. The current study extends prior research on the influence fraud type has on the intent to report fraud internally and externally via anonymous reporting channels.

Ethical Organizational Culture

Bather and Kelly (2006) report that whistleblowing is most effective in organizations that encourage whistleblowing instead of resenting the act of whistleblowing and punishing the whistleblower. Studies have specifically examined the intent to report wrongdoing in environments that are perceived to have ethical cultures, based on the ethics of supervisors and coworkers and the ethics of specific professions. First, Mayer, Nurmohamed, Trevino, Shapiro, and Schminke (2013) examine the influence of ethical leadership of supervisors and ethical behavior of co-workers on employees' intent to internally report unethical conduct using three studies. Study 1 is a survey completed by 197 new hires of a multinational company and examines intent to whistleblow. Study 2 is a field study of 33,756 employees that examines actual reporting behavior. Study 3 is an experiment that examines the interaction between supervisory ethical leadership and ethical behavior of a co-worker. The studies explore the interaction between the ethical leadership of the supervisor and ethical behavior of the co-worker, mediated by fear of retaliation. Study 3 includes an additional mediator called perceptions of futility. Each study uses 10, 3, and 6 items, respectively, from the Brown et al. (2005) ethical leadership scale ranging from 1 (strongly disagree) to 5 or 7 (strongly agree) to measure supervisory ethical leadership and a three-item coworker ethical behavior scale ranging from 1 (strongly disagree) to 5 or 7 (strongly agree). Mayer et al. (2013) find that an employee's decision to internally report unethical behavior depends on the ethical tone established by the employee's supervisor and co-workers. The interactive effect of ethical leadership of the supervisor and the ethical behavior of the coworker was mediated by fear of retaliation in Study 2 and 3, while perceptions of futility was not a mediator in

either study.

Second, Shawver and Clements (2008) examine the accounting professional's evaluation of unethical situations and intentions to blow the whistle on wrongdoing. One area examined as an influence on reporting intentions is the ethical climate of the organization. The study was completed by 89 individuals attending an Institute of Management Accountants conference. The results of the study show that accounting professionals are not more likely to whistle blow when working for a firm with a high ethical climate as opposed to a firm with a low ethical climate. The study also reports that accounting professionals are able to identify unethical situations and are more (less) likely to blow the whistle on situations with higher (lower) materiality and when job guarantees exist (does not), distress levels are low (high), and a sense of security exists (does not).

Third, Taylor and Curtis (2013) examine the influence prior organizational response and power distance has on a public accounting professional's intention to report wrongdoing. Taylor and Curtis (2013, 23) define power distance as the "relative hierarchical distance between the wrongdoer and the potential reporter," and the wrongdoer in the study is either a peer or a superior. The study was completed by 106 audit supervisors attending a training conference for a Big 4 firm. The study finds that audit supervisors reporting intentions are not influenced by the organization's response to prior whistleblowing incidents. The results of the study also show that power distance influences intent to report wrongdoing. The results of the interaction of prior organizational response and power distance indicate that audit supervisors' intentions to

report on a peer (superior) are higher (lower) when the organization is unresponsive as compared to a responsive.

Overall, this area of research suggests that intent to report wrongdoing is not influenced by the overall culture of the company, but is influenced by the ethical tone established by supervisors and co-workers. This area of research also finds that intent to blow the whistle on unethical conduct is influenced by the fear of retaliation, job guarantee, distress level, and sense of security factors examined as personal cost factors in the research explored in the next section. The current study examines the influence a supervisor's leadership style and personal cost have on the intent to blow the whistle on fraud.

Personal Costs

Research has examined the effects of personal costs on the intent to blow the whistle. Schultz, Johnson, Morris, and Dyrnes (1993) examine how an individual's perception of responsibility to report wrongdoing relate to an organization's internal control environment, the perceived personal cost of reporting the questionable act, and the perceived seriousness of the wrongdoing influence the decision to report the questionable act in America, France, and Norway. The study used the Hofstede's Value Survey Module and six scenarios to determine influence on reporting intentions. The perceived seriousness of the irregularity measure in Schultz et al. (1993) is similar to the moral intensity measure examined in Taylor and Curtis (2010). Schultz et al. (1993) use six different scenarios in a within-subjects experiment with 145 individuals (mid-level managers and professional staff), and predicted there would be a negative correlation between likelihood of reporting and personal cost of reporting and a positive correlation

between reporting and perceptions of seriousness and responsibility. The results were statistically significant in the expected direction. As it relates to the international constructs introduced in this study, the results indicate that the variables examined have different levels of importance in different countries. The results indicate that reporting intention is influenced by national factors and specific situations, such as national cultural values related to power distance acceptance and strength of uncertainty avoidance³, personnel ranking of perpetrator, whether the issue was an accounting or non-accounting matter, and the prosperity of company. The results of the study also indicate that in general the perceived seriousness of the act influences the reporting intention, although this prediction did not hold in the American sample specifically.

Similar to Schultz et al. (1993), the influence of perceptions of seriousness of the questionable act, the personal costs of reporting, the responsibility for reporting are also examined in Kaplan and Whitecotton (2001). Kaplan and Whitecotton (2001) explore these factors, as well as professional commitment, on an auditor's reporting intention when is it identified that another auditor is considering taking a job with a client and the auditor has failed to comply with the ethics rules. Personal costs in this study include potential retaliation with weaker performance evaluation ratings, alienation due to peers not wanting to work with a whistleblower, and consequences of being an accomplice if the act is not reported. The subjects in this study are 73 audit seniors. Kaplan and Whitecotton (2001) find that intent to report is higher when personal costs of reporting

³ Hofstede (1984) defines power distance and uncertainty avoidance. Power distance is the degree to which a society accepts that power is unequally distributed in institutions and organizations. Individuals in large power distance societies are more accepting of hierarchical order and those in small power distance societies support the equalization of power. Uncertainty avoidance relates to the extent in which members of society are uncomfortable vagueness and uncertainty. Strong uncertainty avoidance societies lack tolerance for persons and ideas that are deviant. Weak uncertainty avoidance societies are less rigid and more tolerant of deviance.

are perceived to be lower, and reporting intentions are higher when personal responsibility is perceived to be higher. These results are consistent with the findings in Schultz et al. (1993). The study predicted that increases in the perceived seriousness of the act would positively influence the auditors' reporting intention. The findings did not support this prediction, and it is speculated that the results are consistent with the U.S. portion of the results of the Schultz et al. (1993) study due to national cultural norms.

Overall, Schultz et al. (1993) and Kaplan and Whitecotton (2001) examine the influence of personal cost on an individual's likelihood to report wrongdoing and find that individuals are more likely to report wrongdoing when the perceived personal cost, such as risk of reprisal or sanctions imposed by management or peers, is low. The current study expands our knowledge of the influence of personal cost on reporting intentions by examining the interaction of leadership style (transformational and transactional) and personal costs (high and low) on the intent to report fraud.

Hypothesis Development

Leadership and Ethical Employee Outcomes

There are numerous studies (Hood, 2003; Brown, Trevino, & Harrison, 2005; Tuan, 2012; Mayer et al., 2013; Taylor & Curtis, 2013) that examine the role of leadership and the influence of leadership on ethical decision making or creating an ethical organization climate. In addition, Carcello et al. (2011) call for research that provides insight into the role of top management in supporting or possibly impeding the effectiveness of whistleblower programs. For the purposes of this study, research will be discussed to establish the link between leadership style and employee outcomes, such as the intent to report wrongdoing.

Transformational and Transactional Leadership

This paper will investigate the role that the leadership style of a manager has on an employee's intent to blow the whistle on fraud, specifically occupational fraud. The leadership styles examined in this study are transformational leadership and transactional leadership.

Transformational leaders engage the emotional involvement of their followers to establish higher levels of commitment, identification, and trust in the leader and the leader's mission (Jung & Avolio, 2000). They also work to increase their followers' confidence and expand their needs in line with what they have established as the terms of their group's mission (Avolio & Bass, 1995). Transformational leaders typically encourage and empower followers to make their own decisions, and this builds the followers' trust in their leader (Avolio & Bass, 1995). Transactional leaders tend to motivate followers based on contingent reinforcement and acquire what may be termed "conditional trust" from followers via reliable execution of contracts and exchanges (Jung & Avolio, 2000; Bass, 1985; Meyerson et al., 1996). Transactional leaders can be effective in stable and predictable environments (Bass & Riggio, 2006). However, the transactional leadership style does not involve a leader's commitment toward followers' personal development, and it does not involve a strong emotional attachment to the leader (Jung & Avolio, 2000).

Hood (2003) explores the relationship among CEO values, leadership style, and ethical orientation. The values of the CEO were developed by Rokeach (1973) and are categorized in Hood (2003) as morality based values (affection, forgiveness, helpfulness, politeness, and responsibility), personal values (broadmindedness, courage, honesty, and self-respect), social values (equality, freedom, and world at peace), and competency based values (competence and logic). Hood (2003) uses the Multifactor Leadership Questionnaire (Avolio & Bass, 1995) to measure leadership style, and ethical orientation is measured by whether a formal ethics policy or company training program exists.

The results of Hood (2003) indicate that each of the four types of values is significantly associated with transformational leadership; transactional leadership is positively related to personal values and morality-based values. The results also indicate that social and morality based values are directly associated with formal ethics policies and the existence of company diversity training. Hood (2003) also reports that transactional leaders appear to follow ethical practices that are legal, while in contrast, transformational leaders not only comply with the law but also go above and beyond the law by implementing more voluntary ethical and socially responsible practices within their companies.

Value congruence is the amount of overlap that exists between an individual's personal values and the values he or she perceives to exist in leadership or the organization (Cazier, Shao, & St. Louis, 2007). There are a variety of ways to define "values". It has been defined as normative beliefs about preferred or desired results and the proper standards of conduct (Nystrom, 1990). Rokeach (1973) defines value systems as an enduring group of beliefs regarding preferable modes of conduct or end-states of existence along a range of relative importance. Liedtka (1989) notes that values serve as important determinants of behavior and provide criteria for decision making. Krishnan (2002) reports that value congruence implies harmony in the relationship between leaders and followers, and that transformational leadership is positively related to leader-follower value system congruence.

Jung and Avolio (2000) study the effect of transformational and transactional leadership styles on performance, when mediated by trust and value congruence. Performance in the study related to participants working on a brainstorming project responsible for making recommendations to improve the quality of the education provided by a business school, and performance was objectively measured by the quantity and quality of the recommendations generated, and subjectively measured by the participants' satisfaction with the leader. They find transformational leadership has a strong direct positive effect on performance, and transformational leadership has an indirect effect on performance when transformational leadership is mediated through the follower's trust and value congruence with the leader. As it relates to transactional leadership, Jung and Avolio (2000) find transactional leadership does not have a positive direct effect on performance. Jung and Avolio (2000) report that transactional leadership only has indirect effects on performance when transactional leadership is mediated through the followers' trust and value congruence, even though transactional leaders are primarily focused on task completion.

Building on this work, Tuan (2012) studies the relation between transformational leadership and ethical behavior. Tuan finds that transformational leadership fosters knowledge-based and identity-based trust, and notes that these trust dimensions are correlated with a lower degree of unethical behavior. The results also show a direct link between transformational leadership and a lower degree of unethical behavior such as bribery, lying, and personal gain. The results of Tuan (2012) indicate that transformational leadership can lead to the development of ethical corporate social responsibility. The third trust dimension examined in the study is calculus-based trust, which is correlated with a higher degree of unethical behavior and more closely related to transactional leadership. Based on this discussion, transformational leadership has been linked to having a positive influence on performance and to ethical behavior, but it has not been examined in relation to whistleblowing. This paper extends previous research by focusing on whistleblowing as a form of ethical performance.

The previous studies do not examine the influence transformational and transactional leadership behavior has on the intent to blow the whistle on fraud. Mayer et al. (2013) examine ethical leadership on intent to report unethical conduct in general, but not related specifically to occupational fraud. In addition, research indicates that although ethical leadership partially overlaps with the ethical dimensions of transformational and

transactional leadership styles, ethical leadership is distinct and different from transformational and transactional leadership styles (Brown et al., 2005). Brown and Trevino (2006) report that although ethical leadership is significantly correlated with certain dimensions of transformational leadership, such as the idealized influence dimension, the moral management dimension of ethical leadership is more consistent with the transactional leadership style. It is also noted that the intellectually stimulating and visionary aspects of transformational leadership are not included in the construct of ethical leadership (Brown & Trevino, 2006). Thus, the current literature does not focus on the influence on an employee's intent to blow the whistle on fraud from the perspective of a specific leadership style. This study examines this current gap in the literature. The specific leadership styles examined in this study are transformational leadership and transactional leadership. Jung and Avolio (2000) find no direct positive relationship between transactional leadership and performance. The positive direct and indirect influence that transformational leadership has on performance compared to transactional leadership (Avolio & Bass, 1995; Jung & Avolio, 2000) and the influence transformational leadership has on ethical performance (Tuan, 2012) lead to the following directional hypothesis.

H1: An employee's intention to blow the whistle on fraud is greater under a transformational leader than under a transactional leader.

Leadership Style and Personal Costs

Previous studies have examined the relation between personal costs and an individual's intent to report wrongdoing (Schultz et al., 1993; Kaplan & Whitecotton, 2001; Shawer & Clements, 2008; Mayer et al.; 2013). Research indicates that reporting

intentions are higher when personal costs are low (Jones, 1991; Schultz et al., 1993; Kaplan & Whitecotton, 2001; Cohen & Bennie, 2006; Shawer & Clements, 2008; Mayer et al.; 2013). Previous research on the influence leadership style on ethical behavior and performance indicates that transformational leadership has a positive effect on ethical behavior and performance (Jung & Avolio, 2000; Tuan, 2012). When personal costs are high, reporting intentions are lower (Schultz et al., 1993; Kaplan & Whitecotton, 2001).

I examine the interaction of leadership style (transformational or transactional) and personal costs to understand whether transformational leadership has a greater effect on intent to blow the whistle when personal costs are high, rather than low. Previous studies have not examined the interaction of leadership style and personal costs. I expect that when personal costs are low, leadership style will have less influence on reporting intentions, since many people will report. However, when personal costs are high, the leadership style of the manager should become more relevant to the more difficult decision of whether to report. This discussion leads to the following hypothesis:

H2: The effect of leadership style on the intent to blow the whistle on fraud is more pronounced when personal costs are higher than when personal costs are lower.

Value system congruence between leader and follower is one of the most important characteristics of transformational leadership (Krishnan, 2002). Podsakoff, Mackenzie, Moorman, and Fetter (1990, 108) report that "transformational leadership influenced followers' organizational citizenship behaviors only indirectly, in that it was mediated by the followers' level of trust in the leader." Jung and Avolio (2000) study the effect of transformational and transactional leadership styles on performance when mediated by trust and value congruence. Existing research studies do not examine the relationship between leadership styles, trust, value congruence, and whistleblowing.

Person-organization fit relates to an individual preferring an organization that possesses characteristics (such as values, beliefs) that are similar to their own (Amos & Weathington, 2008; Kroeger, 1995). Amos and Weathington (2008) report that personorganization fit is essential to companies because it suggests that if individuals fit well with a company, they are likely to demonstrate more positive attitudes and behaviors, such as internal whistleblowing which is a positive behavior encouraged in the workplace and that is beneficial to an organization (Park & Blenkinsopp, 2009; Miceli, Near, & Dworkin, 2009). Value congruence is the amount of overlap between an individual's personal values and the values he perceives to exist in leadership or the organization (Cazier et al., 2007). Jung and Avolio (2000) report that when a follower's values are compatible with the transformational leader's values, it is expected that the follower will shift motivation from focusing on self-interest to considering the more collective interests of the group or organization.

The influence of personal values on ethical decision making has also been studied (Fritzsche, 1995). Trust has been researched from the employee's or subordinate's viewpoint and the influence of perceived trustworthiness on work attitudes and organizational citizenship behavior (Lester & Brower, 2003). It has been shown that value congruence, when mediated by trust, has a positive impact on information disclosure by individuals (Cazier et al., 2007). Jung and Avolio (2000) report that transformational leadership has a strong indirect influence on performance, mediated through trust and also mediated through value congruence, compared to transactional

leadership which also had an indirect influence on performance, but not as strong of an effect. Tuan (2012) reports the positive influence transformational leadership has on performance and ethical behavior. In the present study, whistleblowing is a form of ethical performance (Gatewood & Carroll, 1991; Miceli et al., 2009; Selvarajan & Sardessai, 2010). This discussion leads to the following hypothesis.

H3a: Transformational leadership, mediated through trust, will have a positive influence on an employee's intent to whistleblow on fraud.

H3b: Transformational leadership, mediated through value congruence, will have a positive influence on an employee's intent to whistleblow on fraud.⁴

Research Question

In addition to the hypotheses above, I also examine one research question. The influence leadership style or personal cost has on the intent to whistleblow on fraud may vary by fraud type. The effect of fraud type (misappropriation of assets or fraudulent financial reporting) on reporting intention has been examined in prior research (Kaplan & Schultz, 2007; Kaplan et al., 2009; Kaplan et al., 2010), and the results have been inconsistent. Kaplan et al. (2009) report higher intent to report fraud for a misappropriation of assets scenario than a scenario related to financial reporting fraud. Kaplan and Schultz (2007) and Kaplan et al. (2010) both report no significant variation in reporting by type of fraudulent act. The conflicting results from prior studies regarding the influence of fraud type on reporting intention motivates the following research question:

⁴ Although not hypothesized, I also will explore any indirect effect of transactional leadership on intent to whistleblow on fraud.

RQ1: Do the effects of leadership style or personal cost on the intent to blow the whistle on fraud vary by fraud type?

The focus of this RQ is whether the basic pattern of results varies between the fraudulent financial reporting conditions and the misappropriation of assets conditions. The focus is not on the mean level of intent to whistleblow in each fraud type.

CHAPTER 3 - METHODS

Design

An experimental, $2x^2$ research design is used. The manipulated independent variables are LEADERSHIP STYLE (two types: Transformational and Transactional) and PERSONAL COSTS (two types: Low and High). Leadership style and personal costs are manipulated between-subjects. In addition, the participants evaluate two independent fraud cases (FRAUD TYPE of Misappropriation of Assets and Fraudulent Financial Reporting), with the fraud types presented in random order. Trust and Value Congruence are measured variables included in the study that use a five-point scale that reflects 1 = strongly disagree to 5 = strongly agree. The dependent variable in this study is the participant's intent to blow the whistle on suspected fraud, and I examine intent to report anonymously, to the Controller, or to the SEC.

Instrument

The participants are given an experimental instrument that describes the background of a hypothetical manufacturing company I created for the purpose of this study, since manufacturing is a common industry for fraud (ACFE, 2014). The manufacturing company in this study is described as being publicly-traded and specializes in supplying repair and maintenance materials and supplies to industrial and commercial facilities worldwide. The organizational structure of the company is summarized, and the participants are informed that their position in the organization structure is the Finance Manager, reporting directly to the Controller. The instrument places participants into one of two leadership style conditions (transformational or transactional), and participants are placed in either a low or high personal cost position. In order to ensure the personal cost positions do not impact the leadership style manipulation, the personal costs focus on the potential for peer retaliation, as opposed to management retaliation. Two types of fraud are presented in two different scenarios in random order.

In response to the scenarios, participants are asked to indicate their intent to blow the whistle on the fraudulent acts (to various parties). Participants are also asked to provide responses to questions regarding their perceptions of whistleblowing and whistleblower protections, manipulation check questions, and questions about their backgrounds.

The instrument was pre-tested for understandability and readability by 43 undergraduate forensic accounting students and five academic researchers. The feedback and recommendations provided during pre-testing were appropriately incorporated before the final instrument was developed and administered. A full copy of the instrument is included in Appendix A.

Independent Variables

Leadership Style

The type of leadership style for the supervisor is manipulated at two levels: transformational leadership style and transactional leadership style. The participants receive cases that provide the characteristics of the supervisor as depicted through the content of a speech the supervisor gives to staff during a recent staff meeting. These descriptions are based on the transformational and transactional leadership characteristics and behaviors reported in Bass (1985), Podsakoff et al. (1990), and Jung and Avolio (2000).

Similar to Jung and Avolio (2000), a Multi-factor Leadership Questionnaire (MLQ) is used to assess transformational and transactional leadership characteristics using a five-point scale that reflects 1 = strongly disagree to 5 = strongly agree. I used 18 questions from the MLQ as manipulation check questions, and the participants' answers to the questions serve as a measure of their interpretation of the leadership style presented to them.

Personal Cost

This variable is manipulated at two levels: high or low. This manipulation relates to whether the circumstances presented in the scenario reflect high or low personal cost. The scenarios provide a distinction between a high or low personal cost factors regarding the risk of reprisal or whether the participant will be penalized or sanctioned by his/her peers (Schultz et al., 1993; Kaplan & Whitecotton, 2001; Ayers & Kaplan, 2005). Type of Fraud There are two different, independent fraud types presented in this study: misappropriation of assets and fraudulent financial reporting. Participants receive a scenario for each fraud type, and the order in which the fraud types are presented to the participants is randomized. The misappropriation of assets scenario involves a suspected fictitious billing scheme, since fraudulent disbursement via a billing scheme is a common fraudulent activity (Kaplan et al., 2009; Kaplan et al., 2010) across industries and accounts for approximately 22.4% of fraud cases in the manufacturing industry (ACFE, 2014), which is used as the setting for this study. The fraudulent financial reporting scenario reflects an accounting manager who is inflating gross revenue by using aggressive revenue recognition practices, since revenue overstatement via the reporting of fictitious revenue is a common fraudulent activity across industries (Kaplan et al., 2009; ACFE, 2014).

Dependent Variable

The dependent variable is this study is the likelihood of the participant's intent to report suspected fraud. This study employs a nine-point scale that ranges from "none" = 1 to "extremely likely" = 9.5 There are three possible reporting channels in this study. Participants provide intentions for reporting fraud anonymously, directly to the Controller, and directly to the SEC. Participants are asked to provide their own reporting intentions as well as their thoughts on the reporting intentions of a "typical" manager. Therefore, there are a total of 12 "likelihood to report" questions (six per fraud scenario). The "typical" manager questions use the same nine-point scale.

⁵ Previous studies that have examined reporting intentions (Kaplan, 1995; Ayers & Kaplan, 2005; Kaplan & Schultz, 2007; Kaplan et al., 2009; Kaplan et al., 2010, 2011) have used a seven-point reporting intention scale that ranges from "extremely unlikely" = 1 to "extremely likely" = 7. This current study uses a nine-point scale for greater precision.

Other Measures

The survey instrument also includes six questions (three for each fraud scenario) regarding the participants' concern about the personal costs if they report the wrongdoing. The nine-point scale for the personal cost concern questions ranges from "not at all concerned" = 1 to "extremely concerned" = 9. Previous research reports that people usually believe they are more ethical than their peers (Randall & Fernandes, 1991). Also, to analyze a social desirability bias⁶ (Cohen, Pant, & Sharp, 1998, 2001; Chung & Monroe, 2003; Kaplan et al., 2011), the differences between the results of the participants' "you" report results and the "typical manager" reports results also are analyzed in each fraud scenario in this study and equate to six additional dependent measures.

Models

Based on the discussion above and the control variables discussed below, the MANCOVA and ANCOVA models used to test the hypotheses are:

Intent to Report (several variations of this) = f (Leadership Style, Personal Cost,

Leadership Style X Personal Cost, Gender, Age, Public Company, Responsibility)

The identification of control variables is somewhat exploratory, as prior literature does not provide a consistent listing of control variables to consider when examining intent to report fraud. The use of Public Company as a control variable is consistent with prior literature that examines fraud prevention, internal control elements, and internal control strength by public companies and nonpublic companies, and finds that public

⁶ Social desirability is "the tendency of individuals to deny socially undesirable traits and behaviors and to admit to socially desirable ones" (Randall & Fernandes, 1991, 805). Social desirability bias is defined as "the tendency of individuals to underestimate (overestimate) the likelihood they would perform an undersirable (desirable) action" (Chung & Monroe, 2003, 241).

companies typically have more effective internal controls (Hermanson, Smith, & Stephens, 2012). Mesmer-Magnus and Viswesvaran's (2005) meta-analysis provides results that identify gender, age, and responsibility as factors influencing whistleblowing. They find that females are more likely than males to whistleblow, older employees are more likely to have an intent to whistleblow, there is a positive relationship between role responsibility and reporting internally, and there is a negative correlation between role responsibility and reporting externally. Taylor and Curtis (2013) explore the influence of gender on whistleblowing in audit firms, and the results of the study indicate that females are less likely to whistleblow. The influence of gender and age on whistleblowing is also analyzed in Near and Miceli's (1996) meta-analysis, and the study reports that males and older individuals are more likely to blow the whistle. The positive influence of perceived personal responsibility on reporting intention (Ayers & Kaplan, 2005) and the positive influence perceived responsibility has on fraud detection (DeZoort, Harrison, & Schnee, 2012) are explored in prior literature. The identification of gender, age, public company organizational type, and responsibility as factors associated with whistleblowing and fraud detection in prior research is consistent with these factors being used as control variables in this study.

Participants

Previous studies have used MBA students to examine whistleblower reporting intentions (Ayers & Kaplan, 2005; Kaplan & Schultz, 2007; Kaplan et al., 2010, 2011). I identified participants for the study by submitting requests to Business School Deans, Accounting Program Directors, and/or Accounting Professors at seven universities with an Executive/Professional MBA. Four of the seven universities contacted agreed to

provide access to the students in their respective Executive/Professional MBA programs. I was allowed to either administer the instrument during class time (allotted time at the beginning of class to request participants and provide a copy of the instrument to participant for them complete and return to me via USPS mail) or mail materials directly to students in the Executive/Professional MBA programs for them to complete and return to me via USPS mail. I approached 166 students in person to complete the instrument during class time or return via USPS mail subsequent to class. Ninety-eight (59%) completed and returned the instrument. I mailed 155 instruments, of which 70 (45%) overlapped with students I had initially approached in class at one of the institutions I visited in person. To ensure students did not complete the instrument twice, I enclosed a letter in the mailing that informed students that they should not complete the survey if they already completed the survey in class during my in-person visit. A copy of the correspondence is included in Appendix B. Excluding the 70 students who overlapped as a result of an in-person participation request, 85 students were mailed a request to participate in my study, of which 11 (12.9%) were returned completed and eight (9.4%) were returned for inaccurate addresses. From these efforts, 109 Executive/Professional MBA students participated in the study, for a participation rate of 43%.⁷

³⁴

⁷ As discussed below, four participants provided incomplete responses.

CHAPTER 4 – DATA ANALYSIS AND FINDINGS

Manipulation Checks

Eighteen questions from the Multi-factor Leadership Questionnaire (Jung & Avolio, 2000) are used to assess transformational and transactional leadership characteristics using a five-point scale that reflects 1 = strongly disagree to 5 = strongly agree. Ten questions related to transformational leadership characteristics, and eight questions related to transactional leadership characteristics. The participants reference a speech given by their supervisor in the case setting and respond to the MLQ questions. See Appendix C for a table that reflects how the speech for each leadership style condition was constructed to ensure equivalence in speech length and appropriate depiction of leadership style. The effectiveness of the manipulation is evaluated based on the MLQ score (transformational compared to transactional) for the participant. The leadership style receiving the highest score represents the leadership style that the participant associates with the leader in the case. Specifically, the MLQ score indicates whether the participant perceived the leader to be transformational or transactional, and if this MLQ assessment matches the participant's experimental condition, then s/he passed this manipulation check.

One question is used to evaluate the effectiveness of the personal cost manipulation in the instrument. Participants are asked to indicate whether individuals suspected of whistleblowing at the company are or are not "considered troublemakers by their peers, isolated by their peers, or receive the cold shoulder from their peers".

A total of 109 Executive/Professional MBA students completed the instrument. I excluded the 25 participants (22.9%) who failed one or both of the manipulation checks.

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Nine participants failed the leadership manipulation, and eight failed the personal cost manipulation.⁸ An additional four participants (3.7%) are excluded for missing data. The remaining 80 participants are included in the study.⁹

Participants' Perception of the Case

Participants responded to questions that provided feedback on how realistic (1 = Not at all realistic, 5 = Very realistic) and how understandable (1 = Not at all

understandable, 5 = Very understandable) they found the case. The participants found the

case realistic (mean of 3.85, S.D. = 0.86) and understandable (mean of 4.31, S.D. = 0.87).

The means for realistic and understandable are significantly greater than the scale

midpoint of 3 (p < 0.001).

Demographics

The demographics for the 80 participants are shown in Table 1. The majority of the participants are male (67.5%), over the age of 29 (76.2%), and work full-time (90.0%). Most participants work for companies that are not publicly traded (66.2%) and serve in roles that are Manager level and above (58.8%). Executive/Professional MBA students were utilized in this study. The highest level of education for most of the

⁸ The majority of the participants who failed either the leadership style or personal cost manipulation are male (12 of the 17 or 70.6%), and the highest level of education for 12 of the 17 (70.6%) is a Bachelors degree. There are eight participants who failed both manipulation checks. Seven of the eight participants (87.5%) who failed both manipulation checks are male, the highest level of education for seven of the eight (87.5%) is a Masters degree, 37.5% are under 30 years old, 25% are 30-35 years old, 25% are 36-40 years old, and 12.5% are 41-45 years old; 62.5% are employed in Manager level positions.

⁹ In addition, I ran the full ANCOVA models including participants who failed manipulation checks. The results (n = 105) are generally consistent with results in Tables 5, 6, 8, 9, 10, and 13. Gender is not significant in Table 5 model, and Age is not significant in Table 9 model; however, Public Company becomes significant in Table 10 model, and Age becomes significant in Table 13 model). The models in Tables 7, 11, 12, and 14 are not significant when participants who failed the manipulation checks are included; however, two other models (Personal Cost Concern if You Report Financial Reporting Fraud to Controller and Report Misappropriation of Assets to Controller: Likelihood Difference between You and Typical Manager) become marginally significant.

participants is a Bachelors degree, and a small percentage have already earned a Masters level degree or above (6.3%).

	Demogra		
	(n = 80))	ſ
		Number	Percentage
Age			
	Under 30	19	23.8%
	30-35	27	33.8%
	36-40	18	22.5%
	41-45	10	12.5%
	Over 45	6	7.5%
Gender			
	Male	54	67.5%
	Female	26	32.5%
Highest Education			
	Bachelors	73	91.2%
	Masters	3	3.8%
	JD	2	2.5%
	MD	2	2.5%
Job Level			
	Executive	16	20.0%
	Director	11	13.8%
	Manager	20	25.0%
	Staff	13	16.2%
	Technical	18	22.5%
	Other/No response*	2	2.5%
Employed by Public or			
Non-Public Company			
	Public	27	33.8%
	Non-Public	53	66.2%
		55	00.270
Employed Full-time or			
Not Full-time			
	Full-time	72	90.0%
	Not Full-time**	8	10.0%

Table 1 Demographics (n = 80)

* No response provided

^{**} Part-time employment reported for 7 participants and no response provided from 1 participant

Descriptive Statistics

Descriptive statistics for the dependent variables are presented in Table 2. Participants are equally likely to report financial reporting fraud anonymously and to report financial reporting fraud to a Controller (means of 6.15 and 6.45, respectively, on a scale of 1 = "none" and 9 = "extremely likely; t-test for difference has p = 0.4662). Participants are neutral about reporting financial reporting fraud to the SEC (mean of Likelihood You Report Financial Reporting Fraud to SEC = 4.01, S.D. = 2.457). Both of the means of reporting financial reporting fraud anonymously and to a Controller are higher than the mean for reporting to the SEC (p < 0.001 in both cases). The participants indicated that a typical manager is more likely to report financial reporting fraud anonymously than to a Controller (mean of Likelihood Typical Manager Reports Financial Reporting Fraud Anonymously = 5.58, S.D. = 2.145, the mean of Likelihood Typical Manager Reports Financial Reporting Fraud to the Controller = 4.84, S.D. =2.230, t-test for difference has p = 0.016), and the mean of Likelihood Typical Manager Reporting Fraud to the SEC = 3.63, S.D. = 2.201. Both of these means are higher than the mean for a typical manager reporting financial reporting fraud to the SEC (mean = 4.01, p < 0.001 in both cases).

The mean of Likelihood You Report Misappropriation of Assets Anonymously = 6.94, S.D. = 2.543, and the mean of Likelihood You Report Misappropriation of Assets to the Controller = 6.78, S.D. = 2.667, are not significantly different from each other (t-test for difference has p = 0.727). Both of these means are significantly higher than the mean of Likelihood You Report Misappropriation of Assets to the SEC = 2.58, S.D. = 1.895 (t-

test for difference has p < 0.001 in both cases). Inquiries related to the likelihood of a typical manager reporting fraud reflects that the mean of Likelihood Typical Manager Reports Misappropriation of Assets Anonymously = 6.15, S.D. = 2.032, which is higher than the mean of Likelihood Typical Manager Reports Misappropriation of Assets to the Controller = 5.60, S.D. = 2.336 (t-test for difference has p = 0.045). Both of these means are significantly higher than the mean of Likelihood Typical Manager Reports Misappropriation of Assets to the SEC = 2.94, S.D. = 1.851 (in both cases, the t-test for difference has a p < 0.001).

Participants also responded to the personal cost questions regarding concerns about being considered a troublemaker by peers, being isolated by peers, and receiving the cold shoulder from peers if they reported fraudulent activities. The mean of Personal Cost Concern if You Report Financial Reporting Fraud Anonymously = 3.65, S.D. =2.496, the mean of Personal Cost Concern if You Report Financial Reporting Fraud to Controller = 4.99, S.D. = 2.583, and the mean of Personal Cost Concern if You Report Financial Reporting Fraud to SEC = 6.09, S.D. = 2.856. Results reveal more concern about personal costs if financial reporting fraud was reported to the Controller than anonymously (t-test for difference has p < 0.001), and more concern if financial reporting fraud was reported to the SEC compared to reporting anonymously (t-test for difference has p < 0.001) or SEC compared to the Controller directly (t-test for difference has p < 0.001) 0.001). The results also reveal the participants have less concern about personal cost when reporting anonymously compared to the Controller when the fraud reporting relates to misappropriation of assets (mean of Personal Cost Concern if You Report Misappropriation of Assets Anonymously = 2.93, S.D. = 2.209, mean of Personal Cost

Concern if You Report Misappropriation of Assets to Controller = 3.94, S.D. = 2.441, and t-tests for difference has p < 0.001). Both of these means are significantly lower than the mean of Personal Cost Concern if You Report Misappropriation of Assets to SEC = 5.30, S.D. = 2.983, t-test has p < 0.001 in both cases).

One sample t-tests on the reporting likelihood difference between "You" and "Typical Manager" variables are run to see if the difference variables are statistically different from zero, and the results reveal significance (p < 0.05) for reporting Financial Reporting Fraud Anonymously, Financial Reporting Fraud to Controller, Misappropriation of Assets Anonymously, and Misappropriation of Assets to Controller (means = 0.58, 1.61, 0.79, and 1.18, respectively). The one sample t-tests on the reporting likelihood difference for reporting Financial Reporting Fraud to the SEC (mean = 0.39) and Misappropriation of Assets to the SEC (mean = -0.36) are marginally significant (p =0.080 and p = 0.064, respectively).

	(n = 80)	
	Mean	Std. Deviation (S.D.)
You Report Financial Reporting Fraud:		
Likelihood You Report Financial Reporting		
Fraud Anonymously*	6.15 ^a	2.491
Likelihood You Report Financial Reporting		
Fraud to Controller*	6.45 ^a	2.418
Likelihood You Report Financial Reporting		
Fraud to SEC*	4.01 ^b	2.457
Typical Manager Reports Financial		
Reporting Fraud:		
Likelihood Typical Manager Reports		
Financial Reporting Fraud Anonymously*	5.58 ^b	2.145

Table 2 Descriptive Statistics – Dependent Variables (n = 80)

Likelihood Typical Manager Reports 4.84 ^b 2.230 Financial Reporting Fraud to Controller* 4.84 ^b 2.230 Likelihood Typical Manager Reports 5.63 ^b 2.201 Personal Cost Concern, Financial Reporting 7.201 7.201 Personal Cost Concern if You Report 7.2496 7.2496 Financial Reporting Fraud Anonymously** 3.65 ^b 2.496 Personal Cost Concern if You Report 7.2583 7.2583 Personal Cost Concern if You Report 6.09 ^b 2.856 You Report Misappropriation of Assets: 7.2583 7.2543 Likelihood You Report Misappropriation of Assets to Controller* 6.78 ^a 2.667 Likelihood You Report Misappropriation of Assets: 7.258 ^b 1.895 Likelihood Typical
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Personal Cost Concern if You Report
Misappropriation of Assets to Controller** 3.94 ^b 2.441
Personal Cost Concern if You Report
Misappropriation of Assets to SEC** 5.30 ^b 2.983
Difference between You and Typical
Manager:

Report Financial Reporting Fraud		
Anonymously: Likelihood Difference		
between You and Typical Manager	.58	2.103
Report Financial Reporting Fraud to		
Controller: Likelihood Difference between		
You and Typical Manager	1.61	2.538
Report Financial Reporting Fraud to SEC:		
Likelihood Difference between You and		
Typical Manager	.39	1.952
Report Misappropriation of Assets		
Anonymously: Likelihood Difference		
between You and Typical Manager	.79	2.519
Report Misappropriation of Assets to		
Controller: Likelihood Difference between		
You and Typical Manager	1.18	2.407
Report Misappropriation of Assets to SEC:		
Likelihood Difference between You and		
Typical Manager	36	1.723

* Scale 1 = None, 9 = Extremely likely

** Scale 1 = Not at all concerned, 9 = Extremely concerned

^a Mean is not significantly different from other means in this grouping that have this same coding (^a) (not done in difference section).

^b Mean is significantly different from other means in this grouping (not done in difference section).

Cell Sizes and Variable Definitions

The cell sizes appear in Table 3 – Panel A and indicate that 22 participants are

given the Transformational/Low Personal Cost treatment, 18 are given the

Transformational/High Personal Cost treatment, 23 participants are given the

Transactional/Low Personal Cost treatment, and 17 are given the Transactional/ High

Personal Cost treatment. The coding of each variable is presented in Table 3 – Panel B.

-		Cell Sizes	
	Transformational	Transactional	
	Leadership Style	Leadership Style	Total
Low Personal Cost	22	23	45
High Personal Cost	18	17	35
Total	40	40	80

Table 3 – Panel A	
Cell Sizes	

Table 3 – Panel B Variable Definitions

Variable Name	Description
Leadership Style	Supervisor's style is portrayed in the
	instrument as having attributes
	associated with Transformational
	Leadership style or Transactional
	Leadership Style; = 1 if
	Transformational, = 0 if Transactional
Personal Cost	Level of the participant's risk of
	reprisal or sanctions being imposed by
	peers if participant reported fraud; = 1
	if high, = 0 if low
Gender	=1 if participant is female, = 0 if male
Age	Age of participant in years
Public Company	= 1 if participant works for a publicly
	traded company, 0 if not publicly
	traded
Responsibility	Participant's level of responsibility for
	reporting fraudulent behavior (scale
	from 1 = No responsibility to 5 =
	Complete responsibility)

MANCOVA Results

I first ran MANCOVA models to examine the effects of Leadership Style, Personal Cost, and the interaction of Leadership Style and Personal Cost on intent to report financial reporting fraud and misappropriation of assets. Gender, Age, Public Company, and Responsibility are the control variables. I analyzed reporting intention across fraud scenarios and all reporting channels available for both the participant and the participant's perception of how a typical manager would report fraudulent behavior. Models that are significant or marginally significant are reported in Table 4.

The model reflected in Table 4 – Panel A is based on the six dependent variables reflected in the You Report Financial Reporting Fraud and the You Report Misappropriation of Assets groupings in Table 2 (i.e., report anonymously, to Controller, and to SEC). The model in Table 4 – Panel A is significant (F = 1.50 and p = 0.030). The coefficient on Age is significant, p = 0.011, and the coefficient on Responsibility is marginally significant, p = 0.058.

The model based on the six dependent variables reflected in the Typical Manager Reports Financial Reporting Fraud and the Typical Manager Reports Misappropriation of Assets groupings in Table 2 (i.e., report anonymously, to Controller, and to SEC) are captured in Table 4 – Panel B. The Table 4 – Panel B model is significant (F = 1.43 and p = 0.046). The coefficients of Age and Responsibility are also significant or marginally significant (p = 0.004 and p = 0.089, respectively).

The reporting intentions of the participant based only on the financial reporting fraud scenario, considering all reporting channels available, is reported in Table 4 – Panel C (three variables for you report anonymously, to Controller, and to SEC). The model in Table 4 – Panel C is significant at p = 0.054 (F = 1.59). The coefficient on Gender (female) is marginally significant, p = 0.087, and the coefficient on Responsibility is significant, p = 0.015. I also ran a model of the reporting intentions of a typical manager based only on the financial reporting fraud scenario, considering all reporting channels, and the model was not significant.

The reporting intentions of the participant based only on the misappropriation of assets fraud scenario, considering all reporting channels available (three variables for report anonymously, to Controller, and to SEC), is reported in Table 4 – Panel D. The model in Table 4 – Panel D is marginally significant (F = 1.52 and p = 0.075). The coefficient on Age is significant, p = 0.001.

I also ran a model of the reporting intentions of a typical manager based only on the misappropriation of assets fraud scenario, considering all three reporting channels, and the model is reported in Table 4 – Panel E and is significant (F = 1.61 and p = 0.050). The coefficient on Age is also significant in this model, p = 0.027, and the coefficient on Leadership Style is marginally significant (p = 0.094).

Overall, the MANCOVA results in Panels A – E of Table 4 indicate that Age and Responsibility are most consistently related to reporting intentions. In addition, Gender is significant in one case, and Leadership Style is marginally significant in one instance.¹⁰

To gain more insight on reporting behavior, I also examined the personal cost concern of reporting fraud. I analyzed the concern of reporting financial reporting fraud and misappropriation of assets combined and then separately. The models for the combined fraud scenarios and financial reporting fraud separately are not significant. The model for personal cost concern of reporting misappropriation of assets is reported in Table 4 – Panel F and is significant (F = 1.65 and p = 0.042). The coefficient on Gender is marginally significant, p = 0.102, and the coefficient on Age is significant, p = 0.006.

¹⁰ If I run the MANCOVAs on the full sample (n = 105, including those who failed a manipulation check), the models in Panels B, D, and E are not significant.

Table 4 – Panel A Model: Intent to Report (You Report Financial Reporting Fraud [3 Variables], You Report Misappropriation of Assets [3 Variables]) = f (Leadership Style, Personal Cost, Leadership Style X Personal Cost, Gender, Age, Public Company, Responsibility)

	(n = 80)		
Source	df	F	Sig.
Model	7	1.50	0.030
Leadership Style	1	0.70	0.647
Personal Cost	1	0.93	0.481
Leadership Style * Personal Cost	1	1.27	0.285
Gender	1	1.13	0.357
Age	1	3.02	0.011
Public Company	1	1.28	0.276
Responsibility	1	2.15	0.058
Error	72		
Total	80		
Corrected Total	79		

Note: Wilks' lambda results are reported in table.

Table 4 – Panel B

Model: Intent to Report (Typical Manager Reports Financial Reporting Fraud [3 Variables], Typical Manager Reports Misappropriation of Assets [3 Variables]) = f (Leadership Style, Personal Cost, Leadership Style X Personal Cost, Gender, Age, Public Company, Responsibility)

(n = 80)

Source	df	F	Sig.
Model	7	1.43	0.046
Leadership Style	1	1.73	0.128
Personal Cost	1	1.46	0.205
Leadership Style * Personal Cost	1	1.05	0.403
Gender	1	0.22	0.969
Age	1	3.58	0.004
Public Company	1	0.48	0.820
Responsibility	1	1.93	0.089
Error	72		
Total	80		
Corrected Total	79		

Table 4 – Panel C Model: Intent to Report (You Report Financial Reporting Fraud [3 Variables]) = f (Leadership Style, Personal Cost, Leadership Style X Personal Cost, Gender, Age, Public Company, Responsibility)

Source	df	F	Sig.
Model	7	1.59	0.054
Leadership Style	1	0.82	0.488
Personal Cost	1	0.30	0.824
Leadership Style * Personal Cost	1	1.99	0.123
Gender	1	2.28	0.087
Age	1	0.25	0.858
Public Company	1	1.70	0.175
Responsibility	1	3.75	0.015
Error	72		
Total	80		
Corrected Total	79		

(n = 80)

Table 4 – Panel D Model: Intent to Report (You Report Misappropriation of Assets [3 Variables]) = f (Leadership Style, Personal Cost, Leadership Style X Personal Cost, Gender, Age, Public Company, Responsibility)

((n =	80)	
	<u> </u>	007	

Source	df	F	Sig.
Model	7	1.52	0.075
Leadership Style	1	0.31	0.819
Personal Cost	1	1.44	0.237
Leadership Style * Personal Cost	1	0.38	0.770
Gender	1	1.08	0.364
Age	1	5.83	0.001
Public Company	1	1.09	0.361
Responsibility	1	0.47	0.703
Error	72		
Total	80		
Corrected Total	79		

Table 4 – Panel E
Model: Intent to Report (Typical Manager Reports Misappropriation of Assets [3
Variables]) = f (Leadership Style, Personal Cost, Leadership Style X Personal
Cost, Gender, Age, Public Company, Responsibility)

Source	df	F	Sig.
Model	7	1.61	0.050
Leadership Style	1	2.22	0.094
Personal Cost	1	1.46	0.232
Leadership Style * Personal Cost	1	1.68	0.179
Gender	1	0.28	0.842
Age	1	3.24	0.027
Public Company	1	0.70	0.553
Responsibility	1	0.60	0.617
Error	72		
Total	80		
Corrected Total	79		

(n = 80)

Table 4 – Panel F Model: Personal Cost Concern Reporting Misappropriation of Assets [3 Variables] = f (Leadership Style, Personal Cost, Leadership Style X Personal Cost, Gender, Age, Public Company, Responsibility)

(n	_	20)
(11)	_	00)

Source	df	F	Sig.
Model	7	1.65	0.042
Leadership Style	1	1.35	0.264
Personal Cost	1	1.94	0.131
Leadership Style * Personal Cost	1	0.98	0.409
Gender	1	2.15	0.102
Age	1	4.52	0.006
Public Company	1	0.49	0.689
Responsibility	1	1.37	0.258
Error	72		
Total	80		
Corrected Total	79		

ANCOVA Results

Based on the MANCOVA results, I next ran ANCOVA models to further examine the effects of Leadership Style, Personal Cost, and the interaction of Leadership Style and Personal Cost on intent to report. Gender, Age, Public Company, and Responsibility are the control variables. I ran a total of 24 models based on the dependent variables reflected in Table 2. Only 10 of the ANCOVA models are marginally significant or significant, and these 10 models are presented in Tables 5 through 14. The first subsection (Tables 5 through 9) relates to the hypothesized dependent variables, the second subsection (Tables 10 and 11) examines personal cost concern to obtain additional insight on reporting behavior, and the third subsection (Tables 12 through 14) focuses on social desirability bias results.

Hypothesized Dependent Variable Results

The model in Table 5 uses the Likelihood You Report Financial Reporting Fraud Anonymously as the dependent variable. The model is marginally significant (F = 1.795 and p = 0.101). The coefficient on Gender is significant, p = 0.030, and the coefficient on Responsibility is significant, p = 0.022.¹¹ These results indicate that female participants and the level of responsibility the participant perceives they have for reporting fraudulent behavior are positively related to the likelihood of reporting financial reporting fraud anonymously. The mean of Likelihood to Report Financial Reporting Fraud Anonymously was 7.15 (S.D. = 2.29) for females, versus a mean of 5.67 (S.D. = 2.46) for males (not tabulated).

⁴⁹

¹¹ All p-values are two-tailed.

		(n = 80)		
Source	df	Mean Square	F	Sig.
Corrected Model	7	10.406	1.795	.101
Intercept	1	9.189	1.585	.212
Leadership Style	1	.748	.129	.720
Personal Cost	1	.138	.024	.878
Leadership Style * Personal	1	.242	.042	.839
Cost	1	.272	.072	.000
Gender	1	28.305	4.883	.030
Age	1	3.241	.559	.457
Public Company	1	.743	.128	.721
Responsibility	1	31.809	5.488	.022
Error	72	5.797		
Total	80			
Corrected Total	79			

Table 5ANCOVA Results:DV = Likelihood You Report Financial Reporting Fraud Anonymously

R Squared = .149 (Adjusted R Squared = .066)

Table 6 uses the Likelihood You Report Financial Reporting Fraud to the Controller as the dependent variable. The model is significant (F = 2.318 and p = 0.034). The interaction between Leadership Style and Personal Cost is significant (p = 0.017). The results for the treatments with the low personal cost environment indicate that participants in the transactional leader environment have a mean of 5.87 (S.D. = 2.51), and participants in the transformational leader environment have a mean of 7.14 (S.D. = 2.08). When personal costs are high, participants in the transactional leader environment have a mean of 7.18 (S.D. = 1.85) and participants in the transformational leader environment have a mean of 5.67 (S.D. = 2.87). Therefore, transformational leadership does not have a greater effect on likelihood to blow the whistle when personal costs are high, and H2 is not supported. The coefficients on Gender and Public Company are significant or marginally significant (p = 0.091 and p = 0.027, respectively). The likelihood to report financial reporting fraud to the Controller for male participants has a mean of 6.69 (S.D. = 2.35), and for female participants the mean is only 5.96 (S.D. = 2.52). This gender result is opposite of the results in Table 5 and may suggest that females are more comfortable reporting anonymously, but less comfortable reporting to the Controller. The mean for participants working for a public company is 5.74 (S.D. = 2.60), and for participants working for a nonpublic company the mean is 6.81 (S.D. = 2.26). Thus, public company participants appear less likely to report to the Controller. Finally, note that I find evidence of heteroskedasticity in the model, and the model is not significant (p = 0.106) if I use regression and robust standard errors (see bottom of table).

		(n = 80)		
Source	df	Mean Square	F	Sig.
Corrected Model	7	12.131	2.318	.034*
Intercept	1	33.842	6.465	.013
Leadership Style	1	5.059	.966	.329
Personal Cost	1	.601	.115	.736
Leadership Style * Personal	1	31.137	5.948	.017
Cost	I	51.157	5.940	.017
Gender	1	15.378	2.938	.091
Age	1	.001	.000	.991
Public Company	1	26.778	5.116	.027
Responsibility	1	8.869	1.694	.197
Error	72	5.234		
Total	80			
Corrected Total	79			

Table 6 ANCOVA Results: DV = Likelihood You Report Financial Reporting Fraud to Controller (n = 80)

R Squared = .184 (Adjusted R Squared = .105)

* Breusch-Pagan / Cook-Weisberg test for heteroskedasticity: Prob > chi2 = 0.0002. If I run the model

using regression and robust standard errors, the model has p = 0.106, Gender has p = 0.106, and Public Company has p = 0.066.

The Likelihood Typical Manager Reports Financial Reporting Fraud to the SEC is the dependent variable in the model presented in Table 7. The model is marginally significant (F = 1.876 and p = 0.086). The coefficients on Age (p = 0.087) and Responsibility (p = 0.006) are marginally significant and significant, respectively. Age is negatively correlated and level of responsibility assumed for reporting the wrongdoings is positively correlated to the likelihood of reporting financial reporting fraud to the SEC.

(n = 80)					
Source	df	Mean Square	F	Sig.	
Corrected Model	7	8.433	1.876	.086	
Intercept	1	2.387	.531	.469	
Leadership Style	1	6.554	1.458	.231	
Personal Cost	1	.425	.094	.760	
Leadership Style * Personal	1	7.042	1 567	215	
Cost	I	7.043	1.567	.215	
Gender	1	1.144	.254	.615	
Age	1	13.506	3.004	.087	
Public Company	1	.048	.011	.918	
Responsibility	1	35.534	7.903	.006	
Error	72	4.496			
Total	80				
Corrected Total	79				

Table 7ANCOVA Results:DV = Likelihood Typical Manager Reports Financial Reporting Fraud to SEC

R Squared = .154 (Adjusted R Squared = .072)

Age also has an influence on the Likelihood You Report Misappropriation of Assets to Controller dependent variable, as noted in Table 8. The model is significant (F = 2.126 and p = 0.051), and the Age control variable is significant (p = 0.002) and has a positive influence on the likelihood to report to the Controller.

		(n = 80)		
Source	df	Mean Square	F	Sig.
Corrected Model	7	13.750	2.126	.051*
Intercept	1	20.749	3.208	.077
Leadership Style	1	.405	.063	.803
Personal Cost	1	9.807	1.516	.222
Leadership Style * Personal	1	.017	.003	050
Cost	1	.017	.003	.959
Gender	1	11.900	1.840	.179
Age	1	66.781	10.325	.002
Public Company	1	11.525	1.782	.186
Responsibility	1	2.506	.387	.536
Error	72	6.468		
Total	80			
Corrected Total	79			

Table 8ANCOVA Results:DV = Likelihood You Report Misappropriation of Assets to Controller

R Squared = .171 (Adjusted R Squared = .091)

*Breusch-Pagan / Cook-Weisberg test for heteroskedasticity: Prob > chi2 = 0.0465. If I run the model using regression and robust standard errors, the results are similar.

The model presented in Table 9 reflects the Likelihood Typical Manager Reports Misappropriation of Assets to the SEC is significant (F = 2.297 and p = 0.036). The leadership style of the manager (p = 0.083) and the interaction of the leadership style and risk of reprisal (p = 0.064) are marginally significant. In this model, participants indicate that a typical manager is more likely to report misappropriation of assets in the transformational leader (mean of 3.25, S.D. = 2.01) environment than in the transactional leader (mean of 2.63, S.D. = 1.64) environment, consistent with H1.

The results for the treatments with the low personal cost environment indicate that participants think a typical manager in the transactional leader environment (mean of 2.61, S.D. = 1.67) and a typical manager in the transformational leader environment (mean of 2.55, S.D. = 1.44) have a low likelihood to report fraud. However, when personal costs are high, participants think a typical manager in the transformational leader environment is likely to report misappropriation of assets to the SEC (mean of 4.11, S.D. = 2.30) and a typical manager in the transactional leader environment has a low likelihood to report to the SEC (mean of 2.65, S.D. = 1.66). Therefore, employing the option to report externally to the SEC, transformational leadership does appear to have a greater effect on the likelihood of a typical manager to blow the whistle when personal costs are high. This finding is qualitatively consistent with H2, although the greater intention to report when personal costs are high is unexpected.

The Age (p = 0.064) of the participant also is marginally significant. Older participants are less likely to believe that the typical manager will report fraud to the SEC.

DV = Likelihood Typical Manager Reports Misappropriation of Ass(n = 80)						
Source	df	Mean Square	F	Sig.		
Corrected Model	7	7.059	2.297	.036*		
Intercept	1	15.883	5.168	.026		
Leadership Style	1	9.526	3.100	.083		

1

1

1

1

1

1

72

80 79

Table 9 **ANCOVA Results:** SEC

5.481

10.906

10.914

4.022

2.962

3.073

.580

1.783

3.549

.189

3.551

1.309

.964

.186

.064

.665

.064

.256

.330

R Squared = .183 (Adjusted R Squared = .103)

*Breusch-Pagan / Cook-Weisberg test for heteroskedasticity: Prob > chi2 = 0.0300. If I run the model using regression and robust standard errors, the model has p = 0.084, and Leadership Style has p = 0.113 (twotailed).

Personal Cost Concern Results

Cost Gender

Age

Error

Total

Personal Cost

Public Company

Responsibility

Corrected Total

Leadership Style * Personal

To gain more insight on reporting behavior (how concerns about personal costs are affected by the independent variables), this study also examines the level of concern participants have regarding being viewed as a troublemaker, being isolated by their peers, and receiving the cold shoulder if they reported fraudulent behavior. Table 10 presents the model of Personal Cost Concern if You Report Misappropriation of Assets to Controller, and it is significant (F = 2.107 and p = 0.053). Leadership style is marginally significant (p = 0.084). The participants in this model are more likely to be concerned about reporting misappropriation of assets to the Controller in the transformational leader environment (mean of 4.20, S.D. = 2.57) compared to the transactional leader

environment (mean of 3.68, S.D. = 2.30). The level of responsibility to report is marginally significant (p = 0.075) and is negatively correlated with concern. Gender is also marginally significant in this model (p = 0.088). Female participants (mean of 4.42, S.D. = 2.52) are more likely to be concerned about reporting misappropriation of assets to the Controller than their male counterparts (mean of 3.70, S.D. = 2.39).

Table 10
ANCOVA Results:
DV = Personal Cost Concern if You Report Misappropriation of Assets to Controller
(n - 90)

		(n = 80)		
Source	df	Mean Square	F	Sig.
Corrected Model	7	11.434	2.107	.053
Intercept	1	93.217	17.180	.000
Leadership Style	1	16.693	3.077	.084
Personal Cost	1	.579	.107	.745
Leadership Style * Personal	1	7.686	1.417	.238
Cost	I	7.000	1.417	.230
Gender	1	16.196	2.985	.088
Age	1	13.117	2.418	.124
Public Company	1	6.594	1.215	.274
Responsibility	1	17.692	3.261	.075
Error	72	5.426		
Total	80			
Corrected Total	79			

R Squared = .170 (Adjusted R Squared = .089)

Table 11 captures Personal Cost Concern if You Report Misappropriation of Assets to SEC, and this full model is marginally significant at the 0.102 level (F = 1.793). Age is significant (p = 0.016) and is negatively correlated with concern, which indicates that older participants are less concerned about personal cost associated with reporting fraud.

		(n = 80)		
Source	df	Mean Square	F	Sig.
Corrected Model	7	14.904	1.793	.102
Intercept	1	146.479	17.622	.000
Leadership Style	1	3.181	.383	.538
Personal Cost	1	18.453	2.220	.141
Leadership Style * Personal Cost	1	14.922	1.795	.184
Gender	1	15.561	1.872	.175
Age	1	50.680	6.097	.016
Public Company	1	.406	.049	.826
Responsibility	1	1.951	.235	.630
Error	72	8.312		
Total	80			
Corrected Total	79			

Table 11ANCOVA Results:DV = Personal Cost Concern if You Report Misappropriation of Assets to SEC

a. R Squared = .148 (Adjusted R Squared = .066)

Social Desirability Bias Results

Tables 12, 13, and 14 reflect models associated with the reporting differences between the participant and their perceptions of the reporting intent of a typical manager. Table 12 captures the difference between the participants and their thoughts on a typical manager reporting financial reporting fraud anonymously. The model in Table 12 is significant (F = 2.111 and p = 0.053). Personal cost is significant in this model (p = 0.040). The mean for the high personal cost environment is 0.97 (S.D. = 2.01) compared to the mean of 0.27 (S.D. = 2.15) for the low personal cost environment. These results suggest there is a larger difference in reporting intentions (you versus typical manager) when there is a high personal cost environment. Gender is marginally significant (p = 0.053), and the results indicate that reporting intention differences are greater for Females (mean of 1.15, S.D. = 1.71) than for Males (mean of 0.30, S.D. = 2.23). The coefficient on Responsibility is marginally significant (p = 0.101) and has a positive correlation with the dependent variable, indicating that participants assuming more responsibility for reporting have greater gaps between their reporting intentions and those of a typical manager. Finally, note that I find evidence of heteroskedasticity in the model, and the model is not significant (p = 0.179) if I use regression and robust standard errors (see bottom of table).

Table 12				
ANCOVA Results:				
DV = Report Financial Reporting Fraud Anonymously:				
Likelihood Difference between You and Typical Manager				
(n = 80)				

Source	df	Mean Square	F	Sig.
Corrected Model	7	8.502	2.111	.053*
Intercept	1	18.392	4.566	.036
Leadership Style	1	.721	.179	.674
Personal Cost	1	17.615	4.373	.040
Leadership Style * Personal	4	0.050	750	007
Cost	1	3.053	.758	.387
Gender	1	15.622	3.878	.053
Age	1	8.474	2.104	.151
Public Company	1	.857	.213	.646
Responsibility	1	11.108	2.758	.101
Error	72	4.028		
Total	80			
Corrected Total	79			

*Breusch-Pagan / Cook-Weisberg test for heteroskedasticity: Prob > chi2 = 0.0493. If I run the model using
regression and robust standard errors, the model is not significant ($p = 0.179$).

Table 13 reflects the difference between the participants and their perceptions of the reporting intentions of a typical manager to report financial reporting fraud to the Controller. This full model is marginally significant (F = 1.850 and p = 0.091). The

interaction of Leadership Style and Personal Cost is significant (p = 0.039). The highest cell means are for transactional leadership / high cost (mean of 2.65, S.D. = 1.37) and transformational leadership / low cost (mean of 1.91, S.D. = 2.11). The other two cell means are approximately 1.00. Finally, note that I find evidence of heteroskedasticity in the model, and the model is not significant (p = 0.109) if I use regression and robust standard errors (see bottom of table).

		(n = 80)		8
Source	df	Mean Square	F	Sig.
Corrected Model	7	11.086	1.850	.091*
Intercept	1	.638	.106	.745
Leadership Style	1	7.297	1.218	.273
Personal Cost	1	4.089	.682	.411
Leadership Style * Personal		00.000	4 400	000
Cost	1	26.382	4.403	.039
Gender	1	16.132	2.693	.105
Age	1	13.120	2.190	.143
Public Company	1	14.204	2.371	.128
Responsibility	1	.344	.057	.811
Error	72	5.991		
Total	80			
Corrected Total	79			

Table 13
ANCOVA Results:
DV = Report Financial Reporting Fraud to Controller:
Likelihood Difference between You and Typical Manager

*Breusch-Pagan / Cook-Weisberg test for heteroskedasticity: Prob > chi2 = 0.0021. If I run the model using regression and robust standard errors, the model has p = 0.109, and the interaction term has p = 0.048.

The likelihood difference in reporting misappropriation of assets anonymously is presented in Table 14. This model is marginally significant (F = 1.820 and p = 0.096). Personal cost is the only significant predictor in this model (p = 0.034). The high Personal Cost environment has a mean of 1.51 (S.D. = 2.11) compared to the low Personal Cost environment, which has a mean of 0.22 (S.D. = 2.69). The results indicate that the participants are relatively more likely than typical managers to report

misappropriation of assets in a high personal cost environment.

(n = 80)							
Source	df	Mean Square	F	Sig.			
Corrected Model	7	10.769	1.820	.096			
Intercept	1	.783	.132	.717			
Leadership Style	1	13.577	2.295	.134			
Personal Cost	1	27.504	4.649	.034			
Leadership Style * Personal	1	1 200	202	654			
Cost	I	1.200	.203	.654			
Gender	1	12.642	2.137	.148			
Age	1	7.216	1.220	.273			
Public Company	1	1.149	.194	.661			
Responsibility	1	3.840	.649	.423			
Error	72	5.917					
Total	80						
Corrected Total	79						

ANCOVA Results: DV = Report Misappropriation of Assets Anonymously: Likelihood Difference between You and Typical Manager

Table 14

As reflected in Table 2, this study includes 12 models that are focused on the likelihood of the participant or a typical manager reporting fraudulent behavior as the dependent variable. The five of these 12 models that are marginally significant or significant are presented in Tables 5 through 9. H1 is supported only in the model reflected in Table 9. Since Transformational Leadership Style does not have a significant influence on intent to whistleblow in most of the models examined in this study, the mediation of trust and the mediation value congruence as reflected in H3a and H3b are not tested.

Fraud Type

The models in Tables 5 and 6 reflect scenarios in which the participant is reporting financial reporting fraud. The models in Tables 8 and 9 relate to reporting misappropriation of assets. In response to the fraud type research question presented in this study, the results do not provide a clear indicator whether the effects of leadership style or personal cost on the intent to whistleblow vary by fraud type.

CHAPTER 5 – CONCLUSION

Using an experimental approach, this study examines employees' intention to report occupational fraud through various channels based on the leadership style (transformational or transactional) of the manager and the expected personal costs (either high or low) of reporting, as well as four control variables (Gender, Age, Public Company, and Responsibility). While the MANCOVA results point primarily to Age and Responsibility as being associated with intent to report, some other results emerge in the individual ANCOVAs.

The results of the present study provide a contribution to researchers, managers, and auditors. First, the current study responds to the call for additional research on the role of management in the whistleblowing process (Carcello, Hermanson, & Ye, 2011). The findings of the study extend our understanding of the role leadership style (transformational and transactional), personal cost (high and low), and the interaction of leadership style and personal cost has on employees' whistleblowing intent. Leadership Style and Personal Cost variables do not have a significant influence on reporting intentions in the vast majority of the models presented in this study. In certain conditions, I find that the intent to report fraud internally is more likely when there is a transactional leader and the personal costs are high (Table 6), and are more likely under a transformational leader when the personal costs are low. However, the intent of a typical manager to report fraud externally is more likely to occur under a transformational leader in a high (Table 9) personal cost environment.

Second, the current study also expands the literature by attempting to explore the effects of the manipulated variables under two different fraud types (misappropriation of

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assets and fraudulent financial reporting). The results of my study are inconclusive. However, the descriptive statistics indicate that participants are more likely to report financial reporting fraud and misappropriation of assets internally than externally report to the SEC and participants think a typical manager is more likely to report financial reporting fraud and misappropriation of assets internally than externally report for the SEC.

Third, the results indicate that Gender plays a significant role in reporting intentions (Tables 5, 6, and 10). I find that females are more concerned about personal cost when reporting misappropriation of assets internally to the Controller. The likelihood of reporting financial reporting fraud to the Controller is higher for males. I also find that age positively influences the participants' intent to report fraud internally (Table 8), negatively influences the participants' intent to report fraud externally (Table 11), and negatively influences a typical manager's intent to report fraud externally (Tables 7 and 9).

There are limitations in my study. The use of an experimental approach with a hypothetical situation is not the same as an employee responding to an actual fraudulent event in the workplace. However, the use of an experimental research design to examine intent to report wrongful acts has been used in previous research (Kaplan, 1995; Ayers & Kaplan, 2005; Kaplan & Schultz, 2007; Kaplan et al., 2009; Kaplan et al., 2010, 2011). A second limitation is the use of Executive/Professional MBA students as participants. Although MBA students have been used in previous research (Ayers & Kaplan, 2005; Kaplan et al., 2007; Kaplan et al., 2010, 2011), the use of student participants is not the same as receiving feedback from actual employees. Due to the challenges associated

with finding individuals willing to respond to inquiries regarding an actual fraud case or an actual act of whistleblowing, examining whistleblowing intent using a hypothetical case provides the information needed to complete this study.

A third limitation is that the study uses a speech to convey the leadership style environment and background information is used to describe the personal cost environment. Although the participants in the study do not the benefit of having firsthand experience of leadership style and personal cost culture, the manipulation check pass rate of 77.1% indicates that the written speech and background information were sufficient to capture the leadership style and personal cost environment needed to conduct this study.

A fourth limitation relates to the use of only one scenario for each of the two types of fraudulent acts included in this study. An attempt was made to provide fraud cases that were descriptive enough to understand the nature of the fraud. However, the participants' responses are reactions to the limited information provided in each scenario. Since the fraud scenarios represent typical and somewhat common fraudulent acts, the generalizability of the findings is not a concern.

Finally, as noted in the tables, I find evidence of heteroskedasticity in certain models. In such cases, I present the effect on the results if I use regression with robust standard errors. Some results are negatively impacted (in particular, see Tables 6, 12, and 13, where the overall models are not significant using this alternate approach). Other remedies, such as ANCOVA on ranks, do not appear to be well suited to this study, in which the dependent variables are Likert scale values.

The results of the majority of the models analyzed in this study do not indicate that leadership style or personal cost have a significant influence on intent to whistleblow. Additional research is needed to explore the role of management and personal cost in the whistleblowing process. An exploratory approach in my study identified age and gender as covariates, and the coefficient on at least one of these variables is marginally or significantly significant in eight out of the 10 models included in my analysis. Future research should further explore the role age and gender on the intent to report fraudulent acts.

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APPENDICES

Appendix A - Copy of Case Instrument



Coles College of Business School of Accountancy

RESEARCH STUDY: Employee Whistleblowing

This study is part of my research requirement to earn my Doctorate in Business Administration (DBA) at Kennesaw State University. The purpose of the study is to gain insight into employee whistleblowing intent.

Your position and expertise make your opinions and evaluations very important to this study. We will be happy to make a contribution to the charity of your choice in appreciation for your participation. The study consists of a hypothetical case and follow-up questions. The estimated time for completion is approximately 25 minutes.

Your participation in the study is entirely voluntary, and you may withdraw your consent (or skip a question) at any time without penalty. Additionally, your individual results will be anonymous (all data will be reported in the aggregate only). There are no known risks involved due to participation in this study. You must be at least 18 years of age to participate in this study.

If you have any questions about the study you can contact me using the information below. Research at Kennesaw State University that involves human participants is carried out under the oversight of an Institutional Review Board. Questions or problems regarding these activities should be addressed to the Institutional Review Board, Kennesaw State University, 1000 Chastain Road, #0112, Kennesaw, GA 30144-5591, (678) 797-2268.

Thank you in advance for your time and assistance. Your response is greatly appreciated.

Tonya Smalls, CPA, DBA Candidate tonyasmalls@comcast.net (678) 480-8337

INSTRUCTIONS

- 1. The pages that follow contain a hypothetical case that includes summary background information and questions for you to answer.
- It is critical that you attempt to put <u>yourself</u> in the following situation as the <u>company's</u> <u>Finance Manager</u> and answer all of the questions as candidly as possible without consulting anyone else.
- 3. Please complete the materials/pages in the order given without looking ahead through the pages. There are no right or wrong answers, so please answer the questions in a way that reflects your honest opinions and judgments. To ensure a usable response, please complete all of the questions if possible. You will have an opportunity at the end of the case to provide any clarifications or comments you would like to make.
- 4. Your responses are guaranteed anonymity. No effort will be made to link you to your responses on the following pages.

RESEARCHER

Tonya Smalls, CPA Doctoral Student – Coles College of Business, Kennesaw State University <u>tonyasmalls@comcast.net</u> (678) 480-8337

DISSERTATION COMMITTEE

Dana Hermanson, Ph.D. (Chair) Dinos Eminent Scholar Chair & Professor Coles College of Business Kennesaw State University <u>dhermans@kennesaw.edu</u> (470) 578-6077

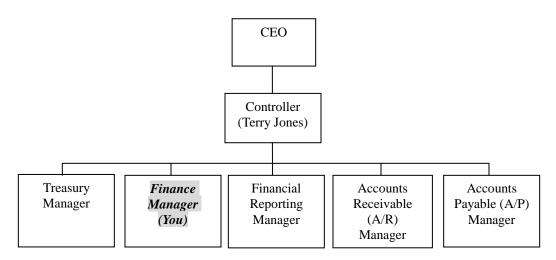
Jeffrey Cohen, Ph.D. Ernst & Young Research Fellow & Professor Boston College <u>Cohen@bc.edu</u> (617) 552-3165

Please review the case information below and answer the questions that follow.

Background

Please assume <u>you</u> are employed as the <u>Finance Manager</u> of Global Manufacturing, Inc. (Global). The Finance Manager is responsible for financial planning and analyzing the financial results of the company. Global is a publicly-traded company that is a supplier to industrial and commercial facilities worldwide. Global specializes in repairs and maintenance materials and supplies. Global's product offerings are high quality, and the company is known for quick delivery and excellent customer service. Global has regional distribution centers across the United States.

The relevant portion of Global's organizational structure is summarized below:



The Controller, Terry Jones, is responsible for overseeing and directing all of the accounting and finance functions of Global, and you report directly to Terry. You and the four other managers who report to Terry each oversee specific elements of the accounting and finance function.

At a recent staff meeting, the Controller, Terry Jones, spoke to the staff and said the following:

[Transformational Leader condition]

Global has a reputation for quick delivery of high quality products. The strength of the company is based on its greatest asset, its people. I am proud to lead this team, and I thank everyone for your hard work, for your contribution to our overall success, and for working collectively towards achieving our shared mission.

It is important that we understand that our team's purpose in the organization is to provide accurate financial data in order for our organization to make sound business

decisions. I'm excited and optimistic that our team will continue to achieve our goals, delivering a high level of customer service and technical expertise that our customers, both internal and external, deserve and respect. I'm interested and invested in staying focused on enhancing your individual strengths, ensuring your individual development, and teaching and coaching you for individual success, and our success as a team.

If you need me for anything, you know I have an open door policy. I will rearrange my schedule if necessary, and I will offer relevant, practical, and constructive suggestions and new ideas to help you with your individual work assignments. I know each of you has individual needs, questions or concerns, and I encourage you to come speak with me anytime or directly after the meeting.

[Transactional Leader condition]

Global has a reputation for quick delivery of high quality products. The strength of the company is based on its ability to achieve results. I commend everyone who has met his or her performance goals and expectations for the year.

It is important that we meet our performance goals in order that we can receive the bonuses budgeted for the members of our team. I'm tracking all of our team performance and customer service complaints to assess whether we are meeting our performance standards and are delivering a high level of customer service and technical expertise to our customers, both internal and external. I'm interested in everyone staying focused on your respective tasks, prioritizing and only solving the problems that are chronic and have high visibility, and not spending time trying to improve processes that appear to be working just fine as is.

If you need me to help you solve more severe issues, I suggest you try to book a meeting with me because I'm typically travelling for business and my calendar is often full. I want you to send your critical questions or concerns to my assistant, and I will touch base to make an appointment to speak with you when I have time available.

Additional Background

Global has a widely communicated whistleblower policy that has been in place for several years. Throughout the year, employees are reminded that the whistleblower policy exists and that an anonymous reporting hotline is available. Company protocol also indicates that an employee has the option of reporting wrongdoing directly to the senior leader of his/her functional department.

Items reported through the anonymous reporting hotline are managed by Global's Internal Audit Department. It is standard practice for the Internal Audit Department to work directly with the senior leader of each functional department in Global to investigate and resolve whistleblower reports in their respective functional area. The senior leader for the accounting and finance functional area is Terry Jones, the Controller.

Low Cost:

At Global, individuals suspected of whistleblowing typically are \underline{not} considered troublemakers by their peers, are not isolated by their peers, and do not receive the cold shoulder from their peers.

High Cost:

At Global, individuals suspected of whistleblowing often <u>are</u> considered troublemakers by their peers, are isolated by their peers, and receive the cold shoulder from their peers.

Situations to Evaluate

Please consider the <u>two independent situations</u> presented on the following pages and answer the questions below each situation.

Situation 1: (Please provide your responses to situation 1 <u>independent</u> of your responses to situation 2)

<u>You</u> are the Finance Manager. You discover that the Financial Reporting Manager appears to be inflating the company's sales by changing the dates on invoices and shipping documents – to move the sales into the current period. You suspect that the apparent premature recording of sales is related to the rumors the Board may sell the company, and higher sales volume in the current period will make the company more attractive to potential buyers.

Please answer the following questions based on the information in the case above (situation 1). You may refer back to the case information when responding. Indicate your answer by filling in a circle.

If you were facing this situation, what is the likelihood that <u>YOU</u> would report it to your company's <u>anonymous reporting hotline</u>? (1 = None, 9 = Extremely likely)

None								Extremely likely
1	2	3	4	5	6	7	8	9
0	Ο	0	0	0	0	0	Ο	0

- 1b. Please explain your rationale for the answer above.
- 2a. If you were facing this situation, what is the likelihood that <u>YOU</u> would report it to your company's <u>Controller, Terry Jones</u>? (1 = None, 9 = Extremely likely)

	None 1	2 O	3 O	4 O	50	6 O	7 O	8 O	Extremely likely 9	
2b.	Pleas	e explain	n your rat	ionale fo	r the ansv	ver above	.			

 3a. If you were facing this situation, what is the likelihood that <u>YOU</u> would report it externally to the <u>Securities and Exchange Commission's (SEC's) Office of the</u> <u>Whistleblower</u>? (1 = None, 9 = Extremely likely)

Extremely None likely $\overset{5}{\mathsf{O}}$ 9 $\overset{6}{\mathsf{O}}$ $\overset{7}{\mathbf{O}}$ 1 2 8 \bigcirc \bigcirc 3b. Please explain your rationale for the answer above. Based on the information presented above, what is the likelihood that $\underline{\mathbf{A}}$ 4a. TYPICAL MANAGER in this office who has become aware of this situation would report it to the company's **anonymous reporting hotline**? (1= None, 9 = Extremely likely) Extremely None likely 9 1 $\overset{6}{\mathsf{O}}$ $\overset{7}{\mathbf{O}}$ $\overset{5}{\mathsf{O}}$ \cap \cap Please explain your rationale for the answer above. 4b. Based on the information presented above, what is the likelihood that $\underline{\mathbf{A}}$ 5a. TYPICAL MANAGER in this office who has become aware of this situation would report it to the company's **Controller**, **Terry Jones**? (1 = None, 9 = Extremely likely) Extremely None likely $\overset{5}{\mathsf{O}}$ $\overset{6}{\mathsf{O}}$ $\overset{7}{\mathbf{O}}$ $\overset{8}{\mathsf{O}}$ 9 1 \bigcap Please explain your rationale for the answer above. 5b.

- 6a. Based on the information presented above, what is the likelihood that <u>A</u> <u>TYPICAL MANAGER</u> in this office who has become aware of this situation would report it externally to the <u>SEC's Office of the Whistleblower</u>? (1 = None, 9 = Extremely likely)
- Extremely None likely $\overset{6}{\mathsf{O}}$ 1 $\overset{7}{\mathbf{O}}$ 9 8 \cap \bigcap 6b. Please explain your rationale for the answer above. 7. If **YOU** reported this behavior to the **anonymous reporting hotline**, how concerned would you be about being considered a troublemaker by your peers, being isolated by your peers, and receiving the cold shoulder from your peers? (1 = Not at all concerned, 9 = Extremely concerned) Not at all Extremely concerned concerned 1 2 9 \cap \bigcirc \bigcap 8. If **YOU** reported this behavior your company's **Controller**, **Terry Jones**, how concerned would you be about being considered a troublemaker by your peers, being isolated by your peers, and receiving the cold shoulder from your peers? (1 = Not at all concerned, 9 = Extremely concerned) Not at all Extremely concerned concerned 9 1 2 8 \cap 9. If <u>YOU</u> reported this behavior externally to the <u>SEC's Office of the</u> Whistleblower, how concerned would you be about being considered a troublemaker by your peers, being isolated by your peers, and receiving the cold



shoulder from your peers? (1 = Not at all concerned, 9 = Extremely concerned)

Situation 2: (Please provide your responses to situation 2 <u>independent</u> of your responses to situation 1)

<u>You</u> are the Finance Manager. While analyzing recent increases in the company's facilities expenses, you determine that, in several instances, it appears that the company is being billed by more than one cleaning service for cleaning the same office location. You discover that one of the cleaning companies submitting bills is actually a local family-owned business run by the spouse of the Accounts Payable Manager. You suspect that the Accounts Payable Manager is submitting fictitious invoices and processing payments to the family's cleaning service.

Please answer the following questions based on the information in the case above (situation 2). You may refer back to the case information when responding. Indicate your answer by filling in a circle.

If you were facing this situation, what is the likelihood that <u>YOU</u> would report it to your company's <u>anonymous reporting hotline</u>? (1 = None, 9 = Extremely likely)

None								Extremely likely
1	2	3	4	5	$\overset{6}{O}$	7	8	9
0	U	U	U	U	U	U	U	U

- 1b. Please explain your rationale for the answer above.
- 2a. If you were facing this situation, what is the likelihood that <u>YOU</u> would report it to your company's <u>Controller, Terry Jones</u>? (1 = None, 9 = Extremely likely)

	None	$\overset{2}{\mathbf{O}}$	3	4	5	6	7	8	Extremely likely 9	
2b.	Pleas	e explain	your rat	ionale fo	r the ansv	ver above		Ŭ	Ŭ	

3a. If you were facing this situation, what is the likelihood that <u>YOU</u> would report it externally to the <u>Securities and Exchange Commission's (SEC's) Office of the</u> <u>Whistleblower</u>? (1 = None, 9 = Extremely likely)

	None 1	2 O	3 O	4 O	5 O	6 O	7 O	8 0	Extremely likely 9
3b.	Pleas	e explain	your rat	ionale fo	r the answ	ver above	». 		
4a.	<u>TYP</u> would	ICAL M	ANAGE t to the c	R in this		no has be	come awa	are of th	at <u>A</u> is situation l = None, 9 =
4b.	None 1 O	$\overset{2}{O}$	3 O	4 O	$\overset{5}{0}$	6 0	7 O	8 0	Extremely likely 9
40.									
5a.	<u>TYP</u> woul	ICAL M	ANAGE t to the c	<u>R</u> in this	nted abov office wl s <u>Contro</u>	no has be	come awa	are of th	is situation
5b.	None 1 O Pleas	2 O e explain	3 O your rat	4 O ionale fo	$\overset{5}{\mathbf{O}}$	6 O ver above	7 0	8 0	Extremely likely 9

- 6a. Based on the information presented above, what is the likelihood that <u>A</u> <u>TYPICAL MANAGER</u> in this office who has become aware of this situation would report it externally to the <u>SEC's Office of the Whistleblower</u>? (1 = None, 9 = Extremely likely)
- Extremely None likely $\overset{6}{\mathsf{O}}$ 1 $\overset{7}{\mathbf{O}}$ 9 8 \cap \bigcap \bigcirc 6b. Please explain your rationale for the answer above. 7. If **YOU** reported this behavior to the **anonymous reporting hotline**, how concerned would you be about being considered a troublemaker by your peers, being isolated by your peers, and receiving the cold shoulder from your peers? (1 = Not at all concerned, 9 = Extremely concerned) Not at all Extremely concerned concerned 1 2 $\overset{5}{\mathsf{O}}$ 9 \cap \bigcap 8. If **YOU** reported this behavior your company's **Controller**, **Terry Jones**, how concerned would you be about being considered a troublemaker by your peers, being isolated by your peers, and receiving the cold shoulder from your peers? (1 = Not at all concerned, 9 = Extremely concerned) Not at all Extremely concerned concerned 9 1 2 8 \cap 9. If <u>YOU</u> reported this behavior externally to the <u>SEC's Office of the</u> Whistleblower, how concerned would you be about being considered a

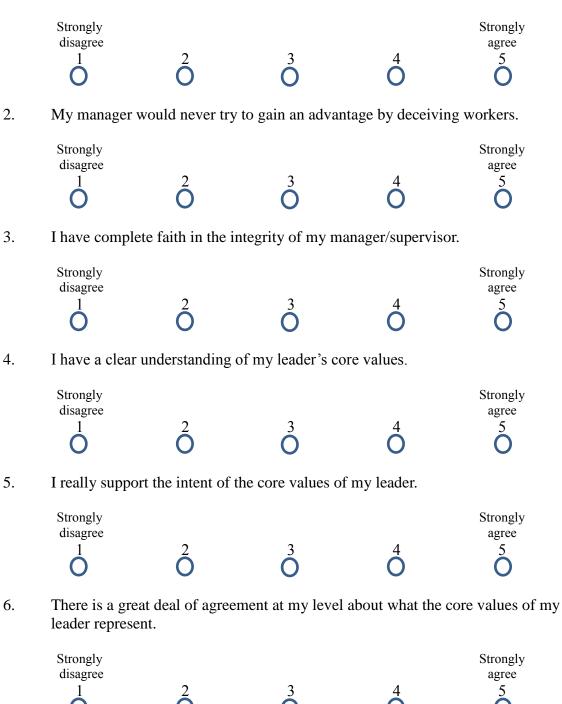
troublemaker by your peers, being isolated by your peers, and receiving the cold shoulder from your peers? (1 = Not at all concerned, 9 = Extremely concerned)

Please answer the following questions based on <u>your</u> perceptions of Terry Jones, Controller, after reading the case. You may refer back to the case information when responding. (0 = Not at all; 1 = Once in a while; 2 = Sometimes; 3 = Fairly often; 4 =Frequently, if not always)

	Not at all 0	Once in a while 1	Sometimes 2	Fairly often 3	Frequently, if not always 4
Is absent when needed					
Talks optimistically about the future					
Focuses attention on irregularities, mistakes, exceptions, and deviations from standards Specifies the importance of having a strong					
sense of purpose					
Spends time teaching and coaching					
Makes clear what one can expect to receive					
when performance goals are achieved Shows that he/she is a firm believer in "If it					
ain't broke, don't fix it"					
Goes beyond self-interest for the good of the					
group					
Instills pride in me for being associated with him/her					
Treats me as an individual rather than just a member of a group					
Demonstrates that problems must become					
chronic before taking action					
Keeps track of all mistakes					
Gets me to look at problems from many different angles					
Suggests new ways of looking at how to					
complete assignments					
Emphasizes the importance of having a collective sense of mission					
Expresses satisfaction when I meet expectations					
Talks enthusiastically about what needs to be accomplished					
Delays responding to urgent questions Terry Jones, Controller					

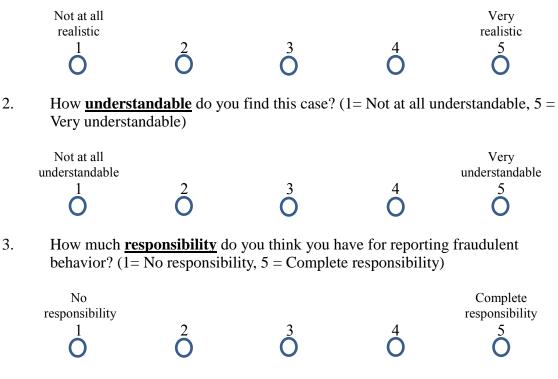
Please answer the following questions based on <u>your</u> perceptions of Terry Jones, Controller, after reading the case. You may refer back to the case information when responding. Indicate your answer by filling in a circle. (1 = Strongly disagree, 5 = Strongly agree)

1. I feel quite confident that my leader will always treat me fairly.



Please answer the following questions <u>without</u> referring back to the case materials. Indicate your answer by filling in a circle.

1. How <u>realistic</u> do you find this case? (1= Not at all realistic, 5 = Very realistic)



4. Did you feel differently about the acts in situation 1 versus situation 2? If yes, please explain.

For the next question, please select one response based on your understanding of the case, **without** referring back to the case materials.

- 1. The facts of this case stated that at Global, individuals suspected of whistleblowing (check the appropriate choice):
 - ____ Often <u>are</u> considered troublemakers by their peers, are isolated by their peers, and receive the cold shoulder from their peers.
 - Typically are <u>not</u> considered troublemakers by their peers, are not isolated by their peers, and do not receive the cold shoulder from their peers.

Please respond to the following demographic questions. These will be used only to analyze the results, not to identify any participant.

- 1. What is your highest educational degree <u>earned</u> (check only one)?
 - ____ Bachelors
 - ____ Masters (please specify type) _____
 - ___ JD
 - ____ PhD/DBA
 - ____ Other (please describe) ______
- 2. Please indicate any programs in which you are <u>currently enrolled</u> (check one below)
 - ____ Currently Enrolled in MBA Program
 - ____ Currently Enrolled in EMBA program
- 3. Please indicate any professional certifications you have._____
- 4. Please provide your total years of professional business experience. _____ years
- 5. What is your age? _____years
- 6. What is your gender? _____

If **working full-time** now, answer questions 7 through 12

- 7. What position or title do you hold in your organization?
- 8. What is the functional area of your department?
 - ____ Accounting/Finance
 - ____ Sales/Marketing
 - ____ Human Resources
 - ____ IT
 - ____ Other (please describe) ______

9. How much experience do you have in your current position? _____years

- 10. Please indicate the primary industry in which your company operates _____
- 11. Please indicate your company's approximate annual revenue \$_____
- 12. Is this company publicly-traded?

If **not working full-time** now, answer questions 13 through 18

13. What position or title did you hold in your former organization?

14.	What was	the functional	area of your	former department?
-----	----------	----------------	--------------	--------------------

Accounting/Finance
 Sales/Marketing
 Human Resources
 IT
 Other

15. How much experience did you have in your former position? ______years

16. Please indicate the primary industry in which your former company operates

17. Please indicate your former company's approximate annual revenue \$_____

18. Is this company publicly-traded?

Thank you for your participation.

As a token of appreciation, we will make a contribution to the charity of your choice from the list below. Please indicate your preference below:

- _____ American Cancer Society
- _____ American Diabetes Association
- _____ American Heart Association
- ____ Girl Scouts of America
- _____ Boys and Girls Club
- _____ Habitat for Humanity

If you would like a summary of the study's results, please email the researcher at tonyasmalls@comcast.net.

Appendix B – Cover letter for Instrument mailed to UGA students

October 31, 2014

Hello!

My name is Tonya Smalls. I'm an Accounting doctoral student at Kennesaw State University, and I'm currently working on my dissertation. The purpose of the study is to gain insight into employee whistleblowing, and I need Executive/Professional MBA students to participant in my study.

I recently had the opportunity to meet some of the UGA EMBA and PMBA students that attend class at the Buckhead Campus. I was onsite asking individuals to volunteer as one of my dissertation survey participants. Due to time constraints, only a few students had time to complete the survey onsite (before or after class). To obtain more participants, I inquired about alternate ways to distribute the survey to UGA students at the Buckhead Campus and the Gwinnett Campus. As a result, the UGA MBA Programs office has assisted me by labeling (note: your address was not provided to me) and sending my survey packet directly to you via mail.

Once I received the approval that allowed my survey to be distributed via mail, I was more than happy to incur the expense for the postage on the packet and the self-addressed return envelope enclosed in this packet! I'm excited that the EMBA/PMBA students at UGA have another opportunity to be included in my study. I realize how busy you are (I'm pursuing my doctorate while working full-time, and I was working full-time when I obtained my EMBA in 2005). I would greatly appreciate you spending approximately 25 minutes to complete the survey.

Please return your completed survey in the postage paid self-addressed envelope that has been provided. The survey is anonymous. So, please do not include your name/address on the envelope when you return the survey to me. Please return the completed survey to me by November 15, 2014, if feasible.

Note: If you are one of the few individuals that have already completed the survey onsite at the Buckhead Campus, thank you again for your assistance. There is no need for you to complete the survey again. Please return the blank survey to me in the enclosed postage paid self-addressed envelope by November 15, 2014.

Thank you,

Tonya Smalls, CPA, DBA Candidate tonyasmalls@comcast.net (678)480-8337

Appendix C – Staff meeting speech by Terry Jones - Controller

Staff Meeting Speech by Terry Jones – Controller: Recap of Transformational and Transactional language:

The 4 categories of questions for Transformational Leadership style are

1) Idealized Influence – Attributed (2 MLQ items: lines 3 and 7)

Idealized Influence – Behavior (2 MLQ items: lines 3 and 4)

- 2) Inspirational Motivation (2 MLQ items: line 5)
- 3) Intellectual Stimulation (2 MLQ items: line 7)
- 4) Individualized Consideration (2 MLQ items: lines 6 and 8)

Total of 10 transformational items to reflect the 4 areas.

The 3 categories of questions for Transactional Leadership style are 1) Contingent Reward (2 MLQ items: lines 3 and 4)

2) Management by Exception – Active (2 MLQ items: line 5)

Management by Exception – Passive (2 MLQ items: line 6)

3) Laissez- faire (2 MLQ items: lines 7 and 8)

Total of 8 transactional items to reflect the 3 areas.

Sentence	Transformational	Transactional	Comment, including any linkage to prior research
1	Global has a reputation for quick delivery of high quality products.	Global has a reputation for quick delivery of high quality products.	Identical
2	The strength of the company is based on its greatest asset, its people.	The strength of the company is based on its ability to achieve results.	Transformational leaders are relations/people oriented, and transactional leaders are tasks/results oriented (Bass & Riggio, 2006)
3	I am proud to lead this	I commend everyone	Transformational

	team, and I thank everyone for your hard work, for your contribution to our overall success, and for working collectively towards achieving our shared mission.	who has met his or her performance goals and expectations for the year.	(Idealized Influence - Behavior): Emphasizes the importance of having a collective mission Transformational (Idealized Influence - Attributed): Instills pride in me for being associated with him/her Transactional (Contingent Reward): Expresses satisfaction when I meet expectations
4	It is important that we understand that our team's purpose in the organization is to provide accurate financial data in order for our organization to make sound business decisions.	It is important that we meet our performance goals in order that we can receive the bonuses budgeted for the members of our team.	Transformational (Idealized Influence - Behavior): Specifies the importance of having a strong sense of purpose Transactional (Contingent Reward): Makes clear what one can expect to receive when performance goals are achieved
5	I'm excited and optimistic that our team will continue to achieve our goals, delivering a high level of customer service and technical expertise that our customers, both internal and external, deserve and respect.	I'm tracking all of our team performance and customer service complaints to assess whether we are meeting our performance standards and are delivering a high level of customer service and technical expertise to our customers, both internal and external.	Transformational (Inspirational Motivation): Talks optimistically about the future Transformational (Inspirational Motivation): Talks enthusiastically about what needs to be accomplished.

6	I'm interested and	I'm interested in	Transactional (Mgmt by Exception – Active): Keeps track of all mistakes Transactional (Mgmt by Exception – Active): Focuses attention on irregularities, mistakes, exceptions, and deviations from standards Transformational
	invested in staying focused on enhancing your individual strengths, ensuring your individual development, teaching and coaching you for individual success, and our success as a team.	everyone staying focused on your respective tasks, prioritizing and only solving the problems that are chronic and have high visibility, and not spending time trying to improve processes that appear to be working just fine as is.	(Individualized Consideration): Spends time teaching and coaching Transactional (Mgmt by Exception – Passive): Shows that he/she is a firm believer in "If it ain't broke, don't fix it" Transactional (Mgmt by Exception – Passive) Demonstrates that problems must become chronic before taking action
7	If you need me for anything, you know I have an open door policy. I will rearrange my schedule if necessary, and I will offer relevant, practical, and constructive suggestions and new ideas to help you with your individual work assignments.	If you need me to help you solve more severe issues, I suggest you try to book a meeting with me because I'm typically travelling for business and my calendar is often full.	Transformational (Idealized Influence – Attributed): Goes beyond self-interest for the good of the group Transformational (Intellectual Stimulation): Suggests new ways of looking at how to complete

			assignments
			Transformational (Intellectual Stimulation): Gets me to look at problems from many angles
			Transactional (Laissez-faire): Is absent when needed
8	I know each of you has individual needs, questions or concerns, and I encourage you to come speak with me anytime or directly after the meeting.	I want you to send your critical questions or concerns to my assistant, and I will touch base to make an appointment to speak with you when I have time available.	Transformational (Individualized Consideration): Treat me as an individual rather than just a member of a group
			Transactional (Laissez-faire): Delays responding to urgent questions
Total # of words	213	207	