

THE MODERATING EFFECT OF PERCEIVED ETHICAL LEADERSHIP
ON REDUCED AUDIT QUALITY BEHAVIORS

by

KIMBERLY J. WEBB

Presented to the Faculty of the Graduate School of
The University of Texas at Arlington in Partial Fulfillment
of the Requirements
for the Degree of

DOCTOR OF PHILOSOPHY

THE UNIVERSITY OF TEXAS AT ARLINGTON

December 2014

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Acknowledgements

I would like to express my sincere gratitude to my dissertation committee: Billy Brewster, Martin Taylor, Tom Hall, Wendy Casper, and Mary Whiteside. Thank you for sharing your time and expertise with me throughout this process.

I would also like to express my deepest appreciation to my family who have supported, encouraged and prayed for me each step of the way in this journey. I could not have achieved this goal without them. My husband has been my greatest supporter and encourager throughout this process. Thank you for always standing in the gaps for me whenever needed. My children are a great source of joy and inspiration for me each and every day. And my parents and parents-in-law have also provided tremendous help and encouragement to me and our family as I journeyed this path.

In addition, I would like to express my appreciation to my colleagues at Texas Wesleyan University who encouraged me to begin this journey and who have continued to support and encourage me throughout the journey.

November 19, 2014

Abstract

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Kimberly J. Webb, PhD

The University of Texas at Arlington, 2014

Supervising Professors: Martin Taylor and Billy Brewster

As auditors perform the audit, they are faced with many decisions that ultimately affect the quality of the audit and can lead to the issuance of an improper audit opinion such as accepting weak management explanations without corroborating evidence, superficial review of client documentation, premature sign off of audit procedures, or underreporting of time spent on audit task. In this study, I investigate the impact of the perceived ethical leadership (EL) of the audit supervisor upon the auditor's propensity to engage in reduced audit quality (RAQ) acts. This question is of particular interest considering the renewed focus placed upon audit quality by audit professional and regulatory bodies around the world (CAQ, 2014; PCAOB, 2013; IAASB, 2013; FRC, 2006).

In studying the potential impact of perceived supervisor EL, I was particularly interested in two aspects of this relationship. First, I was interested in whether perceived supervisor EL would have a direct effect on an auditor's propensity to engage in RAQ acts as this leadership quality has not been previously studied in relation to RAQ acts. Second, I was interested in whether perceived supervisor EL would moderate the relationship between the auditor personal characteristics of locus of control (LOC),

professional commitment (PC), and organizational commitment (OC) and an auditor's propensity to engage in RAQ acts.

This research addresses these questions using a non-experimental design utilizing a survey instrument and a sample of 114 staff and senior level audit professionals. My results provide support for the hypothesized main effects of perceived EL for the RAQ acts of premature signoff (PMSO) and the composite other RAQ acts variable but generally does not provide support for the RAQ act of underreporting of time (URT). It is not surprising that the results would vary among the three different RAQ acts as Coram et al. (2008) found that auditors perceived the moral intensity of various RAQ acts to be different.

With regards to the hypothesized moderating effects of perceived supervisor EL upon the three auditor characteristics, the results are mixed. When considering the likelihood of engaging in PMSO, there was a significant interaction effect between perceived supervisor EL and both auditor PC and OC but not for LOC. Upon further investigating these interaction effects, the results show that the perceived supervisor EL will reduce an auditor's likelihood of engaging in PMSO more for auditor's with lower levels of PC and OC as opposed to higher levels of PC and OC. When considering the likelihood of engaging in URT, there were no significant interaction effects between perceived supervisor EL and any of the three auditor characteristics tested although auditor PC and OC both have a significant negative relationship with the auditor's likelihood to engage in URT. When considering the likelihood of engaging in the composite other RAQ variable, there was a significant interaction effect between perceived supervisor EL and both auditor LOC and PC but not for OC. Upon further investigating these interaction effects, the results show that the perceived supervisor EL will reduce an auditor's likelihood of engaging in OTHER RAQ acts more for auditors with

an internal LOC as opposed to an external LOC and more for auditors with lower levels of PC as opposed to higher levels of PC.

Table of Contents

Acknowledgements	iii
Abstract	iv
List of Illustrations	x
List of Tables	xi
Chapter 1 Introduction.....	1
Chapter 2 Literature Review	7
2.1 Audit Quality	7
2.1.1 Defining Audit Quality	8
2.1.2 Measuring Audit Quality	9
2.1.3 Audit Quality Frameworks	11
2.2 Reduced Audit Quality Behaviors	17
2.2.1 Characteristics of the Auditor	24
2.2.2 Supervisor Leadership Style	29
2.2.3 Firm Control Systems	33
2.3 Ethical Leadership	36
2.3.1 Ethical Dimensions of Leadership Theories	36
2.3.1.1 Transformational Leadership	36
2.3.1.2 Charismatic Leadership	38
2.3.1.3 Authentic Leadership	40
2.3.1.4 Spiritual Leadership	41
2.3.2 Ethical Leadership	42
2.4 Potential Moderating Effects of Ethical Leadership upon RAQ Acts	57
2.4.1 How Ethical Leadership Influences Employee Behavior	58
2.4.2 The Influence of Supervisors	61

2.4.3 The Moderating Role of Ethical Leadership	62
Chapter 3 Methodology	68
3.1 Research Design and Participants	68
3.1.1 Use of Professional Subjects	68
3.1.2 Consideration: Use of Non-Experimental Design.....	70
3.1.3 Consideration: Biases Related to Sensitive Questions	71
3.2 Study Variables.....	73
3.2.1 Dependent Variable	73
3.2.2 Moderating Variable	75
3.2.3 Independent Variables	76
3.2.3.1 Locus of Control	76
3.2.3.2 Professional Commitment.....	76
3.2.3.3 Organizational Commitment	77
3.3 Hypotheses Testing Methodology	78
3.4 Validation and Pilot Study.....	79
Chapter 4 Results	82
4.1 Participant Demographic Information	82
4.2 Correlation Analyses	84
4.3 Frequencies for Dependent Variables	85
4.4 Hypotheses Testing.....	88
4.4.1 Hypothesis 1 - Hierarchical Regression Analysis.....	88
4.4.2 Hypothesis 1 – ANCOVA Analysis	94
4.4.3 Hypothesis 2 - Hierarchical Regression Analysis.....	96
4.4.4 Hypothesis 2 – ANCOVA Analysis	102
4.4.5 Hypothesis 3 - Hierarchical Regression Analysis.....	106

4.4.6 Hypothesis 3 – ANCOVA Analysis	112
Chapter 5 Conclusion.....	115
5.1 Discussion	115
5.2 Contributions.....	118
5.3 Limitations.....	119
5.4 Summary	121
Appendix A Scales Used for Dependent and Independent Variables	122
References.....	128
Biographical Information	153

List of Illustrations

Figure 4.1 Locus of Control x Ethical Leadership with PMSO as DV 91

Figure 4.2 Locus of Control x Ethical Leadership with URT as DV 92

Figure 4.3 Locus of Control x Ethical Leadership with Other RAQ Acts as DV 93

Figure 4.4 Prof. Commit. x Ethical Leadership with PMSO as DV 99

Figure 4.5 Prof. Commit. x Ethical Leadership with URT as DV 100

Figure 4.6 Prof. Commit. x Ethical Leadership with Other RAQ Acts as DV 101

Figure 4.7 Org. Commit. x Ethical Leadership with PMSO as DV 109

Figure 4.8 Org. Commit. x Ethical Leadership with URT as DV 111

Figure 4.9 Org. Commit. x Ethical Leadership with Other RAQ Acts as DV 112

List of Tables

Table 2.1 Commonly Studied Reduced Audit Quality Behaviors	18
Table 2.2 Ethical Leadership Scale Items.....	46
Table 3.1 Reduced Audit Quality Behaviors	74
Table 4.1 Responses	82
Table 4.2 Sample Demographics.....	83
Table 4.3 Means, Standard Deviations, and Reliabilities	84
Table 4.4 Correlations.....	86
Table 4.5 Frequencies for RAQ Acts (Dependent Variables).....	87
Table 4.6 Regression Results: Premature Signoff and Locus of Control	89
Table 4.7 Regression Results: Underreporting of Time and Locus of Control	89
Table 4.8 Regression Results: Other RAQ Acts and Locus of Control	90
Table 4.9 ANCOVA: LOC x Ethical Leadership with Other RAQ Acts as DV.....	95
Table 4.10 Regression Results: Premature Signoff and Prof. Commit.	97
Table 4.11 Regression Results: Underreporting of Time and Prof. Commit.	97
Table 4.12 Regression Results: Other RAQ Acts and Prof. Commit.....	98
Table 4.13 ANCOVA: Prof. Commit. x Ethical Leadership with PMSO as DV	104
Table 4.14 ANCOVA: Prof. Commit. x Ethical Leadership, Other RAQ Acts as DV	105
Table 4.15 Regression Results: Premature Signoff and Org. Commit.	107
Table 4.16 Regression Results: Underreporting of Time and Org. Commit.	107
Table 4.17 Regression Results: Other RAQ Acts and Org. Commit.	108
Table 4.18 ANCOVA: Org. Commit. x Ethical Leadership with PMSO as DV.....	113

Chapter 1

Introduction

In this study, I investigate the impact of the perceived ethical leadership (EL) of the audit supervisor upon the auditor's propensity to engage in reduced audit quality (RAQ) acts. This question is of particular interest considering the renewed focus placed upon audit quality by audit professional and regulatory bodies around the world (CAQ, 2014; PCAOB, 2013; IAASB, 2013; FRC, 2006) and the deterioration of investor confidence in the accounting profession over the last decade as a result of the fraud epidemic of the early 2000's.

As we entered the twenty-first century, the United States faced multiple corporate scandals from Enron to Healthsouth to the Bernie Madoff case. As the dust settled and the investigation moved forward in each case, accounting improprieties and financial fraud were often uncovered. In many cases, the next question raised by regulators and investors was often, "Where were the independent auditors?" In describing the Olympus Corporation accounting improprieties related to the cover up of investment losses through improper accounting practices, Johnston, a Reuters columnist, stated "The admission by Olympus Corp that it falsified financial reports for more than a decade should not shock anyone. The shock is that, for years, the auditors failed to detect such massive fraud." (blogs.reuters.com, 11/11/11)

Independent auditors are responsible to execute an objective, independent investigation of a company's financial statements and to issue an opinion as to whether those financial statements render a fair representation of the financial position of the company within the limits of materiality. The independent audit plays a significant role in the effective functioning of the capital markets. Andrew Ceresney, co-director of the SEC's Division of Enforcement, referred to auditors as the "critical gatekeepers in the

financial reporting process” (www.sec.gov, 11/7/13). The demand for a quality audit arises from the agency conflict that is inherent in public companies due to the separation of ownership and management. In public companies, information asymmetry exists between company insiders (management) and the investors (owners). The owners must rely upon the financial statements prepared and provided by management in order to evaluate the financial health of the company. The independent audit serves as a monitoring device intended to improve information about client performance and thus reduce information asymmetry by minimizing any inconsistencies between a client’s reported financial position and its “true”, unobservable financial position (Watkins, Hillison & Morecroft, 2004). In serving the public interest, it is critical that quality audit work is performed. Raghunathan (1991) noted that any discussion regarding the quality of the financial reporting system will ultimately come back to the topic of audit quality.

As auditors perform the audit, they are faced with many decisions that ultimately affect the quality of the audit and can lead to the issuance of an improper audit opinion. Examples of auditor actions that can reduce the quality of the audit include accepting weak management explanations without corroborating evidence, failing to research a technical issue, superficial review of client documentation, rejecting unusual looking items from a sample, premature sign off of audit procedures, and underreporting of time spent on an audit task. In the academic literature, these behaviors are referred to as reduced audit quality acts, dysfunctional audit behavior, or quality threatening behaviors (Bedard, Deis, Curtis, & Jenkins, 2008). Reduced audit quality (RAQ) acts are defined as the actions carried out by an auditor while performing an audit which inappropriately reduces the effectiveness of the evidence gathering procedures (Malone & Roberts, 1996; Kelley & Margheim, 1990). In that these behaviors reduce the effectiveness of the audit and

can potentially lead to audit failures, it is important to the audit profession that these behaviors be reduced to the extent possible.

The purpose of this research is to provide additional insight into conditions under which undesirable auditor behavior may be reduced. Specifically, this research investigates the potential impact of the perceived ethical leadership (EL) of the audit supervisor to reduce an auditor's propensity to engage in RAQ acts. Brown, Trevino, & Harrison (2005) define ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision making" (p. 120). Although prior research in the leadership domain has demonstrated that EL is positively associated with desirable employee behavior such as organizational citizenship behavior (Brown et al, 2005; Avey, Palanski, & Walumbwa, 2010; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Kacmar, Carlson, & Harris, 2013; Piccolo, Greenbaum, Den Hartog, & Folger, 2010) and improved employee performance (Walumbwa et al., 2011a; Walumbwa, Morrison & Christensen, 2012; Kacmar et al., 2013; Piccolo et al., 2010) and negatively associated with undesirable employee behavior such as unethical behavior and interpersonal conflict (Mayer, Aquino, Greenbau, & Kuenzi, 2012), we cannot assume that these relationships will hold in the audit environment. Due to aspects unique to the accounting environment such as the audit review process and the need to follow professional standards, Bonner (2008) notes that theories developed in other disciplines may not be well suited for the accounting setting. Therefore, it is important to study the potential impact of ethical leadership in the audit environment.

In addition to studying the direct effects of perceived EL upon auditors' behavior, this research also investigates whether the perceived EL of the audit supervisor

moderates the relationship between auditor attributes and the auditor's likelihood of engaging in RAQ acts. Prior research has studied the relationships between the auditor attributes of locus of control (LOC) (Malone & Roberts, 1996; Donnelley, Quirin, & O'Bryan, 2003a, 2003b; Shapeero, Chye, & Killough, 2003), professional commitment (PC) (Malone & Roberts, 1996; Otley & Pierce, 1996a; Paino, Thani, & Idris, 2011b), and organizational commitment (OC) (Donnelley et al, 2003a; Herbach, 2001; Otley & Pierce, 1996a; Malone & Roberts, 1996) with the auditor's likelihood of engaging in RAQ acts finding mixed results. Inconsistent findings can be indicative of an unidentified moderator; therefore, this research will test the perceived EL of the audit supervisor as a potential moderator of these relationships. Specifically, it is hypothesized that auditors with an internal LOC and lower levels of PC and OC will be more influenced by the perceived EL of the audit supervisor thus the expected reduction in likelihood to engage in RAQ acts will be greatest under these conditions.

I test these theoretical predictions with a non-experimental design utilizing a survey instrument and a sample of 114 staff and senior level audit professionals. The survey instruments along with instructions for completing the surveys were distributed to auditors by a firm representative (partner, senior manager, or human resource personnel) or by me at a firm training event among 5 public accounting firms in the southeastern United States. The survey required the participant to rate the likelihood that another auditor as well as the likelihood that they personally would engage in eight different RAQ acts. Participants also provided responses to previously validated scales for perceived ethical leadership, locus of control, professional commitment, and organizational commitment in addition to demographic information.

The results of testing the main effects of perceived supervisor EL upon auditors' likelihood to engage in RAQ acts provide support for the hypothesized main effects of a

negative relationship between perceived EL and the likelihood of engaging in the RAQ acts of premature signoff (PMSO) and the composite other RAQ acts variable but generally does not provide support for the RAQ act of underreporting of time (URT). It is not unexpected that the results would vary among the three different RAQ acts as Coram, Glavovic, Ng, & Woodliff (2008) found that auditors perceived different levels of moral intensity for the various RAQ acts. The results indicate that as an auditor's perception of his audit supervisor as an ethical leader increases, his likelihood of engaging in PMSO and other RAQ acts decreases but not URT. These results suggest that an auditor's internal pressures to URT may override the potential influence of the perceived EL of the audit supervisor.

With regards to the hypothesized moderating effects of perceived supervisor EL upon the three auditor characteristics, the results are mixed. When considering the likelihood of engaging in PMSO, there was a significant interaction effect between perceived supervisor EL and both auditor PC and auditor OC but not for auditor LOC. Upon further investigation of these interaction effects, the results show that the perceived supervisor EL will reduce an auditor's likelihood of engaging in PMSO more for auditors with lower levels of PC and OC as opposed to higher levels of PC and OC indicating that auditors who have low levels of commitment to the profession or to their firm will be less likely to engage in PMSO if they work for an audit supervisor whom they perceive to be an ethical leader. When considering the likelihood of engaging in URT, there were no significant interaction effects between perceived supervisor EL and any of the three auditor characteristics tested although the auditor characteristics of PC and OC both had a significant negative relationship with the auditor's likelihood to engage in URT. When considering the likelihood of engaging in the composite OTHER RAQ variable, there was a significant interaction effect between perceived supervisor EL and both auditor LOC

and auditor PC but not for auditor OC. Upon further investigation of these interaction effects, the results show that the perceived supervisor EL will reduce an auditor's likelihood of engaging in OTHER RAQ acts more for auditors with an internal LOC as opposed to an external LOC and more for auditors with lower levels of PC as opposed to higher levels of PC.

The remainder of this paper is organized as follows. First, I review the extant literature on RAQ behavior and ethical leadership as relevant to this study, followed by development of the research hypotheses. Next, I present a description of the methodology utilized in this study and then discuss the research findings. Finally, concluding remarks are presented, including discussion of theoretical and practical contributions, potential limitations of the study, and avenues for future research.

Chapter 2

Literature Review

2.1 Audit Quality

Delivering a quality audit is not only an important factor contributing to the efficiency of the market economy, but it is also a key element in maintaining the efficacy of the audit profession. Audit quality is an essential component explaining the demand for audit services. The degree to which stakeholders can place reliance upon the audit report is dependent upon the quality of the audit performed (Christensen, Omer, Sharp, & Shelley, 2014). Yet despite its significance, audit quality has proven to be a hard concept to define and measure as it is a complex, multifaceted concept that can mean different things to different stakeholders in the financial reporting process (Knechel, Krishnan, Pevzner, Shefchik, & Velury, 2012; Francis, 2011; Wooten, 2003; Rasmussen and Jensen, 1998; Watkins et al., 2004; IAASB, 2013). The various stakeholder groups each view audit quality through a different lens (Knechel et al., 2012). These stakeholder groups have conflicting roles and different expectations which lead them to interpret audit quality in different ways (Sutton, 1993).

Several issues give rise to the difficulty associated with defining and measuring audit quality. Wooten (2003) discusses many issues contributing to the uncertainty in measuring audit quality. First, audit quality is not directly observable. "An audit is a knowledge-based professional service producing an uncertain and unobservable outcome." (Knechel et al., 2013, p. 391) The International Auditing and Assurance Standard Board (IAASB) reiterated this difficulty in their report entitled "A Framework for Audit Quality" (IAASB, 2013). The IAASB report acknowledges limited transparency of the audit work performed as well as the audit findings as an obstacle in measuring audit quality. The audit reporting process provides limited insight into the audit procedures

implemented and the issues identified and addressed during the audit process. The Financial Reporting Council (FRC) also acknowledges this issue in their discussion paper, "Promoting Audit Quality" (FRC, 2008). The FRC points out that very little information regarding the way in which the auditor approached the engagement, the amount of audit evidence collected, and the key judgments made by the auditor is made available to users relying upon the audit report. Second, Wooten (2003) points out that audit failures are not a good measure of audit quality as they only become evident when an audited entity suffers a related business failure. Considering that a poor quality audit can occur without a related business failure, we do not have a way of knowing the number of undetected audit failures. Third, Wooten (2003) and the IAASB (2013) both point out that a poor quality audit can occur even when the audited financial statements do not contain a material misstatement such as when the audit is not adequately planned or the fieldwork is poorly executed. Therefore, the presence or lack of material misstatements can only provide a limited view into audit quality. Fourth, the IAASB (2013) report also notes that each audit engagement is unique and as a result what would be considered sufficient, appropriate audit evidence will vary from engagement to engagement which also provides challenges in attempting to measure and define audit quality.

2.1.1 Defining Audit Quality

Despite the difficulties in reaching consensus on a universally accepted definition of audit quality (IAASB, 2013; CAQ, 2014), there have been many attempts to define it. The professional literature typically defines audit quality in relation to how well an audit conforms to generally accepting auditing standards (Krishnan & Schauer, 2001; Tie, 1999; McConell & Banks, 1998; Aldhizer, Miller, & Moraglio, 1995; Cook, 1987). The varying definitions found in the academic literature portray the many different dimensions

of audit quality. Audit quality has been defined in terms of the accuracy of the information provided to investors by the auditors (Beatty, 1989; Krinsky & Rotenberg, 1989; Titman & Trueman, 1986), the level of assurance provided by the audit (Palmrose, 1988), the auditor's ability to reduce noise and bias (Wallace, 1980) and to detect and eliminate material misstatements in the financial statements (Davidson & Neu, 1993), and the probability that the auditor will not issue an unmodified opinion on materially misstated financial statements (Lee, Liu, & Wang, 1999).

The most commonly cited definition of audit quality in the academic literature is "the market-assessed joint probability that a given auditor will both (a) discover a breach in the client's accounting system, and (b) report the breach" (DeAngelo, 1981, p. 186). This definition brings to light three key dimensions of audit quality. Two of these dimensions focus upon the auditor and her technical competence and independence. It emphasizes the importance of the auditor's technical knowledge and skills which enable her to discover errors and nonconformance to generally accepted accounting principles as well as the importance of the auditor's independence to then ensure that material misstatements are corrected or disclosed in the audit report. These two dimensions have been referred as the monitoring strength of the audit (Watkins et al., 2004). A third key dimension of this definition is its acknowledgment that the process is a "market-assessed probability" which brings to light the influence of the market's perceptions regarding the auditor's competence and independence. This dimension has been referred to as auditor reputation as it is based upon the users' belief about the monitoring strength of the audit firm (Watkins et al., 2004).

2.1.2 Measuring Audit Quality

Measuring audit quality has also proven to be problematic. Because audit quality is unobservable, researchers must identify appropriate proxies for measurement

purposes. One approach to studying audit quality has been to define proxies for audit quality and to then examine the differences between audit firms using these developed proxies (Nor, Smith, & Ismail, 2010). Direct measures of audit quality are measures that focus on the output-based factors of the audit cycle and attempt to measure the monitoring strength of the audit (PCAOB, 2013). In the accounting literature, the proxies that capture this are typically dichotomous measures which measure audit quality as absent (audit failure observed) or present (no audit failure observed) (Francis, 2011). Surrogates used to identify audit failures are the presence of litigation against the audit firm (Palmrose, 1988), SEC enforcement actions against the audit firm (Dechow, Hutton, & Sloan, 1996), the relationship of a going concern audit report to a later business failure (Francis & Krishnan, 2002; Lennox, 1999; Carcello & Palmrose, 1994), and the restatement of financial statements. Although these proxies provide a way to objectively measure audit quality, they also present challenges because evidence indicates that the instance of audit failures is very low occurring in less than one percent of engagements, and these measures likely understate the actual rate of low quality audits (Francis, 2011).

The accounting literature has also utilized indirect measures of audit quality which tend to focus more on the input-based factors of the audit cycle (PCAOB, 2013). These measures identify various firm characteristics hypothesized to be associated with audit quality. These surrogates are more related to firm reputation and capture the perceived audit quality which may or may not approximate actual audit quality (Watkins et al., 2004). Proxies utilized as indirect measures have been firm size (DeAngelo, 1981; Simunic & Stein, 1987; Francis & Wilson, 1988; Lennox, 1999; Krisnan & Schauer, 2001), engagement office size (Francis & Yu, 2009; Choi, Kim, Kim, & Zank, 2010), industry expertise (Reichelt & Wang, 2010), level of abnormal accruals (Becker, DeFond, Jiambalvo, & Subramanyam, 1998; Francis, Maydew, & Sparks, 1999; Nelson, Elliot, &

Tarpley, 2002), tenure with audit client (Johnson, Khurana, & Reynolds, 2002; Meyers, Meyers, & Omer, 2003), firm alumni in executive positions with client (Menon & Williams, 2004; Lennox, 2005), fee dependence on client (Frankel, Johnson, & Nelson, 2002), audit fee premiums (Palmrose, 1986; Francis & Simon, 1987; DeFond, Francis, & Wong, 2000; Ferguson, Francis, & Stokes, 2003); nonaudit fees (Frankel et al., 2002; Ashbaugh, LaFond, & Mayhew, 2003; DeFond, Raghunandan, & Subramanyam, 2002), and PCAOB inspection reports (Gunny & Zhang, 2013). These proxies have been utilized to study audit quality from an archival perspective.

2.1.3 Audit Quality Frameworks

It has been noted that audit quality is a complex concept which does not lend itself to a single, simple definition (FRC, 2006; Bonner, 2008), as a result, many audit regulatory bodies as well as researchers have begun to develop frameworks for studying and reporting on audit quality. In 2006, the UK's Financial Reporting Council defined five main drivers of audit quality: the culture within an audit firm; the skills and personal qualities of audit partners and staff; the effectiveness of the audit process; the reliability and usefulness of audit reporting, and factors outside the control of auditors. Indicators of audit firm cultures that enhance audit quality include an emphasis on quality by firm leadership, respect for auditing and ethical standards, and firm development systems that promote personal characteristics critical to quality auditing. Quality indicators with regard to skills and personal qualities of audit personnel include appropriate training, quality mentoring and on-the-job training by audit supervisors, and an appraisal process with appropriate emphasis given to factors that promote audit quality. Indicators associated with the effectiveness of the audit process involve identifying the appropriate structure, experience and knowledge for each engagement team, providing high quality technical support to the engagement team, providing a well-structured audit methodology, and

ensuring that ethical standards are achieved. Indicators of the reliability and usefulness of audit reporting include audit reports that are highly standardized and in conformity with auditing standards and good communication with audit committees. Factors outside the control of the auditor but which impact audit quality include items such as the client's approach to corporate governance, the influence of the client's audit committee, the exposure to litigation risk, and the approach of regulators.

Francis (2011) identified a framework for understanding audit quality which identified six key units of analysis in audit research. This framework begins with audit inputs which include the audit testing procedures and the engagement team personnel. These audit inputs then flow through to the audit process whereby the engagement team implements the audit testing procedures and appropriately evaluates the audit evidence. These audit teams perform the audit processes within an accounting firm which impacts audit quality through the hiring, training and appraisal of auditors as well as through the development of audit guidance. Firms also develop incentives which then impact auditor behavior. The accounting firms then constitute an audit industry which influences audit quality through its effects on markets and economic behavior. Audit quality is also influenced by various institutions such as standard setters and regulatory bodies with oversight of the audit profession. The final audit quality unit of analysis identified by Francis is the economic consequences of audit outcomes which impact clients and users of the audited financial information. Francis notes that a comprehensive understanding of the drivers of audit quality will necessitate research at each of these units of analysis.

In their review of the audit quality literature, Knechel et al. (2013) propose a balanced scorecard approach to understanding audit quality which identifies linkages across five primary attributes of the audit and four different aspects of the audit process. The four aspects of the audit are the audit inputs composed of the individual

characteristics of the engagement team such as professional skepticism, knowledge and expertise; the audit process which involves tasks such as assessing risks, obtaining and evaluating evidence, and making judgments; the audit outcomes which include items such as audit reports, financial reporting quality, and regulatory reviews of audit firms; and the audit context which encompasses items such as non-audit fees, auditor tenure, and market perceptions of audit quality. Knechel et al. (2013) note that each audit category can be influenced by primary audit attributes with a resulting impact on audit quality. These attributes are the incentives surrounding the audit, uncertainties related to the outcome and risks associated with an audit, the uniqueness of each individual audit engagement, the process or systematic activities of an audit, and the professional judgments necessary in implementing an audit. Each interaction between audit categories and audit attributes has the potential to impact audit quality. These authors describe a quality audit as “one where there is execution of a well-designed audit process by properly motivated and trained auditors who understand the inherent uncertainty of the audit and appropriately adjust to the unique conditions of the client” (Knechel et al., 2013, p. 407).

In 2013, the IAASB developed a framework for audit quality which identifies four key attributes that are conducive to audit quality while recognizing the various stakeholder perspectives (IAASB, 2013). The first element is the audit inputs which focus on auditors displaying the appropriate values, ethics and attitudes, having sufficient knowledge and experience, and utilizing a rigorous audit process and quality control procedures. The audit inputs should be considered at the engagement level, firm level and the national level. The second element is the audit outputs which include the auditor’s report and the audited financial statements but also includes outputs that might not be visible to those outside the audited entity such as improvements to the financial

reporting practices or internal control. This element would also encompass feedback from audit regulators with regards to specific engagements. The third element is the interactions within the financial reporting supply chain including external auditors, management, those charged with governance, users, and regulators. The formal and informal communications among these participants can influence the attitudes and views of others thereby influencing audit quality. The final element identified by the IAASB is the contextual factors which encompasses the environmental factors that are likely to impact the nature and quality of financial reporting such as business practices and commercial law, information systems, corporate governance, and broader cultural factors.

The U.S. Public Company Accounting Oversight Board (PCAOB) has also identified audit quality as an area of current interest and presented an audit quality framework as part of its discussion of audit quality indicators (PCAOB, 2013). The three broad elements of the PCAOB's framework which align closely with the other frameworks discussed include audit inputs, processes, and results. Audit inputs include elements related to competent and talented audit teams such as professional experience, supervision and review, and workloads. Audit processes include elements from the PCAOB's Quality Control Standards such as risk assessment, control activities, monitoring, and tone at the top. Audit results include the deliverables required to be provided by the auditors such as reliable financial statements, assurance about internal control, and going concern warnings. These elements should all be considered in light of external pressures such as client expectations, the public demand for audits, and environmental change.

Upon comparing these five audit quality frameworks, it becomes apparent that they have many aspects in common. All five frameworks are designed around the audit

cycle of audit inputs, audit processes, audit outputs, and other contextual/environmental factors. These frameworks make it clear that audit quality is a multifaceted concept that is influenced by many elements along the audit cycle. Research contributing to a better understanding each of these drivers and how they can help bring about higher quality audits will increase the audit quality knowledge base.

In considering the audit inputs component of the audit quality framework, prior survey research has revealed that many stakeholders in the audit process indicate that attributes related to the audit team members is more closely tied to audit quality than firm wide attributes. In 1986, Schroeder, Solomon, & Vickrey surveyed the audit committee chairpersons from Fortune 500 companies who ranked audit team factors as more important than firm wide factors in determining audit quality. Carcello, Hermanson, & McGrath (1992) expanded upon this research by surveying financial statement preparers, professional auditors, and financial statement users regarding audit quality. This survey found that the top four factors contributing to audit quality as identified by all three stakeholder groups were more closely tied to audit team members as opposed to firm wide attributes. In an unpublished paper, Christensen et al. (2014) surveyed audit partners and managers as well as experienced investors regarding definitions and measures of audit quality. Consistent with prior research, they find that both stakeholder groups overwhelmingly associate individual characteristics of the audit engagement team with high audit quality. Three questions related to engagement team staffing, training, and expertise received the highest average scores among any of the audit quality questions. These findings indicate that characteristics of the audit team are perceived to be very closely related to audit quality and as such warrant further study.

The various audit quality frameworks all identify engagement team characteristics as an important element impacting the audit input components of the

framework. The PCAOB (2013) indicates that the six elements of the audit inputs component of their suggested framework “each relate to competent and talented people, who are essential for audit quality” (p. 4). They point out that human capital is one of the audit firm’s most significant assets. The IAASB (2013) focuses on the engagement team in the audit inputs component of their suggested framework grouping inputs into the following categories: (1) the values, ethics and attitude of auditors, which in turn are influenced by the culture prevailing within the audit firm, (2) the knowledge and experience of auditors and the time allocated for them to perform the audit; and (3) the effectiveness of the audit process and quality control procedures (p. 17). They state that it is important for audit firms to promote the personal characteristics of audit personnel that are essential to audit quality. The FRC (2006) identified the skills and personal qualities of audit partners and staff as a significant element of their framework. With regards to this element, they note that due to the hierarchical structure of most audit firms in which relatively inexperienced staff completes a significant portion of the on-site procedures that proper supervision with regards to technical and judgmental issues is essential. In describing the audit inputs of his proposed framework, Knechel et al. (2013) state that the “ability to make sound judgments directly influences the quality of the audit so the better the personnel the better the outcome of the audit is likely to be” (p. 391). In this case, the authors note that incentives and motivation, professional skepticism, knowledge and expertise, and within firm pressures all influence the engagement team. Francis (2011) notes that people and audit tests are the key audit inputs and states that higher quality audits will be achieved when they are undertaken by competent people. Yet despite this observation, he points out that little research has been published with respect to individual auditor characteristics.

One approach to investigating the engagement team aspect of the audit inputs component is to take a behavioral approach to examining audit quality. This is a more direct approach which takes into consideration the work performed by the audit engagement team personnel. This approach entails studying the actions and behaviors of the auditor while performing the audit procedures and then assessing the appropriateness of these actions. The underlying assumption of this approach is that the auditor's behaviors would then impact the audit engagement such as in the evidence gathering and evaluation and the potential errors made by the auditor. Coram , Ng, & Woodliff (2003) referred to this approach to studying audit quality as taking a "look behind the audit veil to evaluate how the auditor executes audit program steps" (p. 38).

2.2 Reduced Audit Quality Behaviors

As auditors perform the audit, they are faced with many decisions that ultimately affect the quality of the audit and can lead to the issuance of an improper audit opinion. In the research literature, dysfunctional audit behavior is often referred to as reduced audit quality acts (RAQ) or quality threatening behaviors (Bedard et al., 2008). RAQ acts are defined as the actions undertaken by an auditor during the performance of an audit which inappropriately diminish the effectiveness of the evidence gathering procedures (Malone & Roberts, 1996; Kelley & Margheim, 1990). Herrbach (2001) described RAQ acts as "poor execution of an audit procedure that reduces the level of evidence gathered for the audit, so that the collected evidence is unreliable, false, or inadequate quantitatively or qualitatively. This evidence no longer allows coverage of the risk linked to the financial statements" (p. 190). The occurrence of RAQ behaviors is of concern to the profession because the behaviors compromise the quality of the audit by increasing the risk that an inappropriate audit opinion will be issued and as a result those relying upon the financial statement will be harmed (Coram et al., 2008). RAQ behaviors

threaten the outcome of the audit and the validity of the audit opinion (Herrbach, 2001).

The RAQ behaviors most commonly studied in the literature are listed in Table 2.1.

Table 2.1 Commonly Studied Reduced Audit Quality Behaviors

<ul style="list-style-type: none">• False or premature sign off of audit procedures• Accepting weak client explanations or doubtful evidence• Failing to research a technical issue• Superficial review of client documentation• Reducing amount of work performed below what auditor would consider reasonable• Rejecting awkward looking items from a sample• Failure to pursue questionable items• Underreporting of time

False or premature sign off occurs when an auditor signs off on an audit program indicating that he has completed all required audit procedures without completing the work or noting the omission in the documentation (Raghunathan, 1991). Many studies have examined this RAQ behavior (Rhode, 1978; Alderman & Deitrick, 1982; Margheim & Pany, 1986; Kelley & Margheim, 1987, 1990; Pany, Pourciau, & Margheim, 1989; Raghunathan, 1991; Otley & Pierce, 1995, 1996a, 1996b; Malone & Roberts, 1996; Kelley, Margheim, & Pattison, 1999; Herrbach, 2001; Donnelly et al., 2002, 2003a, 2003b; Pierce & Sweeney, 2004; Gundry & Liyanarachchi, 2007; Coram et al., 2008; Morris, 2009; Hyatt & Taylor, 2013; Nor et al., 2010; Sweeney, Arnold, & Pierce, 2010; Hyatt & Prawitt, 2011). Accepting weak client explanations or doubtful evidence occurs when an auditor accepts a client's explanation regarding a transaction and uses it in lieu of other substantive evidence that the auditor could reasonably expect to be accessible (Coram et al., 2008). This would also be evidenced by an auditor placing overreliance on client prepared work or on other weak or suspicious evidence. Many studies have found evidence of this behavior among auditors (Kelley & Margheim, 1987, 1990; Malone & Roberts, 1996; Willet & Page, 1996; Otley & Pierce, 1996a, 1996b; Kelley et al., 1999;

Herrbach, 2001; Coram et al., 2003, 2004, 2008; Gundry & Liyanarachchi, 2007; Morris, 2009; Sweeney et al., 2010; Nor et al., 2010). Failure to research a technical issue occurs when an auditor is faced with an unfamiliar issue and is unsure of the appropriate accounting treatment but chooses not to seek applicable guidance from the relevant technical and professional standards (Coram et al., 2008). These actions reduce the effectiveness of the audit (Kelley & Margheim, 1987; Otley and Pierce, 1996a, 1996b; Malone & Roberts, 1996; Kelley et al., 1999; Herrbach, 2001; Coram et al., 2008; Morris, 2009; Nor et al., 2010). Superficial review of client documents entails an auditor hastily reviewing documentation provided by the client without giving proper evaluation of its accuracy and credibility (Coram et al., 2008). This action potentially reduces audit quality in that it increases the risk that audit outcomes are based upon inaccurate or falsified documentation (Kelley & Margheim, 1987; Malone & Roberts, 1996; Otley & Pierce, 1996a, 1996b; Herrbach, 2001; Coram et al., 2008; Morris, 2009; Nor et al., 2010). Reducing the amount of work performed on an audit procedure occurs when an auditor does less work than would be expected under normal conditions when completing an audit step (Coram et al., 2008). An example would be when an auditor does not perform all stated audit procedures on each item within a selected sample perhaps due to all prior items examined in the sample being found without error. This behavior reduces the quality of the audit in that it can result in the collection of insufficient audit evidence to make a proper assessment which increases the risk that a material misstatement will go undetected (Kelley & Margheim, 1987, 1990; Malone & Roberts, 1996; Willet & Page, 1996; Otley & Pierce, 1996a, 1996b, Kelley et al., 1999; Herrbach, 2001; Donnelley et al., 2002, 2003a, 2003b; Coram et al., 2003b, 2004, 2008; Morris, 2009; Nor et al., 2010). Rejecting awkward looking items from a sample occurs when an auditor chooses to exclude items that appear to be complex or time consuming from an audit sample and

replaces them with other items during the analysis of a sample (Coram et al., 2008). This behavior will reduce audit quality because discarding complex sample items increases the risk that an error or fraud will not be detected by the audit procedures (Willet & Page, 1996; Coram et al., 2003a, 2003b, 2008). Failure to pursue questionable items is when an auditor chooses to not extend audit procedures when a suspicious transaction has been discovered (Malone & Roberts, 1996; Herrbach, 2001; Coram et al., 2008).

Underreporting of time is also studied as a dysfunctional audit behavior. Underreporting of time occurs when an auditor performs work that is chargeable to a client engagement but chooses to not charge the time to the client for whom the work was completed (Coram, 2008). This behavior impacts audit quality indirectly through its negative impact on audit time budgets and engagement staffing. Unrealistic time budgets can increase time pressure in future audits leading to potential engagement in direct effect reduced audit quality behaviors. As a result, this undesirable behavior has also been studied extensively (Lightner, Adams, & Lightner, 1982; Cook & Kelley, 1988, 1991; Pany et al, 1989; Kelley & Margheim, 1990; Otley & Pierce, 1996a, 1996b; Herrbach, 2001; Donnelly et al., 2002, 2003a, 2003b; Shapeero et al., 2003; Sweeney et al., 2010).

These behaviors by auditors will not necessarily result in an incorrect audit opinion being issued but they do decrease the effectiveness of the audit and increase the risk of an incorrect audit opinion being issued which can have serious consequences for the stakeholders who rely on the opinion. Herrbach (2001) noted that these behaviors reduce audit quality because “by lowering the care and skepticism involved in auditing, they threaten the outcome of the engagement and the validity of the audit opinion” (p. 190). Cook & Kelley (1991) note that in addition to jeopardizing the integrity of the audit, RAQ acts can also reduce employee morale and obscure the actual time required to

complete the audit which can result in unrealistic time budgets for future audits. Much of the early research into this behavior focused on identifying the extent to which the behaviors occur, the staff positions most likely to engage in the behaviors, the reasons why auditors would engage in the behaviors, and the areas of the audit in which the behaviors were more likely to occur (Coram et al., 2008).

The fact that it was not uncommon for auditors to engage in premature sign off on audit procedures was first documented in a questionnaire survey of CPAs which was sponsored by the Commission on Auditor's Responsibilities and conducted by John G. Rhode (1978)¹. This report indicated that 58 percent of the respondents had engaged in premature sign-off at some point in time although 80 percent of these respondents indicated that they did so infrequently. 34 percent of these respondents indicated that premature signoffs occurred primarily as the result of time budget pressures. The results also indicated that staff auditors were perceived to be the most susceptible to engaging in premature signoffs. Additionally, the Rhode's study found that 55 percent of respondents engaged in underreporting of chargeable time. In 1982, Alderman & Deitrick improved upon Rhode's research design and replicated his findings. They found that 31% of respondents indicated that in general, they perceived that some auditors engage in premature signoff while 20% indicated that they perceived auditors in their firm to engage in this behavior. Respondents also indicated that premature signoff was most likely to occur during the testing of internal controls and as a result of time constraints, inadequate supervision, auditor judgment that a procedure was unnecessary and auditors willingly accepting client explanations as sufficient (Alderman & Deitrick, 1982). Lightner, Leisenring, & Winters (1983) found that 67 percent of surveyed auditors had

¹ Information related to this report has been obtained from other studies (Alderman & Deitrick, 1982; Margheim & Pany, 1986; Coram et al, 2003b).

underreported time. Raghunathan (1991) looked at only one type of RAQ act which was premature signing-off of audit procedures. In his survey, 55% of the respondents admitted to engaging in premature sign-off at some point in time although overall, 85% reported that they never, very rarely, or rarely signed-off prematurely. He also found that senior auditors are in the audit position most likely to engage in premature sign-off perhaps due to this being the position in which time budget pressure is felt most intensely. Additionally, his results indicated that the audit areas most susceptible to RAQ acts were internal control testing, reviewing the work of internal auditors, and performing the analytical review procedures. In a survey conducted by Otley & Pierce (1995), 89 percent of auditors admitted to engaging in some RAQ acts during their career and 76 percent indicated a belief that premature signoff does occur in practice. In 1996, Willet and Page surveyed auditors regarding RAQ actions in which they had engaged and found that 70 percent admitted to having engaged in an RAQ act. Reasons given for being tempted to engage in RAQ acts were time pressure (60%), work perceived as unimportant (41%), and boredom (30%). Malone & Roberts (1996) reported that 75 percent of auditors admitted to doing less work than would normally be done at least once in their career. Coram et al. (2003b) collected survey data related to three RAQ acts. They found that 53.5 percent of auditors had sometimes encountered colleagues who rejected awkward looking items from a sample (25.6 percent encountered this often), 42.8 percent of auditors had sometimes encountered colleagues who did not test all items in a sample (21.4 percent encountered this often), and 50 percent of auditors had sometimes encountered colleagues who accepted doubtful evidence (16.7 percent encountered this often). When asked how often the auditor had been personally tempted to engage in these activities, 47.6 percent said they were sometimes tempted to reject awkward sample items (33.4 percent often tempted), 37.2 percent were sometimes

tempted to not test all items in a sample (23.3 percent often tempted), and 47.6 percent were sometimes tempted to accept doubtful evidence (16.7 percent often tempted). Additionally, 62.8 percent of the auditors reported that they had sometimes engaged in at least one of the RAQ acts (0 percent reported engaging often). Furthermore, the results showed no significant difference between experience level (staff or senior) or gender and that the audit areas most likely to suffer were compliance testing, creditors, and completion of the audit. In its 2000 Panel on Audit Effectiveness Report and Recommendations, the AICPA Public Oversight Board Research expressed continuing concern that time and budget pressures can still give rise to these dysfunctional behaviors (POB, 2000). Research that spans over 30 years provides evidence that RAQ behavior continues to occur although most of the US research studies occurred prior to the passage of the Sarbanes-Oxley Act of 2002 (Rhode, 1978; Alderman & Deitrick, 1982; Kelley & Seiler 1982; Buchman & Tracy, 1982; Margheim & Pany, 1986; Kelley & Margheim, 1990; Raghunathan, 1991; Malone & Roberts, 1996; Otley & Pierce, 1996a; Herrbach, 2001; Shapeero et al., 2003; Donnelly et al., 2003a, 2003b; Coram et al., 2004; O'Bryan, Quirin, & Donnelley, 2005; Gundry & Liyanarachchi, 2007; Coram et al., 2008; Morris, 2009; Nor et al., 2010; Sweeney et al., 2010; Hyatt & Prawitt, 2011). As a result, this is an area of continuing concern in the audit profession.

Further research in this area is concerned with the effects of situational variables, auditor characteristics, and audit team characteristics on the occurrence of RAQ acts. The audit profession is particularly concerned with what can be done to reduce the incidence of RAQ acts. The variables that have been identified as potentially influencing the auditor's engagement in RAQ acts can be categorized into four areas: those related to the auditor, those related to the auditor's superiors, those related to the firm's control systems, and other contextual variables.

2.2.1 Characteristics of the Auditor

Many auditor characteristics have been studied in relation to RAQ acts.

Organizational commitment (OC) is a measure of one's identification with an organization and can be defined as "the acceptance of organizational goals and a willingness to exert effort on behalf of the organization" (Donnelley et al., 2003a, p. 99). OC has three interrelated dimensions which are (1) a strong belief in and acceptance of the organization's goals and values; (2) a willingness to work hard to help the organization achieve its goals; and (3) a desire to retain affiliation with the organization (Mowday, Steers & Porter, 1979). OC has been found to be positively associated with desirable work behaviors such as job performance and attendance (Porter, Steers, Mowday, & Boulian, 1974; Ferris, 1981; Ferris & Larcker, 1983) and negatively associated with undesirable work behaviors such as resistance to change and reluctance to leave due to lack of ability (Arranya & Ferris, 1984). It has also been found that people with high OC show work persistence even when under high stress (Choo, 1986). With regard to RAQ acts, it is expected that an auditor with high OC would identify with the firm and its values and would exert extra effort in order to see the firm achieve its goals; therefore, he would be less likely to engage in unethical or dysfunctional work behavior. Research has found this characteristic to have a negative relationship with RAQ acts (Donnelley et al., 2003a; Herrbach, 2001; Otley & Pierce, 1996a; Malone & Roberts, 1996; Paino et al., 2011b) although the relationship has not always been statistically significant (Herrbach, 2001; Malone & Roberts, 1996). Otley & Pierce (1996a) studied the RAQ acts of underreporting of time (URT) and premature signoff separately from the other RAQ acts and found that OC had a positive association with URT although the relationship was statistically insignificant. They stated that this could be due to the fact that URT could be

viewed as helping the firm to meet the established time budget. Overall, results support that an auditor with high levels of OC will have a lower propensity to engage in RAQ acts.

The relationship between RAQ acts and a similar construct, professional commitment (PC), has also been studied. PC embodies the same underlying components as organizational commitment but it focuses on an individual's identification, involvement, and motivation to exert extra effort for a particular profession (Jeffrey and Weatherholt, 1996; Aranya & Ferris, 1984; Aranya, Pollock, & Amernic, 1981). PC is the attachments one forms to her profession and encompasses the belief and acceptance of the goals and values of the profession, a willingness to put forth effort on its behalf, and a desire to retain membership in the profession (Aranya et al., 1981; Aranya and Ferris, 1984). PC has been found to be associated with positive work related outcomes such as improved work performance (Lee, Carswell, & Allen, 2000), reduced turnover intentions, and greater organizational and professional satisfaction (Harrell, Chewning, & Taylor, 1986; Meixner and Bline, 1989; Bline, Duchon, & Meixner, 1991; Bline, Meixner, & Aranya, 1992). Furthermore, it has been proposed that higher levels of PC should result in greater sensitivity to matters involving professional ethics although the findings in this area have been mixed (Aranya et al., 1981; Aranya, Lachman, & Amernic, 1982; Lachman and Aranya, 1986; Shaub, Finn, & Munter, 1993; Lord & DeZoort, 2001). Auditors who have a high belief in the goals and values of the profession and who are willing to exert extra effort on behalf of the profession would be expected to be less likely to engage in RAQ acts as this behavior would decrease audit quality and potentially damage the reputation of the profession. Malone & Roberts (1996) found PC to have a negative association with RAQ acts although the relationship was not statistically significant. Otley & Pierce (1996a) found PC to have a positive association with URT and premature signoff and a negative association with the other RAQ acts, but none of these

associations were statistically significant. Paino et al. (2011b) also found the direct relationship between PC and RAQ acts to be insignificant, but their results indicated that this relationship was partially mediated by OC.

The relationship between auditor personality type and RAQ acts has also been studied. People with the personality characteristics of being more aggressive, competitive, ambitious, time conscious, motivated and work oriented are known as Type A personalities in the academic literature (Eysenck & Fulker, 1983; Rayburn & Rayburn, 1996). Ivancevich & Matteson (1987) report that the Type A behavior pattern exhibits three key characteristics: impatience, job involvement, and hard driving/competitiveness. On the one hand, auditors with high levels of Type A personality traits may be more likely to engage in RAQ acts as stress levels increase, yet on the other hand, their commitment to their work related goals may reduce their propensity to engage in RAQ acts (Gundry & Liyanarachchi, 2007; Malone & Roberts, 1996). Early research into the relationship between auditor's Type A personality and RAQ acts found no significant direct relationship (Kelley & Margheim, 1990; Malone & Roberts, 1996) nor was support found for a Type A personality moderating the relationship between time budget pressure and RAQ acts (Kelley & Margheim, 1990). In 2007, Gundry & Liyanarachchi utilized a different measurement scale for Type A personality and found that it had a significant and negative association with the likelihood of accepting weak client explanations and premature sign off indicating that auditors with higher levels of Type A personality characteristics were less likely to engage in these activities. They also found that it was a significant moderator of the relationship between time budget pressure and the likelihood of accepting weak client explanations and premature sign off. Overall, results seem to indicate that auditors with Type A personalities are less likely to engage in RAQ acts.

Auditor's turnover intentions have also been studied in relation to RAQ acts. Turnover intention is the probability that one plans to leave their current place of employment. The predicted relationship between turnover intentions and RAQ acts is ambiguous. It may be expected that an auditor with high intentions to leave the firm would be more likely to engage in RAQ acts as his fear of consequences or termination would be low (Malone & Roberts, 1996). Yet, a high turnover intention could also be expected to diminish the likelihood that an auditor would engage in RAQ acts as he would not necessarily be concerned with performance appraisals or promotions and thus not concerned about budget overruns (Malone & Roberts, 1996). Malone and Roberts (1996) found no significant relationship between these variables, but Donnelley et al. (2003b) found a positive relationship between turnover intentions and acceptance of RAQ acts. They suggest that this is a positive aspect of auditor attrition rates as retaining auditors with high intentions of leaving the firm could adversely impact audit quality (Donnelley et al., 2003b).

Locus of control (LOC) reflects the degree to which a person perceives that their own personal behaviors will impact their success or failure in any given circumstance. People with an internal LOC perceive outcomes to be associated with personal efforts and thus believe that they can influence their success or failure. People with an external LOC perceive outcomes to be associated with external forces and thus believe that external forces beyond their control influence their success or failure (Spector, 1982). Internal LOC has been found to be positively associated with OC (Luthans, Baack, & Taylor, 1987; Kinicki & Vecchio, 1994, Donnelley et al., 2003a). Internals perceive themselves as having many job alternatives; therefore, when they remain with an employer, it is by personal choice resulting in the development of a greater sense of OC. Externals do not perceive themselves as having many employment alternatives, thus

when they remain with an employer, it may be due to feeling that they have no other options. Considering this positive association between LOC and OC, it is expected that internals will be less likely to engage in RAQ acts. External LOC has been found to be associated with Machiavellianism which involves a willingness to use manipulation or deception to achieve personal goals (Gable & Dangelo, 1994; Comer, 1985; Solar & Bruehl, 1971). Mudrack (1989) stated that this relationship may be the result of externals attempting to exert influence over an environment that they perceive as hostile. O'Bryan et al. (2005) state that this association may indicate that auditors who exhibit an external LOC may be more likely to engage in RAQ acts as a way to cope with the high pressure audit environment and attempt to improve their performance assessment. As an external, the auditor would not perceive their actions during the audit as influencing the outcome of the audit, thus, they would not necessarily view their dysfunctional behavior as reducing the quality of the audit (O'Bryan et al., 2005). O'Bryan et al. (2005) used ANOVA to look at the different perspectives of auditors with an internal versus external LOC with regards to three RAQ acts: premature signoff, altering/replacing assigned audit procedures, and URT. They found that externals perceive all three RAQ acts to occur more frequently, are more accepting of all three RAQ acts, and perceive a lower likelihood of detection for premature signoffs and altering/replacing assigned audit procedures. Utilizing regression analysis, Malone & Roberts (1996) did not find a significant relationship between LOC and frequency of engaging in RAQ acts when measuring RAQ behavior as a composite score of six acts, but Donnelley et al. (2003a, 2003b) found that external LOC was positively associated with acceptance of premature signoff, altering/replacing assigned audit procedures, and URT. Shapeero et al. (2003) also found that external LOC was positively associated with premature signoff and URT. Overall, the results support that external LOC is positively associated with RAQ acts

when RAQ acts are examined individually indicating that an auditor with an external LOC is more likely to engage in RAQ acts.

An auditor's position within the firm has also been found to be associated with RAQ acts. Many studies have found that auditors at the staff and senior levels are more likely to engage in RAQ acts than those at levels above senior (Kelley & Seiler, 1982; Alderman & Deitrick, 1982; Donnelley et al., 2003a; Gundry, 2006; Shapeero et al., 2003). These findings may be the result of auditors who are accepting of RAQ acts not remaining in the profession; as auditor tenure increases, the more likely he is to become indoctrinated into the firm culture and the better able he is to understand the implications of this behavior for the many stakeholders involved (Donnelley et al., 2003a). Malone & Roberts (1996) surprisingly found that senior auditors were more likely to engage in RAQ behavior than staff auditors. They stated that this could be due to senior auditors feeling more pressure to bring an audit in on budget, but they also recognized that it could be the result of their RAQ measure. They measured RAQ as how frequently one had engaged in the various RAQ behaviors over the course of her career; therefore, it is reasonable to expect that the RAQ measure of a senior auditor would be higher than that of a staff auditor simply as a result of the senior having been in the profession longer.

2.2.2 Supervisor Leadership Style

Research has also investigated the potential influence of various characteristics of the auditor's superior on the auditor's perceptions of RAQ acts. The most commonly studied characteristics are the two leadership dimensions referred to as initiating structure and consideration. Initiating structure refers to the degree to which a supervisor clearly establishes the roles and responsibilities of himself and his subordinates and how those responsibilities should be accomplished (Fleishman & Peters, 1962). "To the extent that the leader encourages the use of uniform procedures, defines standards of

performance and lets subordinates know what is expected of them, he is engaging in structuring activities” (Pratt & Jiambalvo, 1982, p. 371). Consideration is defined as the degree to which a leader’s behavior “reflects mutual trust, respect for subordinates’ ideas and consideration of their personal needs” (Pratt & Jiambalvo, 1982, p. 372). Studies have shown that the way in which accounting control information, such as time budgets, is utilized by supervisors can have a significant effect on an individual’s actions in a given situation (Hopwood, 1974; Otley, 1978;). Pratt & Jiambalvo (1981) found that a senior auditor’s consideration behavior was positively correlated with audit team performance, audit team interpersonal relations, and audit staff satisfaction yet the senior auditor’s structuring behavior was not correlated with these variables.

The structuring dimension of leadership has been viewed from two different perspectives in the RAQ literature. On the one hand, Kelley & Margheim (1990) theorized that if an audit supervisor provided highly structured tasks and guidelines that the auditor would have less opportunity to engage in RAQ acts without detection. This would result in an inverse relationship between structuring and RAQ acts. Their MANCOVA results indicated that a senior’s structuring behavior had a marginally significant inverse direct effect on the staff’s RAQ behavior while individual ANCOVAs indicated that the effect only occurred with the RAQ act of failing to research an accounting principle. They also tested but found no support for a potential moderating effect of senior structuring behavior on the relationship between time budget pressure and RAQ acts. On the other hand, Otley & Pierce (1996a) theorized that an audit manager who demonstrates high levels of structuring will likely stress a rigid application of the audit time budget which would be associated with higher levels of RAQ behavior as the staff and senior auditors attempt to meet the budget. Their regression results provide support for a positive association between the perceived structuring behavior of the audit

manager and the senior's URT, premature signoff, and four other RAQ acts combined as one variable. Otley & Pierce (1995) results also support the positive relationship between leader structuring behavior and RAQ acts although their results provide support for a potential interaction effect of structuring and consideration behaviors with regards to URT as the positive relationship between leader structuring behavior and URT is weaker in the presence of leader consideration behavior. Pierce & Sweeney (2004) find no significant relationship between leader structuring behavior and URT or ten other RAQ acts combined as one variable when surveying audit staff and seniors. In a survey of Malaysian audit managers, Paino, Thani, & Idris (2011a) found the perceived structuring behavior of the audit partner to be positively associated with the audit manager's engagement in RAQ acts. The results related to the relationship of the structuring dimension of leadership to RAQ acts have been mixed.

The consideration dimension of leadership is generally expected to have a negative association with RAQ acts such that as the audit supervisor exhibits higher levels of consideration behavior, the auditor will be less likely to engage in RAQ acts. It is theorized that an audit manager with high levels of consideration will provide a more supportive environment whereby audit and budget issues can be freely discussed which would then be associated lower levels of RAQ behaviors. Kelley & Margheim (1990) found no statistically significant relationship between an audit senior's consideration behaviors and the audit staff's engagement in RAQ acts nor did they find a significant moderating effect of consideration behavior on the relationship between time budget pressure and RAQ acts. The results of Otley & Pierce (1996a) provide support for a negative association between the perceived consideration behavior of the audit manager and the senior's URT, premature signoff, and four other RAQ acts combined as one variable. Otley & Pierce (1995) results also support the negative relationship between

leader consideration behavior and RAQ acts and find that high levels of consideration behavior are associated with lower levels of RAQ acts regardless of the level of leader structuring behavior present which underscores the importance of consideration behavior on the part of the audit supervisor. Pierce & Sweeney (2004) find no significant relationship between leader consideration behavior and URT or ten other RAQ acts combined as one variable when surveying audit staff and seniors. Pierce & Sweeney (2004) attribute the lack of significance related to both leadership consideration and structuring to the fact that “communication and reporting procedures in the current audit environment are much more complex than a simple one to one hierarchical relationship” (p. 436) They found in their sample that audit staff were often reporting directly to an audit manager as opposed to an audit senior and the manager’s presence during fieldwork is significantly less than that of a senior. They felt that this was a contributing factor as to why their results were different than prior findings. In a survey of Malaysian audit managers, Paino et al. (2011a) found the consideration behaviors of partners to have a positive relation with the RAQ behaviors of audit managers which was the opposite result of what they were expecting and is also inconsistent with prior research. In further analysis; they found it to be positively correlated with accepting weak client explanations and reducing audit work but negatively correlated with superficial review of documents and premature signoff. They offer no explanation for the inconsistent results, but it interesting to note that their study differs from prior studies in that they examine the relationship between audit managers and partners whereas previous studies focused on the relationship between audit staff and seniors or audit seniors and managers. As prior studies have provided evidence that RAQ behavior is more prevalent at the staff and senior positions (Kelley & Seiler, 1982; Alderman & Deitrick , 1982; Donnelley et al.,

2003a; Gundry, 2006; Shapeero et al., 2003), the manager-partner relationship may not be the most appropriate for examination of these variables.

2.2.3 Firm Control Systems

Audit firm control systems have also been an area of research focus with regards to RAQ acts. Audit firms are faced with a cost-quality dilemma in that they must find a balance between maintaining a high level of audit quality which often involves investing more time in audit procedures while controlling the cost of performing the audit which involves controlling the time spent on the audit procedures (McNair, 1991; Otley and Pierce, 1996a). Time budgets are one way in which audit firms attempt to manage the cost of performing an audit. Throughout the RAQ studies, time budget pressure has consistently been found to be positively associated with the likelihood of engaging in RAQ acts (Alderman & Deitrick, 1982; Lightener et al., 1982; Cook & Kelley, 1988, 1991; Kelley & Margheim, 1990; Raghunathan, 1991; Otley & Pierce, 1996a, 1996b; Willet & Page, 1996; Kelley et al., 1999; Pierce & Sweeney, 2004; Coram et al., 2004; Gundry & Liyanarachchi, 2007; McNamara & Liyanarachchi, 2008). In 1990, Kelley & Margheim found that the relationship between time budget pressure and URT and RAQ acts was u-shaped as opposed to linear in which the URT and RAQ acts increased as time budget pressure increased until time budget pressure reached the point of being impossible to achieve at which point the level of URT and RAQ acts decreased suggesting that once an auditor views the time budget as impossible, the likelihood of responding to this pressure with dysfunctional behavior declines. Kelley et al. (1999) found that time budget pressure was more associated with RAQ acts than time deadline pressures for auditors at both the staff and senior levels. Gundry & Liyanarachchi (2007) found that time budget pressure was positively related to premature signoff for staff and senior auditors but not for managers and partners indicating that less experienced auditors are more likely to

respond to this pressure with dysfunctional behavior. In an experimental setting studying the RAQ acts of accepting doubtful evidence and truncating a selected sample, Coram et al. (2004) found evidence of a three-way interaction between time budget pressure, risk of misstatement, and type of RAQ act in addition to the main effects of time budget pressure. These results indicate that auditors consider the risk of misstatement as well as the type of RAQ act when responding to time budget pressure. Malone & Roberts (1996) and Nor et al. (2010) both found time budget pressures to be insignificant but in both cases, the authors attributed this inconsistency with prior results to lack of variability in the time budget variable. Overall, research indicates that as time budget pressures increase, the likelihood of auditors engaging in RAQ acts also increase.

A firm's quality control standards have also been examined in relation to the likelihood of RAQ acts. Using an experimental design, Margheim & Pany (1986) found that the existence of a stated quality control standard did not have an impact on either URT or premature signoff. Two other control factors studied in relation to RAQ acts are perceived firm penalties associated with RAQ acts and perceived strength of quality control and review procedures. Malone and Roberts (1996) found perceived strength of the firm's quality control and review procedures and perceived penalty for RAQ behavior are both inversely related to the frequency in which staff and senior auditors engaged in RAQ acts. These findings provide support for the idea that the higher the likelihood that a firm's quality control and review process will detect an RAQ act and the greater the perceived penalties associated with detection, the lower the likelihood that an auditor will engage in RAQ behavior (Malone & Roberts, 1996). Otley & Pierce (1996a) found that the effectiveness of the audit review in finding premature signoffs was inversely related to the frequency in which the auditor had engaged in premature signoff and a RAQ measure combining the frequency of engagement in superficial review of documents, failure to

research accounting principle, acceptance of weak client explanations, and reduction of work below that considered reasonable. Paino et al. (2011a) found that the effectiveness of the audit review was negatively related to the frequency with which RAQ acts are encountered and that this relationship is partially mediated by leader consideration and structuring behavior. The research provides support that higher quality control standards are associated with a lower likelihood of auditors engaging in RAQ acts.

In their examination of the interaction effects of time pressure and risk of misstatement, Coram et al. (2004) found significant interaction effects related to truncating a sample but not for accepting doubtful evidence. The results indicated that audit seniors would be less likely to engage in truncating a sample under high time budget pressure when the audit involved a high risk of misstatement. The fact that there was no interaction effect related to accepting doubtful audit evidence indicates that auditors do not view all RAQ acts as equivalent. They make distinctions between them. This was an interesting finding because most prior research had pooled all RAQ acts together and treated them as homogeneous acts. Coram et al. (2004) suggested that in future research, RAQ acts should be investigated separately.

Expanding upon this finding, Coram et al. (2008) investigated the moral intensity of RAQ acts. They hypothesized that if auditors see various RAQ acts differently that these differences may be due to perceived variances in the moral intensity of each act. They specifically investigate three dimensions of Jone's (1991) proposed model of moral intensity: social consensus or the agreement as to whether an act is good or evil, magnitude of consequences which is the aggregate of the harms or goods that occur as a result of the act, and probability of effect which is the likelihood that the act and related consequences will occur. They find that although auditors see all RAQ acts as wrong (social consensus), the magnitude of consequences and probability of effects to the

auditor and to the financial statement users vary for the different RAQ acts. They further find that acts rated as higher in moral intensity corresponded to acts reported to occur less frequently in prior research. These findings further suggest that the aggregate measurement of RAQ acts could confound research results.

Much research has been conducted in relation to RAQ behavior and various characteristics or circumstances associated with it such as characteristics of the auditor, characteristics of the audit supervisor, and control systems of the audit firm. As discussed above, most research has examined direct relationships or mediated relationships between these variables, but not many have investigated the potential moderating effects of environmental factors such as the perceived ethical leadership of the audit supervisor. This research study will examine the potential moderating effect of supervisor ethical leadership upon the auditor's propensity to engage in RAQ behavior.

2.3 Ethical Leadership

2.3.1 Ethical Dimensions of Leadership Theories

In recognition of the significance of the ethical influence of a leader, many current theories of leadership theories encompass a dimension or aspect related to ethics. I will first describe in general terms the ethical dimensions found in several current leadership theories with the purpose of providing a distinction between these leadership theories and the ethical leadership construct. Then, I will focus on the development and empirical research related to the construct of ethical leadership (Brown et al., 2005).

2.3.1.1 Transformational Leadership

Transformational leadership was first introduced by James M. Burns (1978) in his study of governmental leaders. Transformational leadership involves a relationship between leader and followers which in the long run brings about a change in the followers' beliefs, needs and values (Burns, 1978). Burns (1978) indicates that a

“transformational leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower” (p. 4). This leader motivates followers toward a common goal. Bass (1985) applied this concept to an organizational setting and identified four dimensions of transformational leadership (Bass, 1985; Bass & Avolio, 1993).

One dimension of transformational leadership is the idealized influence dimension which is also referred to as charisma. This dimension encompasses establishing vision and setting high standards (Bass & Steidlmeier, 1999). This dimension indicates that transformational leaders set high standards of ethical conduct for their followers and are role models (Brown et al., 2005). Brown et al. (2005) suggest that this is the dimension most closely associated with the ethical aspect of transformational leadership. A second dimension of transformational leadership is the inspirational motivation which motivates followers to work toward common and challenging goals. This dimension involves bringing out the best in people and empowering people (Bass & Steidlmeier, 1999). A third dimension is intellectual stimulation in which the leader encourages followers to question assumptions and to be innovative in generating and suggesting alternative solutions (Bass & Steidlmeier, 1999). The last dimension is individualized consideration which focuses on the leader’s care and concern toward the followers. The leader sees each follower as an individual and provides for the development of each follower (Bass & Steidlmeier, 1999).

Bass & Steidlmeier (1999) further distinguished between an authentic transformational leader and a pseudo-transformational leader. The primary distinguishing factor between the two forms of transformational leadership lies in the motives of the leader. An authentic transformational leader will be motivated by altruism and will be true to self and others while a pseudo-transformational leader will be

motivated by selfishness and will misuse power for personal gain (Bass & Steidlmeier, 1999). Brown et al. (2005) suggest that since transformational leaders may be either authentic (ethical) or pseudo (nonethical), it cannot be viewed as ethical leadership in and of itself despite it having ethical or moral dimensions.

Turner, Barling, Epitropaki, Butcher and Milner (2002) provide further support for the moral or ethical dimension of transformational leadership by identifying a relationship between transformational leadership and the moral reasoning of the leader. They measured the leader's moral development using Rest's (1990) Defining Issues Test - Short Form. They measured perceptions of leadership behaviors by having the subordinates complete Bass & Avolio's (1995) Multifactor Leadership Questionnaire (MLQ) Form 5x – Short. Using a sample of leaders and subordinates across three organizations in two countries, they found that leaders who have higher moral reasoning are perceived by their subordinates as being more transformational in their leadership. They found no relationship between the leader's moral development and the subordinates' perceptions of their transactional leadership behaviors. These findings suggest that leaders with higher levels of moral reasoning are better able to think about problems from multiple viewpoints, are aware of various behavior options in any given situation and can think about interpersonal situations in more advanced ways thus giving rise to more transformational leadership behaviors.

2.3.1.2 Charismatic Leadership

Charismatic leadership involves a relationship between the leader and follower in which the leader's personal capabilities allow him to have an extraordinary impact on his subordinates (Conger & Kanungo, 1987). Conger & Kanungo (1987) indicate that charismatic leadership is a result of the interaction between the leader's attributes and the followers' needs, beliefs, values and perspectives. Based upon a literature review,

Conger & Kanungo (1987) find that attributes associated with charismatic leaders are being visionary, strengthening follower's confidence, inspiring followers, having a need for influence, being dominant, having strong communication skills and often displaying counternormative behavior. Several of these attributes such as having vision, instilling confidence and inspiring others provide the ethical dimension of charismatic leadership. Yet, Howell & Avolio (1992) suggest that charisma is value neutral in that it doesn't make a distinction between moral or immoral charismatic leadership.

Howell & Avolio (1992) distinguish between ethical and unethical charismatic leadership. An ethical charismatic leader or socialized charismatic leader is one who ultimately develops his followers into leaders by helping them to strengthen their confidence, independence and capability. A socialized charismatic leader uses his power to serve others, encourages two-way communication, aligns his vision with the goals and needs of his subordinates, and has strong internal moral standards. An unethical charismatic leader or personalized charismatic leader is one who pursues obedient and compliant followers who will be dependent upon him. A personalized charismatic leader undermines the motivation of his followers, uses power for his personal gain, promotes his own personal vision without regard to subordinates, relies upon opportune external moral standards that support his self-interest, and is not open to criticism or opposing viewpoints. As with transformational leadership, Brown et al. (2005) suggest that since charismatic leaders may be either socialized (ethical) or personalized (nonethical) that it cannot be viewed as ethical leadership in and of itself although charismatic leadership does have ethical or moral dimensions to it.

Focusing on the ethical dimensions of charismatic and transformational leadership, Brown & Trevino (2006a) investigated the relationship between socialized charismatic leadership, values congruence and deviant behavior in work groups. They

note that these two theories of leadership overlap in that they both describe “inspiring, values-based leadership style that includes ethical content” (p. 954). Their study focuses on the ethical leaders (authentic transformational leaders and socialized charismatic leaders) who are others centered and provide ethical role models for subordinates. They hypothesize that an ethical leader should influence his subordinates' behavior in such a way that deviant work group behavior would be reduced. They further hypothesize that this relationship will be mediated by the goal congruence between the leader and subordinates. Based upon a sample of 882 subordinates across 150 workgroups, they find that socialized charismatic leadership is negatively related to workgroup deviance directed toward individuals within the organization (interpersonal deviance) and workgroup deviance directed toward the organization (organizational deviance). They further find that the leader and subordinate value congruence fully mediated the negative relationship between socialized charismatic leadership and interpersonal workgroup deviance but not organizational workgroup deviance. These findings provide support for the ethical content of transformational and socialized leadership and for the influence leaders have on subordinate behavior.

2.3.1.3 Authentic Leadership

Avolio, Gardner, Walumbwa, Luthans & May (2004) describe authentic leaders as those who have “ achieved high levels of authenticity in that they know who they are, what they believe and value, and they act upon those values and beliefs while transparently interacting with others” (p. 802). Authenticity refers to knowing and being true to one's self. Authentic leaders build credibility and win the respect of their subordinates by acting in accordance with their strong personal values and convictions (Avolio et al., 2004). The model of authentic leadership proposed by Avolio et al. (2004) indicates that the influence of authentic leaders on the behavior and attitudes of followers

occurs through the processes of identification, hope, positive emotions, optimism and trust. Authentic leaders are very aware of their moral responsibilities. "Authentic leaders realize their ethical behavior sends a strong message to followers affecting what they attend to, what they think, how they construct their own roles, and ultimately how they decide and behave" (Avolio et al., 2004, p. 807). They engage in an authentic decision making process which involves recognizing moral dilemmas, assessing different alternatives transparently, and then developing intentions to act consistent with these assessments (May, Hodges, Chan & Avolio, 2003). Brown and Trevino (2006b) recognize that the ethical dimension of authentic leadership involves the leader's ability to judge and evaluate ethical issues and to act on those issues in accordance with their strong moral values.

2.3.1.4 Spiritual Leadership

Another current leadership theory which encompasses ethical dimensions is spiritual leadership. Fry (2003) defined spiritual leadership as "comprising the values, attitudes, and behaviors that are necessary to intrinsically motivate one's self and others so that they have a sense of spiritual survival through calling and membership" (p. 694). Calling refers to creating a vision in such a way that it enables subordinates to create meaning in their life and work. Membership refers to establishing a culture where subordinates feel understood and appreciated. The spirituality encompassed in this concept is indicative of the human spirit such as love, compassion, patience, and forgiveness as opposed to spirituality in a religious sense. In developing a measure of spiritual leadership, Fry, Vitucci, & Cedillo (2005) outlined three dimensions of spiritual leadership: vision, hope and faith demonstrating confidence that the vision will be realized and altruistic love characteristic of the considerate work environment. Brown

and Trevino (2006b) note that the focus on integrity, altruism, and consideration in spiritual leadership theory denote the ethical dimension of leadership.

Brown and Trevino (2006b) identify the similarities of the above leadership theories with the concept of ethical leadership. These theories all share a concern for others and an emphasis on integrity and role modeling. Authentic leadership and transformational leadership also identify ethical decision making as a significant component. These characteristics of leadership all indicate an ethical dimension, but the theories also encompass many more dimensions other than the ethical dimension. They were interested in developing a leadership concept having ethics as the primary focus.

2.3.2 Ethical Leadership

Trevino, Brown, & Hartman (2003) were interested in how people perceived ethical leadership. They were interested in finding out how perceptions of ethical leadership differed between executives and those outside the executive ranks. Additionally, they wanted to identify the content domain encompassed by ethical leadership. They used a qualitative research approach to answer these research questions. They interviewed 20 executives who were either active or recently retired CEOs or senior vice presidents of medium to large American companies as well as 20 ethics officers. They asked these interviewees to think about a senior executive that they would identify as an ethical leader as they responded to the questions. Questions included items such as define ethical leadership, what traits and behaviors do ethical leaders display, and describe the ethical leader's motivation and vision for the organization. The interview responses were then coded to identify common themes. From this process, Trevino et al. (2003) identified five consistent characteristics of ethical leadership. The first and most prevalent characteristic is that ethical leaders are people-oriented. They show concern and respect for their subordinates. Second, ethical leaders

focus on visible ethical actions and traits. They role model ethical behavior and practice what they preach regarding ethics. They are perceived as honest, trustworthy, and good communicators. Trevino et al. (2003) liken this characteristic to the influential or inspirational aspects of transformational leadership. Third, ethical leaders are perceived as setting ethical standards and establishing accountability. These leaders do not just role model ethical behavior, but they also set ethical ground rules and then hold subordinates accountable to these rules. They reinforce ethical behavior by use of rewards and punishments. Trevino et al. (2003) note that this transactional characteristic of ethical leadership had not been previously identified. Fourth, ethical leaders have a broad ethical awareness. They take into consideration the interests of the many organizational stakeholders and attempt to serve the greater good. They are concerned with the bottom-line, but they are just as concerned with the processes used to get to that bottom-line and take a long-term perspective. And last, ethical leaders are every aware of the decision-making processes and the need for transparency. These results suggest that the content domain of ethical leadership encompasses more than the ethical dimensions of the leadership theories described above.

In comparing the responses of the executives and the ethics officers, Trevino et al. (2003) noted many similarities but also an important difference. Executives emphasized the decision making process of ethical leaders while the ethics officers emphasized the visible ethical actions and communication. Trevino et al. (2003) accentuate the significance of this differing perception. The executives focused on the many ethical decisions made by executives on a day by day basis. They felt that this was the defining element of an ethical leader. The ethics officers on the other hand focused on the ethical actions and communications of the ethical leader. People outside of the executive suite are often not privy to the ethical decision making processes of the

executive leaders, thus it does not have social salience for them. Executives need to engage in behaviors, actions, and communications that will be noticed by lower level employees. If they do not, they may be perceived as an ethically neutral leader.

Trevino, Hartman, & Brown (2000) use this same data set to emphasize the importance of perceptions in regards to ethical leadership. From the interviews described above, they identified two components of a reputation for ethical leadership. First, a leader must be a moral person. This component forms the substantive basis for the reputation and is focused on the individual traits and behaviors of the ethical leader. To be a moral person, the leader needs to be honest, be trustworthy and to exhibit integrity. Their behaviors and decision making should be consistent with their character. Second, the leader must also be a moral manager which involves communicating the ethics message to the rest of the organization. This component focuses on making their ethical leadership observable and relevant to their employees and also encompasses the transactional leadership dimension of rewards and discipline for ethical and nonethical behavior. As lower level employees do not interact with executives on a day-to-day basis, this moral manager component is significant for directing their attention to the ethical leadership of the executive.

Perceptions play an important role in ethical leadership. Several studies have shown that perceptions of ethics differ based upon employee hierarchy. Morgan (1993) found that the perspective from which others evaluate a manager's ethics does affect the ratings. He studied ratings from subordinates, peers, and superiors. The results show that ratings by superiors are significantly higher than ratings by subordinates. He suggests that this could be due to superiors being more interested in the end results as opposed to the processes employed to reach this result (Morgan, 1993). Trevino, Weaver, & Brown (2008) also found that perceptions of organization ethics differed

depending upon hierarchy within the organization. Using a sample from four different organizations, the results show that senior managers have a more positive perception of organizational ethics than lower level employees. These results suggest that it is important to study the perceptions of the lower level employees with regards to ethical leadership.

After earlier results showing that the content domain of ethical leadership encompasses more than the ethical dimensions present in other leadership theories, Brown et al. (2005) further develop the ethical leadership construct and a scale to measure it. They develop this construct based upon Bandura's (1986) social learning theory which emphasizes that learning can take place by observing other's actions and the consequences of those actions. This indicates that ethical leaders can impact their subordinate's actions by both demonstrating ethical behavior as well as by rewarding or disciplining other's ethical and unethical behavior (Brown et al., 2005). Brown et al. (2005) define ethical leadership as "the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision making" (p. 120). This definition points out that the ethical leader not only demonstrates ethical behavior and decision making but also actively engages his followers in ethical considerations through communication, reinforcement, and decision making. The two-way communication indicates that the leader not only communicates and draws attention to ethics but that s/he also permits subordinates to have a voice in the process allowing for procedural and interactional justice. The reinforcement draws upon the transactional aspects of ethical leadership while the decision making indicates that the ethical leader considers the ethical consequences of his decisions (Brown et al., 2005).

Brown and colleagues conduct seven studies using seven different samples to develop and validate the measurement scale for the ethical leadership construct. Based upon prior research (Trevino et al., 2003), they initially develop 48 items for the scale. Using exploratory factor analysis, one factor emerged. Based upon the factor loadings and discussion with a construct development expert, they were able to narrow the scale to ten items. These items were as follows in Table 2.2 (Brown et al., 2005, p. 125).

Table 2.2 Ethical Leadership Scale Items

- Listens to what employees have to say
- Disciplines employees who violate ethical standards
- Conducts his/her personal life in an ethical manner
- Has the best interest of employees in mind.
- Makes fair and balanced decisions.
- Can be trusted
- Discusses business ethics or values with employees
- Sets an example of how to do things the right way in terms of ethics.
- Defines success not just by results but also the way that they are obtained.
- When making decisions, asks “What is the right thing to do?”

Using a second sample, they again perform exploratory factor analysis using the 10 item scale and find strong support for one coherent construct. A third sample was used to perform confirmatory factor analysis further supporting the ethical leadership construct. A fourth study involved the use of an expert rating investigation which found that overall the consideration dimension of leadership behavior and the passive avoidant leadership behavior were distinct from ethical leadership. The results of a fifth study supported the convergent validity of the construct as it was shown to be positively correlated to consideration behavior and affective trust and negatively related to abusive supervision. Discriminant validity was also supported in this study as there were no significant correlations between ethical leadership and a number of control variables such as age, gender, and lifestyle similarity. A sixth study further supported the discriminant validity of the construct. In this study, the respondents were asked to rate their current or

most recent supervisor on scale items from ethical leadership, the idealized influence component of transformational leadership using Bass & Avolio's (2000) MLQ, and trusting and cynical philosophies of human nature using Wrightsman's (1991) 20 item scale. They found that ethical leadership is significantly and positively related to both idealized influence and the trusting philosophy. A confirmatory factor analysis indicates that ethical leadership and idealized influence overlap but are distinct constructs in that the two factor model was the best fit.

In their seventh study, Brown et al. (2005) tested the predictive validity of the ethical leadership scale (ELS). They collected data from three matched sub-samples within work groups where one sample rated the workgroup leader on ethical leadership and honesty, a second sample rated the workgroup leader on idealized influence leader behavior, and a third sample rated the workgroup leader on interactional justice and provided measures of group outcomes theorized to be related to ethical leadership. These outcomes were satisfaction with the leader, leader effectiveness, extra effort or job dedication, and employee's willingness to report problems to management. The inter-rater agreement for ethical leadership was strong suggesting that ethical leadership does represent observable behavior. Using structural equation modeling, the results indicate that ethical leadership predicts a combined criterion including the four outcomes mentioned above and that the relationship between idealized influence and the combined criterion was not significant when included in the model with ethical leadership. These findings provide substantial support for the validity of the ethical contrast scale.

Validity of the ethical leadership construct has continued through the development of a nomological network for the construct. Prior to the scale development work of Brown et al. (2005), Zhu, May, and Avolio (2004) proposed a theoretical model of the effects of ethical leadership on organizational commitment and trust in leaders.

Organizational commitment refers to the psychological attachment felt by an employee toward the organization (O'Reilly & Chatman, 1986). They propose that ethical leadership will have a positive relationship with both organizational commitment and trust in leader but that this relationship will be mediated by psychological empowerment which is defined by Thomas and Velthouse (1990) as an increase in motivation as a result of meaning, competence, self-determination, and impact. Ethical leaders empower their subordinates by taking their needs and rights into consideration and putting them in positions in which they can best utilize and develop their skills and knowledge. It is through this mechanism that Zhu et al. (2004) propose that ethical leadership influences organizational commitment and trust in leader. They further propose that the relationship between ethical leadership and empowerment will be moderated by the leader's authenticity or the consistency between a leader's moral intentions and her actions.

Brown and Trevino (2006b) proposed a more complete nomological network for ethical leadership identifying both potential antecedents and consequences. They proposed that situational influences as well as individual leader characteristics will be antecedents of ethical leadership. Once again, the model is based upon Bandura's (1986) social learning theory. This theory indicates that in order for one to be an effective role model, they must be attractive and credible (Brown & Trevino, 2006b). Drawing from this concept, the proposed antecedents are variables considered to enhance the leader's attractiveness and credibility.

Brown & Trevino (2006b) propose that three situational variables will enhance the perceptions related to one being an ethical leader. These variables offer learning experiences that can promote the development of ethical leadership. The first situational influence is the presence of an ethical role model. Having an ethical role model during one's career provides opportunities for one to view ethical leadership in action and to

then emulate that behavior. Research by Weaver, Trevino & Agle (2005) suggests that for role models to be most effective, they need to be managers that one interacts with closely as oppose to distant top management. The second situational influence is ethical context which encompasses the concepts of ethical climate (Victor & Cullen, 1988) as well as ethical culture (Trevino, 1990). These two concepts are significantly correlated (Trevino, Butterfield, & McCabe, 1998) and refer to the aspects of an organization that both support and encourage ethical attitudes and behaviors or not. As organizations build stronger ethical contexts through formal policies and informal norms in support of ethical actions and reinforce ethical actions, this will provide development opportunities for ethical leadership. Additionally, Brown & Trevino (2006b) propose that moral intensity will moderate the relationship between ethical context and ethical leadership. Moral intensity (Jones, 1991) focuses on multiple dimensions of the moral issue at hand. The six dimensions of moral intensity are social consensus or the overall agreement as to whether an act is good or bad, the magnitude of consequences which is the aggregate of the harms or goods resulting from the act, the probability of effect or the likelihood that the act and related consequences will occur, temporal immediacy or the amount of time before consequences begin, concentration of effects which refers to the inverse function of the number of people effected by an act of a given magnitude, and the proximity or the nearness one feels to the victims (Jones, 1991). As the moral intensity increases, the situation becomes more salient and subordinates pay closer attention to the leader's response. When handled appropriately, these situations will increase the perception of ethical leadership and thus increase the influence of ethical context on ethical leadership.

Brown & Trevino (2006b) also propose six individual characteristics as antecedents to ethical leadership. Drawing from the Five Factor Model of personality (Tupes & Christal, 1961), they propose that agreeableness, conscientiousness, and

neuroticism will be related to ethical leadership. Agreeableness or likeability refers to characteristics such as being courteous, good-natured, flexible, and forgiving. These traits would enhance the attractiveness of a leader. Conscientiousness encompasses characteristics such as having a strong will to achieve, being dependable, responsible and organized. These traits would enhance the credibility of a leader. Thus, agreeableness and conscientiousness are proposed to have a positive relationship with ethical leadership. Neuroticism or emotional stability refers to traits such as being anxious, embarrassed, depressed, or worried. These traits would detract from the attractiveness of a leader and as such are proposed to have a negative relationship with ethical leadership. Brown & Trevino (2006b) indicate that extraversion and openness to experience appear to be more closely associated with charisma which is not within the content domain of ethical leadership. Machiavellianism refers to one who uses manipulation and deceit to get others to do what they want them to do. Use of manipulation and coercion are not consistent with the principles of the social learning theory (Bandura, 1986) and would also likely decrease the attractiveness of a leader, thus a negative relationship with ethical leadership is proposed. Locus of control is the perception that one has control over the events and circumstances in his life. People with an external locus of control perceive that they do not have much control over the happenings in their life while those with an internal locus of control perceive significant personal control over the events in their life. People with an internal locus of control are more likely to see the connection between their actions and the consequences and are therefore more likely to take responsibility for their actions. As a result, an internal locus of control is proposed to have a positive relationship with ethical leadership.

Level of moral judgment is proposed to have a positive relationship with ethical leadership. Moral judgment refers to the way in which one determines the right action to

take in a given situation. Kohlberg (1969) developed a theory of cognitive moral development which describes six stages through which one progresses as he develops higher levels of moral reasoning. The first two stages are the pre-conventional level in which one reasons based upon obedience, fear of punishment and definitive consequences. The second two stages are the conventional level in which one reasons based upon conformity with expectations and by reference to significant others such as family or work group. Kohlberg (1969) finds that most adults reason at this level. The last two stages are the principled level reasoning which is based in universal values or principles or in one's deeply held personal values. As individuals move into higher levels of moral reasoning, her actions will be more ethical, consistent and fair thus enhancing ethical leadership. Although people may be at a higher level of moral reasoning and have a higher capacity for moral reasoning, this does not necessarily mean that they will utilize this capacity. Moral utilization refers to the degree to which one actually uses her higher moral reasoning capacity. Brown & Trevino (2006b) propose that moral utilization will moderate the relationship between moral judgment and ethical decision making as people can only learn from the higher moral reasoning of a leader if the leader actually puts it into action.

Brown & Trevino (2006b) further propose that power inhibition will enhance the relationship between the need for power and ethical leadership. Power inhibition refers to one's restrained use of power as a means to serve others and to enhance the common good as oppose to one who uses power for personal gain. As one uses her power for other's benefit, her attractiveness as a leader and role model will increase thus moderating the relationship between need for power and ethical leadership. In addition, they propose that the personal characteristic of self-monitoring will also moderate the relationship between the situational variable of ethical context and ethical leadership.

Self-monitoring refers to one's concern regarding how he presents himself to others. One high in self-monitoring will control the image he presents to others depending upon the social situation while one low in self-monitoring will not be as concerned with how he is perceived and thus will behave more consistently. As high self-monitors will conform to expectations, in a highly ethical context, they will respond by conforming to the high ethical expectations thus enhancing the positive relationship between ethical context and ethical leadership.

In addition to the many proposed antecedents, Brown & Trevino (2006b) also proposed several outcomes of ethical leadership. They propose that the outcomes of ethical leadership will be an increase in follower ethical decision-making, an increase in prosocial behavior, a decrease in employee counterproductive behavior, and an increase in follower satisfaction, motivation, and organizational commitment. As ethical leaders set high ethical standards, model appropriate ethical behavior and attitudes, and hold followers accountable for their behavior in relation to the ethical standards, their followers are provided the opportunity to learn and enhance their own ethical decision making capabilities. As ethical leaders treat their employees fairly and with concern and respect, Blau's (1964) social exchange theory and Gouldner's (1960) norm of reciprocity suggest that the employee will feel a need to reciprocate. One way they may reciprocate is by going above and beyond the duties of their job and to engage in prosocial behavior. These same theories would also suggest that this sense of reciprocation would also result in a decrease in counterproductive behavior or employee behavior that ultimately brings harm to the organization or other employees. The negative relation between ethical leadership and counterproductive behavior is also based upon the employee's emulation of the consistent ethical role modeling of the leader. As ethical leaders are kind and considerate toward their employees, trustworthy, honest and fair in their

dealings with the employees, this is expected to bring about an increase in positive follower work attitudes related to satisfaction, commitment, and motivation.

As the development and validation of the Ethical Leadership Scale (ELS) (Brown et al., 2005) and the proposed nomological network for ethical leadership (Brown & Trevino, 2006b) occurred fairly recently, there has not yet been extensive empirical testing involving the ethical leadership construct. In the following section, I will review the results of these empirical studies.

Only one empirical study tested antecedents of ethical leadership. This study was performed by De Hoogh and Den Hartog (2008) in the Netherlands. They used qualitative methods to collect data from the CEO regarding his or her social responsibilities which was the hypothesized antecedent. They then surveyed subordinates to collect data regarding the perceived ethical leadership of the CEO and two hypothesized outcomes which were effectiveness of the top management team and employee optimism about her future. De Hoogh and Den Hartog base their ethical leadership measure on three dimensions: morality and fairness, role clarification, and power sharing. These dimensions draw upon the definition of Brown et al. (2005) although they do not use the ELS as developed by Brown et al. (2005). They also measured despotic leadership which is leadership without regard or concern for others and that is self-absorbed. They found that the leader's social responsibility was positively related to ethical leadership and negatively related to despotic leadership. They also found that ethical leadership was positively related to top management team effectiveness and optimism about the future but that despotic leadership had no significant relation to these two outcomes. In their regression analyses, they also found that the morality and fairness dimension and the role clarification dimension of ethical

leadership were the more significant dimensions. The power sharing dimension was not found to be significant in any of the analyses.

Pelletier and Bligh (2006) found that an increase in the perceived effectiveness of an ethics program is also an outcome of ethical leadership. In measuring perceptions of ethical leadership, they developed their own ten item scale for which they report an alpha coefficient of .90. Sample items from this scale are “The top leadership of this organization is concerned with ethical practice,” “My immediate supervisor sets a good example of ethical behavior,” and “Top leadership provides employees with ethical guidance when it is needed.” Their sample consisted of 418 respondents from a governmental agency that had recently implemented an ethics program in response to ethical failures of top leaders. The results indicate that perceptions of ethical leadership is a significant positive predictor of employees’ perceptions of the ethics program effectiveness after controlling for ethics code awareness, employee perceptions of ethical decision making processes, and organizational resources in support of ethical decision making. These results indicate that an employee’s perceptions of ethical leadership have the potential to impact their perceptions regarding the employer’s quality control standards.

Using a two by two experimental design, Dadhich and Bhal (2008) studied outcomes related to ethical leadership and leader-member exchange (LMX). They hypothesized that ethical leadership would be positively related to normative or ethics-related outcomes while high quality LMX relationships would be positively related to pragmatic or job-related outcomes. Their sample consisted of 81 graduate students in India. They measured ethical leadership using Brown et al.’s (2005) ELS and LMX using a five item scale developed by Bhal and Ansari (1996). A sample LMX item is “How much responsibility does the leader take for the jobs that are done jointly by you and

him?" The pragmatic outcomes measured were leadership effectiveness, satisfaction with leader, and employee extra effort. The normative outcomes measured were leader's honesty, employee's willingness to report problems, affective trust, and cognitive trust. The results indicate that high quality LMX relationships significantly predict all pragmatic outcomes as well as affective trust. Ethical leadership was found to predict all normative outcomes as well as all pragmatic outcomes which had not been hypothesized. These results suggest that ethical leadership has overarching effects.

Prior to the development of Brown et al.'s (2005) ELS, Khuntia and Suar (2004) developed an ethical leadership scale and tested it with a sample of middle and top level managers in India. They developed their scale based upon three dimensions of ethical leadership: leader's motivation, leader's influence and leader's character. Using exploratory factor analysis, the final scale consists of 22 items loading on two factors which they label as empowerment and motive/character. The empowerment dimension encompasses the leader's ability to enhance the subordinate's self-efficacy. The motive/character dimension encompasses the altruistic, affiliation, power, and achievement motives of the leader. In testing the criterion-related validity of the scale, they find that ethical leadership is negatively correlated with unethical practices and positively related to job performance, job involvement, and organizational commitment. The measure of unethical practices included items such as "taking longer time than necessary to do a job" and "padding an expense account".

Detert, Trevino, Burris, and Andiappan (2007) studied the relationship between ethical leadership and the potential outcome of employee counterproductivity hypothesizing a negative relationship. Their study involved a sample of employees from a nation-wide fast food restaurant chain, and they operationalized counterproductivity as a measure of food loss which would encompass both intentional and unintentional

undesirable employee behavior. They used the ELS (Brown et al., 2005) as the measure of ethical leadership. Additionally, they also looked at the relationships of managerial oversight and abusive supervision to counterproductivity. Although they found a negative relationship between managerial oversight and counterproductivity and a positive relationship between abusive supervision and counterproductivity, they unexpectedly did not find a significant relationship between ethical leadership and counterproductivity. They suggested that this could be due to the low-skill, low-pay workers in the sample for whom working conditions and decent treatment may be more important. They also suggested that ethical decisions in the restaurant environment are straightforward thus making ethical leadership not as significant.

Mayer et al., (2009) also studied the relationship between ethical leadership and counterproductive work behavior (CWB) and organizational citizenship behavior (OCB) and found different results than those of Detert et al. (2007). They studied group level CWB and OCB. Their sample was 195 work units from 160 different organizations. Using Brown et al.'s (2005) ELS, the subordinates rated their supervisor. The subordinates rated group deviance using the twelve item Organizational Deviance Scale (Bennett and Robinson, 2000). A sample scale item is taking property from work without permission. The subordinates rated group OCB using five items adapted from Smith, Organ, and Near (1983). A sample item is "Employees in my department help out others who have been absent and return to work." The supervisors also provided ratings of work group deviance and OCB. The results indicate that ethical leadership is positively related to group level OCB and negatively related to group level CWB. In additional analysis, they also found that the effect of the ethical leadership of top management and group level OCB and CWB was fully mediated by the ethical leadership of the supervisor. Thus, the ethical leadership of both levels of management is important but top

management has only an indirect influence on employee behavior. This study demonstrates that it is not just the ethical leadership of top management which is often described as the “tone at the top” that has an impact upon employee behavior but that it is important for ethical leadership be demonstrated by supervisory level management.

2.4 Potential Moderating Effects of Ethical Leadership upon RAQ Acts

In that RAQ behavior negatively impacts audit quality, learning more about how this behavior may be reduced or eliminated is of particular interest to the audit profession. Prior research examining the propensity of employees to engage in counterproductive or helpful work behavior have found that leaders play a significant role (Brown & Trevino, 2006a; Davis & Rothstein, 2006; Grojean, Resick, Dickson, & Smith, 2004; Dickson, Smith, Grojean, & Ehrhart, 2001). In particular, research has found that ethical leadership is related to employee behavior. Ethical leadership has been found to be positively related to desirable work behavior such as organizational commitment (Hassan & Wright, 2014; Ruiz, Ruiz, & Martinez, 2011), willingness to report ethical problems (Hassan & Wright, 2014; Brown et al., 2005), employee performance (Walumbwa et al., 2011a, 2012; Kacmar et al., 2013; Piccolo et al., 2010), and organizational citizenship behavior which is helpful behavior above that required of the employee’s job position (Brown et al., 2005; Avey et al., 2011; Mayer et al., 2009; Ruiz et al., 2011; Kacmar et al., 2013; Piccolo et al., 2010). It has also been found to be negatively related to dysfunctional work behavior such as counterproductive work behavior (Avey et al., 2011; Mayer et al., 2009), unethical behavior and interpersonal conflict (Mayer et al., 2012).

Although EL has been shown to be positively related to desirable work behavior and negatively related to undesirable work behavior, we cannot assume that these relationships would hold true in an audit environment. Bonner (2008) indicates that accounting settings have unique aspects such that theories developed in other disciplines

may not be well suited for the accounting setting. She also notes that features of accounting settings that make it unique involve “the review process in auditing...in that it combines elements of accountability by subordinates to superiors who face different incentives, group decision making, the need to follow professional standards, and learning through feedback” (p. 6). Ashton & Ashton (1995) also note that the environment of accounting and auditing has distinguishing features including decision making processes that impact multiple periods and parties thus increasing the accountability requirements, tasks and settings that often have significant financial consequences as well as human consequences such as reputational and lifestyle impacts, accounting and auditing judgments play a critical role in the financial markets, and these tasks are embedded in pervasive institutional settings including a strong professional society and governmental regulatory bodies. Any one of these circumstances viewed independently may not appear to be unique, but it is the combination of these circumstances within the accounting and auditing setting that make the environment unique (Solomon & Shields, 1995). Auditors face pressure from both their employers as well as their clients in addition to the intense regulatory environment faced by the profession. The auditor’s work is also unique in that the quality of their work is not directly observable. Under these circumstances, it is important to test the potential impact of ethical leadership in the audit environment.

2.4.1 How Ethical Leadership Influences Employee Behavior

Brown & Trevino (2006a) posited that relationship between ethical leadership and follower behavior could be understood through the lens of the social learning theory (Bandura, 1986) and the social exchange theory (Blau, 1964). The social learning theory says that people learn by observing and then striving to emulate the values and behaviors of role models they see as credible and attractive (Bandura, 1986). People

learn vicariously by watching the actions and related consequences of others whom they see as credible role models. Ethical leaders demonstrate characteristics of honesty, consideration of others, and fair treatment of employees which enable them to be seen as attractive, credible and legitimate role models for their followers (Brown et al., 2005). Mayer et al. (2009) note that ethical leaders influence their followers to act ethically in two ways. First, leaders serve as legitimate models of behavior by virtue of their position within the organization; therefore, if they demonstrate ethical behavior through their actions and decision making processes, they provide significant examples of ethical behavior to their subordinates. Second, by clearly communicating the ethical expectations, rewarding ethical actions and disciplining unethical actions of their subordinates, ethical leaders utilize a transactional approach to inform their followers of the benefits of ethical conduct and the costs of inappropriate conduct. Mayer et al. (2012) note that “when leaders behave in an ethical manner, communicate the importance of ethics, and use punishment and reward systems to encourage ethical behavior, group norms for acceptable behavior are formed and employees in a work unit will be less likely to engage in unethical behavior” (p. 153).

Brown and Trevino (2006a) also posit that ethical leadership affects subordinates through the social exchange process (Blau, 1964). The social exchange process is based upon the norm of reciprocity (Gouldner, 1960) which says that if one exchange partner does something favorable for the other, this will then create a sense of obligation to reciprocate the favorable behavior (Cropanzano & Mitchell, 2005). Thus when ethical leaders treat their employees in a fair manner with mutual respect and employees perceive the leader to have their best interest at heart, this will generate high levels of trust in which employees are more likely to reciprocate by improving their task performance (Brown & Trevino, 2006a).

Walumbwa et al. (2011) also theorized that social identity theory also plays a role in explaining the link between ethical leadership and employee behavior. Social identity (Ashforth & Mael, 1989) is the sense of oneness or belongingness to a social group such that one is intrinsically motivated to contribute to the good of the group. Walumbwa et al. (2011a) indicate that by demonstrating the high ethical standards of the organization, ethical leaders may generate higher levels of social identity between their subordinates and the organization thus influencing positive follower job performance. Walumbwa et al. (2011a) link ethical leadership to employee behavior utilizing these three theories: social learning, social exchange, and social identity. They operationalize social exchange through leader-member exchange between a supervisor and his direct report stating that ethical leadership would influence a stronger leader-member exchange thus leading to improved employee performance. They operationalize social learning through the self-efficacy of the subordinate. Bandura (1986) stated that as one learned appropriate behavior vicariously through observation, his self-efficacy would improve because he would become more confident of his abilities. Thus as ethical leaders demonstrate normatively appropriate behavior and help followers learn to think through behaviors and decision making; the followers will improve their self-efficacy thus leading to improved employee performance. They operationalize social identity as organizational identity or the extent to which an employee identifies with the employer organization. Ethical leadership generates higher levels of trust between the leader and follower; higher levels of trust are associated with higher levels of organizational identification which in turn promote positive responses toward the employing organization. Their research provides support for the positive relationship between ethical leadership and employee performance which is mediated by leader-member exchange, self-efficacy, and organizational identification. This indicates that ethical leadership influences employee

performance through the three mechanisms of social exchange, social learning, and social identification (Walumbwa et al., 2011).

2.4.2 The Influence of Supervisors

In studying the influence of ethical leadership on employee behavior, Mayer et al. (2009) found that although the ethical leadership of top management impacts employee behavior, this relationship is mediated by the ethical leadership of supervisors. This finding makes sense in that leaders at different levels within the organization serve different roles and rely on different methods to communicate values and expectations. While top management is often said to establish organizational ethical standards and to set the tone at the top, supervisors are a more salient role model to employees in that they interact more frequently and more closely with their subordinates and are therefore in a position to interpret, demonstrate, and implement organizational ethical values (Brandes, Dharwadkar, & Wheatley, 2004; Becker, Billings, Eveleth, & Gilbert, 1996; Meglino, Ravlin, & Adkins, 1989). Research finds that supervisors have the strongest influence on employee behavior (Davis & Rothstein, 2006; Falkenberg & Herremans, 1995) in that they provide the most direct and immediate feedback with regard to employee behavior.

Research has also found that the influence of supervisors is significant in the audit setting and that the interaction between subordinates and superiors significantly influences the audit process (Jenkins, Deis, Bedard, & Curtis, 2008; DeZoort & Lord, 1994). Belkaoui and Picur (1987) found that the most significant and reliable source of feedback for an auditor was from her immediate supervisor. Covaleski, Dirsmith, Heian, & Samuel (1998) found that junior members of the firm “absorb, imbibe, and internalize” the subtle, implicit values and goals of the firm as embodied by their supervisors. As a

result, it appears that direct audit supervisors are in a position to influence their subordinate's propensity to engage in RAQ behaviors

2.4.3 The Moderating Role of Ethical Leadership

Avey et al. (2011) note the importance of identifying the circumstances under which ethical leadership behavior is more or less effective and state that “an exclusive focus on direct leader effects without considering the context under which such leadership behavior occurs may lead to incomplete or inaccurate conclusions” (Avey et al., 2011, p. 574). Ethical leadership behavior includes acting fairly, promoting and rewarding ethical conduct, allowing followers voice, showing concern, demonstrating consistency and integrity, and taking responsibility for one's actions (Brown et al., 2005; DeHoogh & DenHartog, 2008; Kalshoven, Den Hartog, & De Hoogh, 2011a; Trevino et al., 2003). Ethical leaders possess strong positive reputations (Kacmar et al., 2013) which are developed over time through their frequent interactions with subordinates. As a result of these strong positive reputations and high levels of trust and fairness demonstrated by ethical leaders, it would seem that the subordinates' perceptions of the ethical leadership of their supervisor would moderate the strength of the relationships between auditor characteristics and the auditor's propensity to engage in RAQ acts.

Leadership doesn't happen in a vacuum. It is a two-way street involving both the leader and the follower with each party influencing the relationship. Howell & Shamir (2005) made the argument that followers' characteristics play a significant role in their reactions to their leaders; and Ehrhart & Klein (2001) found support that subordinates' personality traits influenced their preferences for different types of leaders. Zhu et al. (2009) posit that individual differences will impact how followers respond to various leadership styles and find that the positive relationship between transformational leaders and work engagement is moderated by the follower characteristics of creativeness,

innovativeness, proactiveness, taking initiative, and learning orientation. Wofford, Whittington, & Goodwin (2001) found that transformational leadership had a more positive effect on follower performance when the follower had higher levels of growth need strength and need for autonomy. Liborious (2014) posited that the personality of the follower must be taken into consideration when examining the impact of leadership because these personality traits will likely moderate the influence of the leader on the follower's behavior. He found that the association between the leader's characteristics and the behavior of the follower was moderated by the follower's agreeableness, conscientiousness, and neuroticism. These findings all suggest that individuals may respond differently to leadership on the basis of personal characteristics and values; thus it is important to take individual differences into consideration when studying the impact of leadership.

Locus of control (LOC) describes the degree to which a person believes that his personal actions and decisions will impact his success and failure (Rotter, 1966). A person with an internal LOC believes that he has some control over what happens while a person with an external LOC believes that luck, fate or other forces outside his control determines what happens. An external LOC person may not believe that there is a relationship between actions and consequences thus being less likely to respond to external influences such as a supervisor. LOC orientation could make a person more or less receptive to the efforts of a supervisor. Prior research has found interaction effects between leadership behaviors and follower LOC indicating that subordinates with internal versus external LOC will react differently to different leader behaviors (Abdel-Halim, 1981; Chiu, Chien, Ling, & Hsiao, 2005).

Generally, the results of RAQ research find that external (internal) LOC is positively (negatively) associated with RAQ acts when RAQ acts are examined

individually indicating that an auditor with an external (internal) LOC is more (less) likely to engage in RAQ acts (O'Bryan et al., 2005; Donnelley et al., 2003a, 2003b; Shappeero et al., 2003). These findings are consistent with Trevino's (1986) proposal that the behavior of those with an internal LOC would be more ethical because they are more likely to recognize the association between their behavior and the outcomes of that behavior. Based upon the above research related to the interaction effects of follower LOC and leader behavior, it would be expected that the relationship between auditor LOC and RAQ acts would be moderated by ethical leadership. Leadership research has found that people with internal LOC are more responsive to supervisor leadership behavior (Chiu et al., 2005; Abdel-Halim, 1981); therefore, I hypothesize that an auditor with an internal LOC will be more responsive to the perceived ethical leadership of her supervisor which will strengthen the negative relationship between internal LOC and likelihood of engaging in RAQ acts.

H1 The perceived ethical leadership of the audit supervisor will reduce the likelihood of an auditor engaging in reduced audit quality behavior and the reduction in the likelihood of engaging in reduced audit quality behavior will be greatest for an auditor with internal locus of control rather than external locus of control.

Professional commitment (PC) refers to the attachments one forms to her profession and is the degree to which one identifies with and is involved with his or her profession (Jeffrey & Weatherholt, 1996; Aranya et al., 1981). From an accounting perspective, it has been defined as "a measure of one's training and socialization into the accounting profession" (Jeffrey & Weatherholt, 1996, pg. 14). The literature defines three key aspects of PC which are the belief and acceptance of the profession's goals and values, a willingness to put forth effort on its behalf, and a desire to retain membership in

the profession (Aranya et al., 1981; Aranya & Ferris, 1984). PC has been found to be associated with positive work related outcomes such as improved work performance (Lee et al., 2000), reduced turnover intentions, and greater organizational and professional satisfaction (Harrell et al., 1986; Meixner & Bline, 1989; Bline et al., 1991,1992). Furthermore, it has been proposed that higher levels of PC should result in greater sensitivity to matters involving professional ethics although the findings in this area have been mixed (Aranya et al., 1981, 1982; Lachman & Aranya, 1986; Shaub et al., 1993; Lord & DeZoort, 2001). Auditors who have a high belief in the goals and values of the profession and who are willing to exert extra effort on behalf of the profession would be expected to be less likely to engage in RAQ acts as this behavior would decrease audit quality and potentially damage the reputation of the profession. Auditors with higher levels of PC would be expected to be more likely to engage in behavior that is in the best interest of the public and less likely to engage in behavior that has the potential to damage the audit profession (Jeffrey & Weatherholt, 1996). As such, I expect that PC will have a negative relationship with RAQ acts. Additionally, I expect that the interaction of perceived ethical leadership (EL) will strengthen this negative relationship although I expect diminishing returns for this interaction effect. I expect the impact of perceived ethical leadership to be strongest for auditors with lower levels of PC as these auditors would have the most potential for improvement with regards to their likelihood of engaging in RAQ acts. I expect that the interaction effect would weaken as the auditor's level of PC increased as these auditors would increasingly be more sensitive to the potential negative impact of RAQ acts and less likely to engage in them regardless of the perception of their supervisor's EL. Aranya et al. (1981) note that accountants who are highly committed to their profession would "consider it essential to work within a framework that allows them the opportunity to fully express themselves as professionals,

using autonomous thought and action” (pg. 272). Thus these individuals would have internalized the values of the professions such that they would be more cognizant of ethical issues and would look within themselves and utilize their professional judgment more than they would rely on direction from others. Individuals with lower levels of PC would not have internalized the values of the profession and thus would look to referent others such as their supervisor when faced with ethical dilemmas.

H2: The perceived EL of the audit supervisor will reduce the likelihood of an auditor engaging in RAQ behavior and the reduction in likelihood of engaging in RAQ acts will be greatest for auditors who have lower levels of PC rather than higher levels of PC.

Organizational commitment (OC) represents one's psychological attachment to an organization (O'Reilly & Chatman, 1986). Affective OC is the emotional attachment between an employee and employer such that the employee identifies with, is involved in, and enjoys membership in the organization (Allen & Meyer, 1990). Generally, the RAQ research has found auditor OC to be negatively associated with the likelihood to engage in RAQ behavior (Donnelley et al., 2003a; Herrbach, 2001; Otley & Pierce, 1996a; Malone & Roberts, 1996; Paino et al., 2011b). An auditor who has a high belief in the goals and values of her employing organization and who is willing to exert extra effort on behalf of the organization would be expected to be less likely to engage in RAQ acts as this behavior would decrease audit quality and potentially damage the reputation of the audit firm. As such, I expect that OC will have a negative relationship with RAQ acts. Additionally, I expect that the interaction of perceived ethical leadership (EL) will strengthen this negative relationship although I expect diminishing returns for this interaction effect. I expect the impact of perceived ethical leadership to be strongest for auditors with lower levels of OC as these auditors would have the most potential for

improvement with regards to their likelihood of engaging in RAQ acts. I expect that the interaction effect would weaken as the auditor's level of OC increased as these auditors would increasingly be more sensitive to the potential negative impact of RAQ acts to the firm and less likely to engage in them regardless of the perception of their supervisor's EL.

H3: The perceived ethical leadership of the audit supervisor will reduce the likelihood of an auditor engaging in reduced audit quality behavior and the reduction in likelihood of engaging in reduced audit quality acts will be greatest for auditors who have lower levels of organizational commitment rather than higher levels of organizational commitment.

Chapter 3

Methodology

This chapter describes the methodology that I used to test my hypotheses. I tested my hypotheses with the use of a field survey given to staff and senior level auditors currently working in public accounting. In the following sections, I discuss my research design, the variables used in the study, the measurement and testing of the hypotheses, and pilot testing.

3.1 Research Design and Participants

To test the hypotheses, I utilized staff and senior level auditors currently practicing as financial statement auditors in public accounting. I use G*Power 3.1.9.2 to predict the number of participants needed in this study. Using an F test of ANCOVA: fixed effects, main effects and interactions, with 4 groups and 1 covariate, I determined the minimum number of participants needed to achieve a power of .80 is 94 participants (Faul, Erdfelder, Land, & Buchner, 2009; Faul, Erdfelder, Buchner, & Lang, 2007).

3.1.1 Use of Professional Subjects

In this research, I am studying the likelihood of an auditor engaging in reduced audit quality (RAQ) acts such as accepting weak client explanations or doubtful evidence, rejecting awkward looking items from a sample, premature sign-off of audit procedures, or underreporting of time. Considering that these acts are undesirable behaviors which have been found to occur under the time constraints and pressures related to financial statement audits, I determined that the best population from which to draw my sample would be professional auditors currently working in the audit profession. As most accounting students have not yet experienced the audit work environment and related pressures associated with this environment, I did not expect that student participants would have the background knowledge needed to provide valid responses. My goal was

to survey audit professionals that have a day to day operational knowledge of an audit and potential RAQ acts. Gaining access to audit professionals can be difficult; therefore, I discussed my research plan with audit partners and senior audit managers from various public accounting firms in the southern United States to obtain permission to provide my survey instrument to the staff and senior auditors within their firm. From these meetings, I was granted permission to distribute surveys in 5 different firms.

I provided the questionnaire to potential participants in both a pencil and paper format as well as an online survey format. The surveys were distributed to potential participants in two ways. For some participating firms, the firm contact person distributed the survey packets to the potential participants. The firm contact person was an audit partner, an audit senior manager, or a human resource employee. In each case, the contact person told me how many survey packets he or she would need in order to distribute a packet to each auditor with 1-6 years of experience (staff or senior auditor level). For one participating firm, I was allowed to attend staff and senior auditor training sessions, briefly describe my research, and deliver the survey packets to potential participants. Each survey packet contained an introductory letter, the survey instrument, and a self-addressed, stamped envelope for returning the completed survey directly to me. The survey packet letter briefly described the research and provided instructions for completing and returning the survey. In this letter, potential participants were also given a link to an internet-based survey site which hosts an online version of the survey. The online version is password protected, and the letter provides the password as well as instructions for completing the online survey. The letter emphasized that although participants have a choice of completing the survey either by paper or online that they should only complete it once. My purpose in allowing responses via both hard copy and online is to increase the response rate. Sax, Gilmartin, & Bryant (2003) found that

response rates were highest when both hard copy and online responses were both allowed as opposed to hard copy only or online only. In surveying professional auditors, Bobek, Daugherty, & Radtke (2012) allowed participants the choice of responding via hard copy or online and found no significant difference in responses or demographics when comparing hard copy responses versus online responses. My responses were collected over a four month period in the summer of 2013.

3.1.2 Consideration: Use of Non-Experimental Design

Due to the sensitive nature of the questions related to RAQ acts, prior research suggests that experimental designs might not be the best way to study this behavior. Otley & Pierce (1996b) state that as a result of the stresses and pressures of the audit environment, “it appears unlikely that experimental designs can realistically capture these pressures to the extent that participants will select the dysfunctional option as often as they would in real audit situations” (p. 48). Hyatt & Prawitt (2011) also note concerns with the effectiveness of experimental designs with regards to the study of RAQ behavior. They state that despite the many benefits provided by experimental designs, a major limitation when studying RAQ behavior is that auditors may respond differently to RAQ acts in an experiment than they would in an actual audit.

Surveys play a significant role in obtaining insight and understanding of theoretical constructs that are often unobservable. When studied archivally, these constructs are frequently subject to measurement error and omitted correlated variables biases (Dichev, Graham, Harvey, & Rajgopal, 2013; Nelson, Elliot, & Tarpley, 2002). Surveys in audit research have been used to study various topics such as professionalism and managerialism in the accounting profession (Carrington, Johansson, Johed, & Ohman, 2013), resolving audit engagement challenges (Bobek et al., 2012), auditor response to the discovery of fraud (Hassink, Meuwissen, & Bollen, 2010),

auditor's use of analytical procedures (Trompeter & Wright, 2010), and the use of computer related audit techniques (Janvrin, Bierstaker, & Lowe, 2009, 2008). The use of non-experimental surveys has been extensive in the study of RAQ behaviors (Kelley & Margheim, 1990, 2002; Malone & Roberts, 1996; Kelley et al., 1999; Donnelly et al., 2003a, 2003b; Coram et al., 2003, 2008; Sweeney et al., 2010; Nor et al., 2010; Paino et al., 2011a, 2011b; Morris, 2009; Otley & Pierce, 1995, 1996a, 1996b; Pierce & Sweeney, 2004, 2006, 2010). As a result, I used a non-experimental design and performed a field study of professional auditors for this research.

3.1.3 Consideration: Biases Related to Sensitive Questions

When conducting survey research involving sensitive questions, two main concerns that must be considered are the refusal to respond and misleading responses so as to conceal unacceptable behavior (Buchman & Tracy, 1982). In order to increase the likelihood that survey recipients would respond, the surveys were delivered in-house to the recipients as opposed to being mailed directly to participants (Shapeero et al., 2003). Having them delivered in-house indicates to the potential participant that the firm is supportive of the research. Also each survey included a letter describing the significance of the research to encourage participation.

Prior research has found that when questions are of a sensitive nature and/or related to ethical judgments that people exhibit a tendency to represent themselves more favorably (Chung & Monroe, 2003; Cohen, Pant, & Sharp, 1998, 2001; Buchman & Tracy, 1982). This tendency is referred to as social desirability bias and is the likelihood of a respondent answering a question in a socially acceptable manner. This would occur when a participant selects a response that would be considered right or ethical even though this response might not represent what he or she would do in an actual

circumstance. Considering the sensitive nature of RAQ acts, several measures were taken to reduce the likelihood of misleading responses due to the social desirability bias.

First the questions regarding RAQ acts were asked using indirect questioning whereby the respondents were asked the likelihood of this action being taken “by other auditors in your firm”. When utilizing indirect questioning, it is expected that respondents will “project their unconscious biases into ambiguous response situations and reveal their own attitudes” (Fisher, 1993, p. 304). Using three experiments, Fisher (1993) found that the use of indirect questioning does diminish social desirability bias and the pattern in his results indicates that respondents project their beliefs and evaluations when answering these indirect questions. Informer measures have been used frequently in behavioral research for sensitive questions (Pierce & Sweeney, 2010). Arnold & Ponemon (1991) state that asking a question in the third person can serve to reduce social desirability bias as well as provide a reliable measure of the respondent’s personal beliefs.

In addition to using indirect questioning, I also asked the respondents to self-report about the likelihood that they would engage in the RAQ acts. By using indirect questioning as well as self-report, I will be able to measure the difference in the two responses as a measure of the social desirability bias. Margheim & Pany (1986) indicate that asking a participant about the likelihood of action by another party prior to asking about the likelihood of action by themselves serves to reduce the respondent’s sensitivity to the question and to then reduce the probability of a misleading response.

Additionally, respondents were guaranteed complete anonymity with regards to their responses. Respondents were instructed to not include their name or firm name on any of the survey responses. The surveys were not coded in any way as to allow identification of the individual respondent or the firm for which the respondent worked. All responses were returned directly to the researcher either via pre-addressed envelopes or

via the online survey. Respondents were also guaranteed that results would only be reported in the aggregate.

Although the potential for social desirability bias to influence the results can never be completely eliminated in this type of research, the research has been designed to minimize the potential effect through use of indirect questioning, order of questioning, anonymity and confidentiality of responses, responding directly to researcher, and reporting results only in the aggregate. If social desirability bias does influence the results, the bias would serve to understate the incidence of RAQ behaviors and thus provide more conservative estimates of RAQ behavior.

3.2 Study Variables

The purpose of this research is to study the potential moderating effect of perceived supervisor ethical leadership on the relationship between RAQ behaviors and the various individual auditor characteristics of locus of control (LOC), professional commitment (PC), and organizational commitment (OC). To achieve this goal, I provided participants with previously validated scales representing each of these variables. Each variable is discussed below.

3.2.1 Dependent Variable

The dependent variable will be the likelihood of engaging in RAQ acts previously documented to have been committed by auditors. Prior studies have focused on seven RAQ acts. I will include an eighth RAQ act. Many prior studies have aggregated the responses related to questions on the frequency of various RAQ acts to derive a composite measure. Coram et al. (2008) found that auditors perceive the moral intensity of the RAQ acts to be different; therefore, they suggest that it is inappropriate to use a composite measure. As a result, I will test my hypotheses independently for two of the

eight RAQ acts and combine the other six into a composite measure. The eight RAQ behaviors are as follows in Table 3.1.

Table 3.1 Reduced Audit Quality Behaviors

<ol style="list-style-type: none">1. Failing to research a technical accounting or auditing issue even though the auditor was unsure of the proper accounting or auditing treatment.2. Signing off an audit step that had been completed according to the general practices of the firm, but for which the auditor felt s/he should have spent more time due to questionable transactions and/or practices by the client.3. Failing to research a technical issue4. Accepting client explanations that are weaker than normally would have been accepted due to tight time-budget pressure.5. Signing off on a procedure required on the audit program without completing the work or noting the omission of procedures in the audit working papers.6. Completing all required audit steps but not charging the total time spent on the audit work on his/her timesheet.7. Deleting awkward or unusual looking items from a sample and replacing with another item.8. Accepting client explanations that are weaker than would normally be accepted because gathering corroborating evidence would be difficult.

Premature signoff (PMSO) has been noted in the RAQ literature to be the RAQ act with the most severe consequences, the act with the lowest reported frequency, and the act viewed as having the highest level of moral intensity. Thus, I will study PMSO as an individual RAQ act. Underreporting of time (URT) has been noted in the RAQ literature to be the RAQ act with the least severe consequences, the act with the highest reported frequency, and the act viewed as having the lowest level of moral intensity. Thus, I will study URT as an individual RAQ act. The remaining six acts will be combined as a composite variable.

The three dependent variables will be generated from eight scale items requesting the participant to respond on a Likert scale of 1 (very unlikely) to 7 (very likely) indicating the likelihood that an auditor in their firm would engage in each RAQ act and the likelihood that the respondent would engage in each RAQ act. When answering these questions, I ask the respondent to consider the largest audit on which s/he has

worked in the prior year and the audit supervisor for whom s/he worked on this audit. The respondent is then asked to indicate his or her belief as to the likelihood that an auditor in a similar audit environment would engage in the RAQ acts as well as the likelihood that s/he would engage in the RAQ acts.

3.2.2 Moderating Variable

The moderating variable will be the perceived ethical leadership behavior of the audit supervisor. When responding to items related to the audit supervisor, the respondent is asked to consider the supervisor for whom s/he worked on his or her largest audit in the prior year. The auditor will respond to these questions relating to the audit supervisor on a 7 point Likert scale ranging from “strongly disagree” to “strongly agree”. I measure this variable using the 10 item Ethical Leadership Scale (Brown et al., 2005). A sample scale item is “My manager discusses business ethics or values with employees.” Brown et al. (2005) performed seven scale development studies involving exploratory factor analysis and confirmatory factor analysis to establish trait validity, discriminant validity, convergent validity, and predictive validity. Their studies reported coefficient alphas ranging from 0.91 to 0.94. The responses to the 10 items for each individual respondent will be averaged creating a range of 1 to 7 for the continuous variable. This variable will be mean-centered for use in the regression analysis. For use in the ANCOVA analysis and comparisons, this variable will be transformed into a three level categorical variable. As such, I will split the responses into three even categories whereby those with self-rated scores in the highest third will be coded with a 3 indicating a high level of perceived ethical leadership, those with scores in the middle third will be coded with a 2 indicating a medium level of perceived ethical leadership, and those with scores in the lowest third will be coded with a 1 indicating a low level of perceived ethical leadership.

3.2.3 Independent Variables

The independent variables will be the auditor characteristics of locus of control, professional commitment, and organizational commitment. Each of these variables is discussed below.

3.2.3.1 Locus of Control

Locus of control (LOC) refers to one's perception of whether or not their success in a given situation will be influenced more by their own personal behavior or by external forces. I measure this variable using the Spector (1988) 16 item Work Locus of Control Scale. This scale adapted the general locus of control (Rotter, 1966) to a work environment. The 16 item scale includes 8 reverse coded items. A sample item is "Getting the job you want is mostly a matter of luck." Spector reported coefficient alphas ranging from .75 to .85.

This scale has responses on a 7 point Likert scale ranging from "strongly disagree" to "strongly agree". After adjusting for the 8 reverse coded items, the responses to the 16 items for each individual respondent will be summed creating a range of 16 to 112 for the continuous variable. This variable is then mean-centered for use in the regression analysis. For use in the ANCOVA analysis, this variable will be transformed into a dichotomous or categorical variable. As such, I will create a median split, whereby those with self-rated scores above the median will be coded with a 1, indicating that the auditor has more of an external LOC, and those with scores below the median will be coded with a 0 indicating that the auditor has more of an internal LOC.

3.2.3.2 Professional Commitment

Professional commitment (PC) is the attachments one forms to her profession and is the degree to which one identifies with and is involved with her profession (Jeffrey & Weatherholt, 1996; Aranya et al., 1981). I measure this variable using the reduced 5

item Professional Commitment scale tested by Dwyer et al. (2000). Aranya et al. (1981) originally developed a 15 item scale to measure PC by adapting the Porter et al. (1974) organizational commitment scale. The reference point of the organizational commitment scale was changed by replacing the word “organization” with the word “profession”. Dwyer et al. (2000) further refined these 15 items into a 5 item scale which is a “more clearly interpretable and parsimonious measure of affective PC” (pg. 279). A sample item is “Being a member of this profession really inspires the very best in me in the way of job performance.” Dwyer et al. (2000) reported composite reliability of .78.

This scale has responses on a 7 point Likert scale ranging from “strongly disagree” to “strongly agree”. The responses to the 5 items for each individual respondent will be averaged creating a range of 1 to 7 for the continuous variable. This variable will be mean-centered for use in the regression analysis. For use in the ANCOVA analysis, this variable will be transformed into a dichotomous or categorical variable. As such, I will create a median split, whereby those with self-rated scores above the median will be coded with a 1, indicating a high level of PC, and those with scores below the median will be coded with a 0 indicating a low level of PC.

3.2.3.3 Organizational Commitment

Organizational commitment (OC) is the psychological bond between an employee and the employer signifying the degree to which the employee identifies with the organization and internalizes the values of the organization (O’Reilly & Chatman 1986). I measure this using the nine item short-form of the Organizational Commitment Questionnaire (Mowday, et al., 1979). A sample scale item is “I talk up this organization to my friends as a great organization to work for.” Mowday et al. (1979) performed nine studies providing evidence for the convergent validity, discriminant validity, and predictive validity of this scale. They reported coefficient alphas ranging from .82 to .93 with a

median of .90. They also reported test retest reliabilities ranging from .53 to .75 over two, three, and four month periods.

This scale has responses on a seven point Likert scale ranging from “strongly disagree” to “strongly agree”. The responses to the nine items for each individual respondent will be averaged creating a range of 1 to 7 for the continuous variable. This variable will be mean-centered for use in the regression analysis. For use in the ANCOVA analysis, this variable will be transformed into a dichotomous or categorical variable. As such, I will create a median split, whereby those with self-rated scores above the median will be coded with a 1, indicating a high level of OC, and those with scores below the median will be coded with a 0 indicating a low level of OC.

3.3 Hypotheses Testing Methodology

In this section, I provide a detailed discussion of the methods used to test my hypotheses. I will use ordinary least squares (OLS) regression analysis to initially test my hypotheses. The dependent variable in my study is the participant's likelihood to engage in RAQ acts. Eight different RAQ acts were addressed as part of the dependent variable. Taking into consideration that auditors do not view all RAQ acts at the same level of moral intensity (Coram et al., 2008), I will analyze RAQ acts as three individual variables of premature signoff (PMSO), underreporting of time (URT), and a composite score of the other six acts (OTHER). Thus each analysis will be run three times, one for each of the RAQ variables. For each of the three RAQ variables, the participant will respond with the likelihood that another auditor would engage in the act and the likelihood that s/he would engage in the act. Consistent with other accounting research (Kaplan, Pope, & Samuels, 2011; Chung & Monroe, 2003; Cohen et al., 1998, 2001), I measure social desirability bias (SDB) as the difference between the participants' self-report of likelihood to engage in RAQ acts and the participant's assessment of another auditor's likelihood to engage in

RAQ acts. The OLS regression analysis will provide evidence as to the potential main effects of the independent variables as well as the potential moderating effects of perceived ethical leadership. I mean center the independent variables and the moderator variable for use in both creating the interaction term and in the regression model. A separate regression analysis will be performed for each independent variable locus of control, professional commitment, and organizational commitment along with the moderating variable supervisor's perceived ethical leadership and the related two-way interaction terms.

I follow up the regression analyses with an Analysis of Covariance (ANCOVA) to provide further evidence as to the specific nature of the interaction. SDB will be used as a covariate in the ANCOVA analysis. A separate ANCOVA analysis will be performed for each independent variable locus of control, professional commitment, and organizational commitment along with the moderating variable supervisor's perceived ethical leadership and the related two-way interaction terms. To determine the significant components of the interaction effect, I will examine pairwise comparisons in post-hoc analyses utilizing a Bonferroni adjustment for multiple comparisons.

3.4 Validation and Pilot Study

To test the survey instrument, I conducted a pilot test utilizing 17 people with varying levels of professional audit experience, either internal or external audit. Of these 17 people, 4 were PhD students with audit experience and the remaining 13 were professionals with current or prior audit experience. The purpose of this pilot was to identify any confusing questions, to verify that respondents were relating the RAQ-related and supervisor-related questions to the same audit experience, and to estimate the time required to complete the survey. After each pilot participant completed the questionnaire,

I questioned them regarding their perceptions of the questions, the understandability of the questions, and any general observations they had regarding the survey.

Overall, the pilot participants found the questions to be straight forward and understandable. A few minor wording changes were suggested and incorporated into the survey. Several participants noted that most of the response scales were from “bad” to “good” while 2 were reversed going from “good” to “bad”. They found this confusing; therefore, I adjusted all scales to be consistent in this regard. Several participants also asked about why some scales were 5 point while others were 7 point. I adjusted all scales to be consistent on a 7 point scale to avoid confusion.

Audit engagement teams are made up of several audit staff members who are supervised on a daily basis by the audit senior. Audit managers then manage several audits concurrently and are therefore not at the audit location on a daily basis. As an audit engagement is completed, the personnel assigned to that engagement are then reassigned to various other audit engagements. As a result, audit engagement team members from staff to senior to manager change from engagement to engagement. Thus, an audit staff (senior) may work for several different audit seniors (managers) over the course of any given period of time. Due to the fluid nature of audit engagement teams, I need to clearly establish the desired referent that I wish the auditor to consider as s/he responds to the survey items. In the survey instrument, I instruct the respondent to reference the largest audit on which they worked in the past year when responding to the RAQ behavior questions. For these questions, the respondent was given the following instructions: “For each of the following statements, consider the largest audit on which you have worked in the prior year and the direct supervisor to who you reported on this audit. In a similar audit environment, please indicate your belief as to the likelihood that an auditor would act in the following manner.” I then wanted the respondent to

reference this same supervisor when answering the questions related to perceived supervisor behavior. On these questions, the respondent was given the following instructions: "For each of the following questions, consider your direct supervisor to whom you reported on your largest audit in the prior year. Please indicate how often this supervisor displayed the following behaviors." A key interest in conducting the pilot study was to get feedback regarding whether the respondents were making this connection between the various question groupings. In all cases, the pilot participants told me that the instructions were clear and that they established this referent when answering the questions.

A final concern related to the length of the survey and the time required for completion. I needed to verify that the time requirement to complete the survey was reasonable and would not result in response fatigue such that participants would not complete the survey. My original survey instrument was 4.5 pages in length with 98 total response prompts. The time required to complete the survey for the pilot participants ranged from 15 minutes to 33 minutes with an average of 22 minutes. I felt that this was a reasonable amount of time.

Chapter 4

Results

4.1 Participant Demographic Information

Surveys were distributed to potential staff and senior auditors at several accounting firms as described in chapter 3. A total of 412 surveys were distributed with 125 responses (30% response rate). Of the 125 responses received, 6 indicated that respondent was not an external auditor and 5 were incomplete. After eliminating these 11 responses, there were 114 usable responses remaining for analysis. See Table 4.1 below.

Table 4.1 Responses

Distribution of Surveys:	
Delivered to Firm Contact for distribution to auditors	211
Distributed to directly to auditors	<u>201</u>
Total surveys distributed	<u>412</u>
Surveys Collected:	
Received via US Postal Service	37
Received via Online Survey	<u>88</u>
Total responses	125
Less: Surveys indicating non-external auditor	-6
Less: Surveys not completed	<u>-5</u>
Total Usable Responses	<u><u>114</u></u>

Table 4.2 presents the demographic information for the 114 participants. The average participant age was 26.8 years. The average years of work experience as an external auditor was 2.4 years which appears appropriate for the target population of audit staff or senior. The average years of total overall work experience was 4.3 years. Male participants represented 65% of the sample. Of the respondents, 56% were staff

auditors and 44% were senior auditors while 54% worked for a big four firm, 9% for other international/national firm, 33% for regional firm, and 4% for local firms.

Table 4.2 Sample Demographics

	Minimum	Maximum	Mean	Standard Deviation
Age (years)	22	44	26.8	3.748
Work experience as external auditor (years)	0.25	13	2.4	1.8
Total work experience (years)	0.75	26	4.3	3.8
	<u>N</u>	<u>Percentage</u>		
Gender:				
Male	74	65%		
Female	39	35%		
Position:				
Staff auditor	64	56%		
Senior auditor	50	44%		
Firm Type:				
Big Four	61	54%		
Other International/National	10	9%		
Regional	38	33%		
Local	4	4%		

Table 4.3 reports descriptive statistics for all dependent variables, independent variables, and potential control variables. Additionally, the computed reliabilities of the independent variables for this study are reported. As described in chapter 3, all independent variables are measured utilizing validated scales composed of multiple items. As each represents composite measures, I verify that the internal consistency of the measure is reliable. I computed Cronbach's Alpha for each composite measure as reported in Table 4.3. All measures are well above the acceptable standard of .70

(Nunnally, 1978). These measures indicate that these variables have high internal consistency reliability.

Table 4.3 Means, Standard Deviations, and Reliabilities

	N	Mean	Standard Deviation	Reliability
PMSO	114	2.11	1.381	
URT	114	3.56	1.942	
OTHER	114	2.64	1.124	
EL	114	5.47	.948	.919
OC	114	5.29	1.149	.926
PC	114	4.80	1.292	.866
LOC	114	45.43	10.72	.810
SEX	113	1.35	.478	
AGE	107	26.8	3.75	
FIRM	113	1.87	1.004	
AUDEXP	113	2.40	1.76	
ROLE	114	1.44	.498	
TIME	114	3.09	.908	
BUDGET				

4.2 Correlation Analyses

In this section, I will discuss the preliminary analyses performed on the data prior to the testing of hypotheses. I conducted a correlation analysis of the independent, dependent and potential control variables collected from the survey instrument. The purpose of this analysis is to see if the correlations among the variables correspond to the predictions made in each hypothesis. The independent variables ethical leadership (EL), professional commitment (PC), and organizational commitment (OC) exhibit a negative correlation with the dependent variables which is what is expected. Higher levels of EL, PC, and OC are associated with lower levels of likelihood to engage in the various RAQ acts. Locus of control (LOC) exhibits a positive correlation with the dependent variables which is also expected. Higher levels of LOC indicate an external LOC which is expected to be associated with higher levels of RAQ acts. Generally, the control variables are not significantly correlated with the independent and dependent

variables and the correlations are very low with a few exceptions. Auditor role is positively correlated with age and audit experience which would be expected as senior auditors would be older and have more years of audit experience. Audit experience is positively correlated with age and firm type which indicates that auditors with more experience are older and tend to work for smaller firms which is reasonable. Firm type is positively correlated with age indicating that auditors working for smaller firms are older. The control variables were not significantly correlated with any of the dependent variables except for URT, underreporting of time, which is negatively correlated with age and positively correlated with time budget pressure. The correlations are presented in Table 4.4.

4.3 Frequencies for Dependent Variables

In analyzing the frequencies reported for the likelihood of engaging in the various RAQ acts, it is noted that the percentage of respondents indicating that it is very unlikely/unlikely/somewhat unlikely that they would engage in any of the 8 individual RAQ acts is high ranging from 52% to 88%. The act with the highest percentage of respondents (40.4%) indicating that it would be very unlikely is premature signoff (PMSO) which is to be expected as this is a fraudulent act. Other studies have also found this act to have the lowest reported frequency or likelihood (Kelley & Margheim, 1990; Malone & Roberts, 1996). Although the overall reported likelihoods are low, some respondents still reported that the acts are somewhat likely/likely/very likely to occur ranging from 7% to 42%. The act with the highest percentage of respondents (36.8%) indicating that it would be somewhat likely or likely is underreporting of time (URT) which is also expected as this is a commonly encountered issue in public accounting. The frequencies for each of the 8 individual RAQ acts are presented in Table 4.5.

Table 4.4 Correlations

	1	2	3	4	5	6	7	8	9	10	11	12
1 PMSO												
2 URT	.223*											
3 OTHER	.630**	.357**										
4 EL	-.261**	-.202*	-.378**									
5 LOC	.183	.163	.179	-.272**								
6 PC	-.319**	-.297**	-.326**	.522**	-.267**							
7 OC	-.285**	-.278**	-.381**	.628**	-.342**	.731**						
8 GNDR	-.133	-.068	-.055	-.084	-.117	.110	.017					
9 AGE	.142	-.191*	.040	-.081	.023	.107	.119	-.054				
10 FIRM	.063	-.107	-.018	.069	-.068	.127	.119	.041	.432**			
11 ADEXP	.132	-.135	.122	-.173	-.082	-.060	-.119	-.048	.605**	.267**		
12 ROLE	-.099	-.019	-.098	-.061	-.021	.071	-.001	-.047	.234*	.118	.502**	
13 TIME BDGT	.105	.223*	.076	-.257**	.103	-.243**	-.232*	-.153	-.113	-.085	.075	.110

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

* Correlation is significant at the 0.05 level (2-tailed)

N = 114

Variable Descriptions:

PMSO: Signing off on a procedure required on the audit program without completing the work or noting the omission of procedures in the audit working papers (scale 1-7)

URT: Completing all required audit steps but not charging the total time spent on the audit work on his/her timesheet (scale 1-7)

OTHER: Composite variable of remaining six reduced audit quality acts (scale 1-7)

EL: Ethical leadership (Average of 10 item scale)

LOC: Locus of control (range 16 – 112, lower scores = Internal LOC, higher scores = External OC)

PC: Professional commitment (scale 1-7)

OC: Organizational commitment (scale 1-7)

GNDR: Gender (1=Male, 2=Female)

AGE: Reported age

FIRM: Type of firm (1=Big 4, 2=Other International/National, 3=Regional, 4=Local)

ADEXP: Reported months of audit experience

ROLE: Position of auditor within firm (1=Staff, 2=Senior)

TIME BDGT: Reported attainability of time budget (scale of 1-5, 1= very easy to attain, 5=impossible to attain)

Table 4.5 Frequencies for RAQ Acts (Dependent Variables)

Response	PMSO		URT		OTHER											
	N	%	N	%	RAQ1		RAQ2		RAQ3		RAQ4		RAQ7		RAQ8	
1	46	40.4%	23	20.2%	32	28.1%	18	15.8%	37	32.5%	21	18.4%	38	33.3%	25	21.9%
2	40	35.1%	20	17.5%	39	34.2%	43	37.7%	32	28.1%	30	26.3%	45	39.5%	42	36.8%
3	14	12.3%	17	14.9%	18	15.8%	21	18.4%	18	15.8%	25	21.9%	16	14.0%	19	16.7%
4	3	2.6%	6	5.3%	10	8.8%	6	5.3%	10	8.8%	8	7.0%	6	5.3%	13	11.4%
5	7	6.1%	26	22.8%	11	9.6%	17	14.9%	12	10.5%	20	17.5%	3	2.6%	10	8.8%
6	2	1.8%	16	14.0%	3	2.6%	6	5.3%	3	2.6%	8	7.0%	3	2.6%	5	4.4%
7	2	1.8%	6	5.3%	1	0.9%	3	2.6%	2	1.8%	2	1.8%	3	2.6%	0	0.0%

Variable Descriptions:

PMSO: Signing off on a procedure required on the audit program without completing the work or noting the omission of procedures in the audit working papers (scale 1-7)

URT: Completing all required audit steps but not charging the total time spent on the audit work on his/her timesheet (scale 1-7)

OTHER (The following 6 RAQ acts are combined as a single composite variable for use in analyses.)

RAQ1: Failing to research a technical accounting or auditing issue even though auditor unsure of the proper accounting or auditing treatment (scale 1-7)

RAQ2: Signing off on an audit step that had been completed according to the general practices of the firm, but for which the auditor felt he should have spent more time due to questionable transactions (scale 1-7)

RAQ3: Making tickmarks on audit working papers after an essentially superficial review of supporting client documentation (scale 1-7)

RAQ4: Accepting client explanations that are weaker than would normally be accepted due to tight time budget pressure (scale 1-7)

RAQ7: Deleting awkward or unusual looking items from a sample and replacing with another item (scale 1-7)

RAQ8: Accepting client explanations that are weaker than would normally be accepted because gathering corroborating evidence would be difficult (scale 1-7)

4.4 Hypotheses Testing

In this section, I provide in depth discussions of the tests employed to evaluate the hypotheses of this study. The hypotheses testing performed is consistent with the methodology discussion presented in Section 3.3. First, I report the moderation testing utilizing hierarchical regression. Finally, I report the results of the ANCOVA and discuss the simple effects testing utilized to pinpoint the specific nature of the moderation effects.

4.4.1 Hypothesis 1 - Hierarchical Regression Analysis

This section reports the result of the hierarchical regression analyses performed to address the predicted moderating effects of perceived ethical leadership of the audit supervisor (EL) and auditor locus of control (LOC) as predicted in hypothesis 1. I specify each regression using a three block model. In the hierarchical regression, I utilize the mean centered, continuous form of each variable. In the first block, I identify the dependent variable (PMSO, URT, or OTHER) and enter the control variable (SDB_PMSO, SDB_URT, or SDB_OTHER) as an independent variable. Second, I add the main effect variable of LOC and the moderator variable of EL. Finally, I add the two-way interaction between the moderator variable and the auditor LOC (LOCxEL). I repeat this process for each dependent variable/moderator combination.

Hypothesis 1 states that the perceived EL of the audit supervisor will negatively moderate the relationship between the auditor's LOC and the auditor's likelihood of engaging in RAQ acts. Results of the regression analysis utilizing PMSO as the dependent variable can be seen in Table 4.6. Results of the regression analysis utilizing URT as the dependent variable can be seen in Table 4.7. Results of the regression analysis utilizing OTHER as the dependent variable can be seen in Table 4.8.

Table 4.6 Regression Results: Premature Signoff and Locus of Control

		Dependent Variable = Premature Signoff					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		2.240**	16.229 (0.000)	2.266**	17.157 (0.000)	2.244**	16.524 (0.000)
SDB		-0.306*	-2.324 (0.022)	-0.368**	-2.885 (0.005)	-0.386**	-2.962 (0.004)
EL	-			-0.397**	-2.936 (0.002)	-0.388**	-2.856 (0.003)
LOC	+			0.014	1.185 (0.120)	0.015	1.240 (0.109)
LOC x EL	-					-0.011	-0.717 (0.238)
R ²		0.046		0.146		0.150	
ΔR ²				0.100**		0.004	
F		5.401*		6.284**		4.821**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

Table 4.7 Regression Results: Underreporting of Time and Locus of Control

		Dependent Variable = Underreporting of Time					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		4.033**	22.276 (0.000)	4.031**	22.832 (0.000)	4.041**	21.911 (0.000)
SDB		-0.604**	-5.685 (0.000)	-0.602**	-5.806 (0.000)	-0.602*	-5.778 (0.000)
EL	-			-0.365*	-2.114 (0.019)	-0.369*	-2.112 (0.019)
LOC	+			0.018	1.181 (0.120)	0.018	1.153 (0.126)
LOC x EL	-					0.004	0.190 (0.425)
R ²		0.224		0.275		0.276	
ΔR ²				0.051*		0.000	
F		32.319**		13.930**		10.365**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

Table 4.8 Regression Results: Other RAQ Acts and Locus of Control

		Dependent Variable = Other RAQ Acts					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		2.753**	23.596 (0.000)	2.800**	26.362 (0.000)	2.834**	22.512 (0.000)
SDB		-0.260*	-2.103 (0.038)	-0.371**	-3.239 (0.002)	-0.316**	-2.699 (0.008)
EL	-			-0.486**	-4.608 (0.000)	-0.499**	-4.774 (0.000)
LOC	+			0.008	0.904 (0.184)	0.007	0.737 (0.232)
LOC x EL	-					0.021*	1.830 (0.035)
R ²		0.038		0.223		0.246	
ΔR ²				0.185**		0.023 [^]	
F		4.421*		10.525**		8.899**	
df		112		110		109	
n		114		114		114	

[^] < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

The hierarchical regression results in Table 4.6 and Table 4.7 indicate that the interaction term is not significant when PMSO or URT is used as the dependent variable indicating that perceived EL of the audit supervisor does not moderate the relationship between auditor's LOC and the auditor's likelihood of engaging in PMSO or URT. The regression results do indicate that the main effects of perceived EL of the audit supervisor are significant and will reduce the likelihood of the auditor engaging in PMSO or URT regardless of the auditor's LOC. The regression results in Table 4.8 indicate that the interaction term is significant when OTHER is used as the dependent variable indicating the perceived EL of the audit supervisor does moderate the relationship between auditor's LOC and the auditor's likelihood of engaging in OTHER RAQ acts.

These results can also be seen graphically in the figures below. The three levels of high, medium, and low (for both the continuous main effect as well as the continuous

moderating variable) are computed using the mean as the medium value, one standard deviation above the mean as the high mean, and one standard deviation below the mean as the low mean (following Aiken & West, 1991).

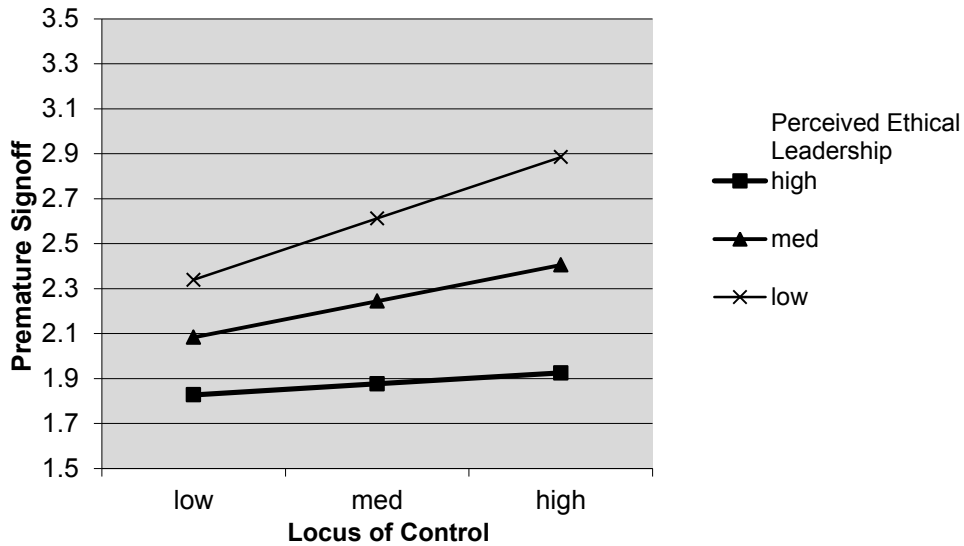


Figure 4.1 Locus of Control x Ethical Leadership with PMSO as DV

When PMSO is the dependent variable, Figure 4.1 indicates a potential interaction effect between LOC and perceived EL as the slope of the three lines appears to differ although the regression results indicate that this interaction is not statistically significant. Figure 4.1 does indicate a main effect for perceived EL which is significant per the regression results. As the perceived EL of the supervisor increases, the likelihood of engaging in PMSO decreases without regard to the LOC of the auditor.

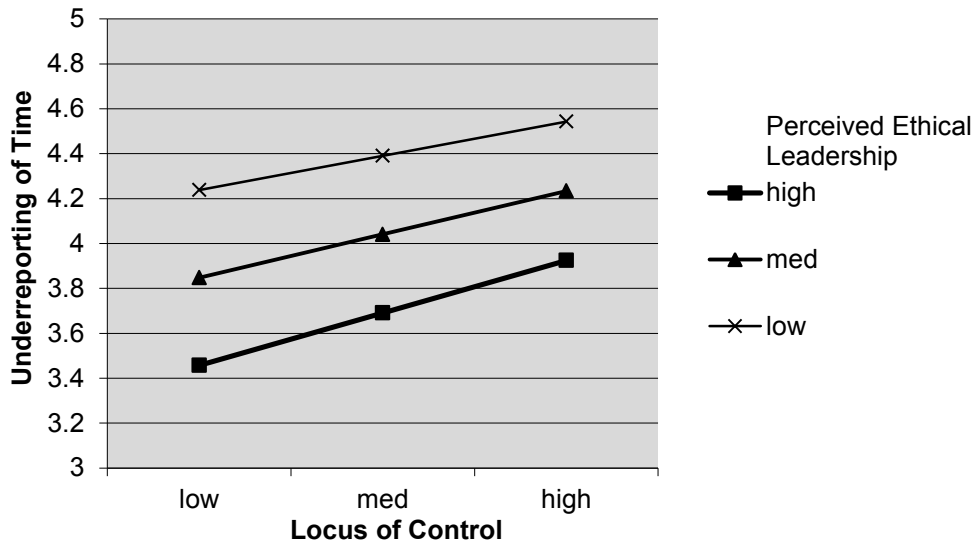


Figure 4.2 Locus of Control x Ethical Leadership with URT as DV

When underreporting of time is the dependent variable, Figure 4.2 indicates no interaction effect between perceived EL and PC although there is a main effect for perceived EL which is significant per the regression results. As the perceived EL of the supervisor increases, the likelihood of engaging in URT decreases without regard to the LOC of the auditor. Although the graph seems to indicate potential main effects for LOC, the regression results indicate that these are not statistically significant.

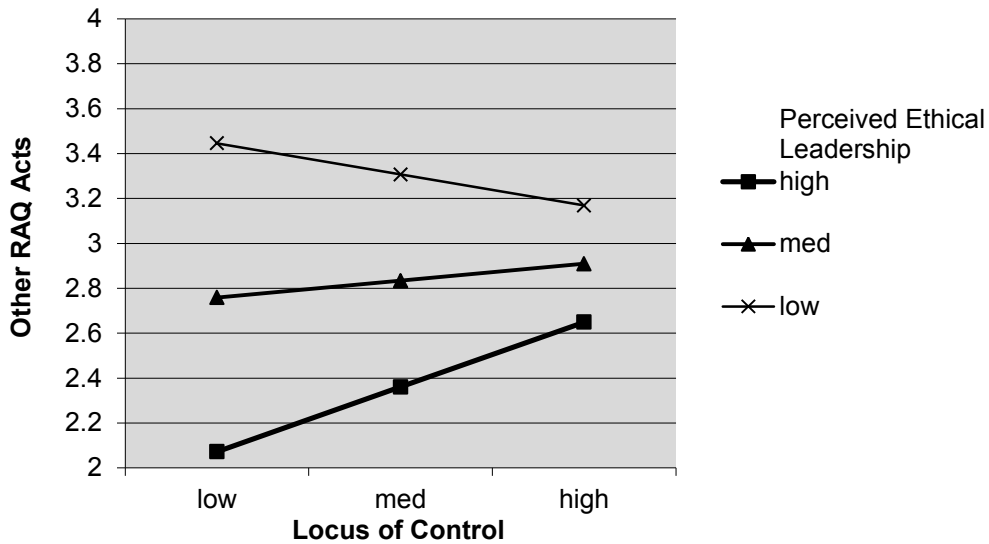


Figure 4.3 Locus of Control x Ethical Leadership with Other RAQ Acts as DV

Figure 4.3 shows the interaction of perceived EL and LOC when the combined OTHER RAQ is the dependent variable. The graph also shows that at low levels of auditor LOC, indicating an internal LOC, the likelihood of engaging in OTHER RAQ acts is highest when perceived EL is low, lower when perceived EL is medium, and lowest when perceived EL is high. At high levels of auditor LOC, indicating an external LOC, the differences among the three levels of perceived EL of the supervisor is much smaller.

To better understand the nature of the significant interaction related to OTHER RAQ acts, it is helpful to look at the regression equation:

Equation 4-1 Locus of Control x Ethical Leadership with PMSO as DV

$$\text{Likelihood of OTHER RAQ} = 2.834 - 0.316 \text{ SDB} + 0.007 \text{ LOC} + (-0.499 + 0.021 \text{ LOC}) \text{ EL}$$

Remembering that all independent variables are mean centered, a negative value for LOC or EL indicates it is below the mean while a positive value for LOC or EL indicates it is above the mean. When interpreting the impact of perceived EL, Equation

4-1 indicates that when LOC is below the mean (negative) indicating internal LOC, the overall impact of EL will be negative thus reducing the likelihood of engaging in OTHER RAQ acts. When LOC is at the mean (zero), the impact of overall EL will be negative thus reducing the likelihood of engaging in OTHER RAQ acts. When PC is above the mean (positive) indicating external LOC, the overall impact of EL could be positive or negative depending upon the LOC value thus increasing or decreasing the likelihood of engaging in OTHER RAQ acts. I will perform an ANCOVA with follow up simple effects testing to determine which aspects of this interaction are significant.

4.4.2 Hypothesis 1 – ANCOVA Analysis

To further understand the interaction effect, I computed an ANCOVA with post hoc simple effects testing using a binary variable for LOC based upon a median split and a 3 level variable for perceived EL splitting EL into three even categories. To determine which parts of the interaction were significant, I computed pairwise comparisons using a Bonferroni adjustment for multiple comparisons. The results are reported in Table 4.9 below. When LOC was low (internal LOC), all pairwise comparisons among the three levels of perceived EL were significant. When LOC was high (external LOC), there were no significant differences among the three levels of perceived EL. Additionally, the likelihood of engaging in OTHER RAQ acts for auditors with low (internal) versus high (external) LOC is significantly different when perceived EL is at low and high levels but not at medium levels of perceived EL. These results indicate that with regard to combined OTHER RAQ acts, the perceived EL of the audit supervisor will significantly reduce the likelihood of an auditor engaging in OTHER RAQ acts for auditors who have an internal LOC but will not make a significant difference for auditors who have an external LOC. These results for OTHER RAQ acts provide support for hypothesis 1.

Table 4.9 ANCOVA: LOC x Ethical Leadership with Other RAQ Acts as DV

Panel A: Unadj. Mean (Adj. Mean) [Standard Deviation] of Likelihood of Engaging in OTHER RAQ Acts

	Lower Perceived Ethical Leadership	Medium Perceived Ethical Leadership	Higher Perceived Ethical Leadership	Totals
Lower Locus of Control (Internal)	3.58 (3.56) [1.539] n= 13	2.58 (2.51) [0.670] n= 20	1.85 (1.85) [0.687] n= 27	2.46 (2.64) [1.134] n= 60
Higher Locus of Control (External)	2.93 (3.00) [1.011] n= 25	2.80 (2.78) [1.125] n= 18	2.70 (2.69) [1.280] n= 11	2.84 (2.82) [1.090] n= 54
Totals	3.15 (3.28) [1.237] n= 38	2.68 (2.65) [0.908] n= 38	2.09 (2.27) [0.963] n= 38	2.64 (2.73) [1.124] n= 114

Panel B: Conventional ANCOVA Analysis

Variable	Sum of Squares	df	Mean Square	F	p-value
Locus of Control	0.857	1	0.857	0.87	0.177
Perceived Ethical Leadership	17.091	2	8.546	8.67	0.000
LOC x Ethical Leadership	8.228	2	4.114	4.17	0.009
Social Desirability Bias	6.223	1	6.223	6.31	0.007
Error	105.470	107	0.986		

Panel C: Follow-Up Simple Effects Test

Contrast	df	F	p-value
Effect of EL given Higher LOC (External)	2,107	0.439	0.323
Effect of EL given Lower LOC (Internal)	2,107	13.153	0.000
Effect of Higher EL versus Medium EL given Lower LOC (Internal)			0.038
Effect of Medium EL versus Lower EL given Lower LOC (Internal)			0.006
Effect of Higher EL versus Lower EL given Lower LOC (Internal)			0.000
Effect of LOC given Lower EL	1,107	2.740	0.051
Effect of LOC given Medium EL	1,107	0.699	0.203
Effect of LOC given Higher EL	1,107	5.58	0.010

All p-values are one-tailed.

Overall, these results indicate that hypothesis 1 is partially supported. The perceived EL of the audit supervisor does negatively moderate the positive relationship between auditor LOC and auditor likelihood of engaging in OTHER RAQ acts such that the effect of auditor LOC (internal versus external LOC) is significantly different only when the perceived EL of the audit supervisor is at the lowest or highest level. Additionally, the effect of the three different levels of perceived EL of the audit supervisor on auditor likelihood of engaging in OTHER RAQ acts is only significantly different when the auditor has low levels of LOC (internal LOC). These results with regard to OTHER RAQ acts support hypothesis 1. Although the interaction effects are not significant with

regards to PMSO and URT, the main effects of the perceived EL of the supervisor do decrease the likelihood of engaging in RAQ acts with regards to these two acts. These results with regards to PMSO and URT provide partial support for the predicted main effects of hypothesis 1.

4.4.3 Hypothesis 2 - Hierarchical Regression Analysis

This section reports the result of the hierarchical regression analyses performed to address the predicted moderating effects of perceived EL of the audit supervisor and auditor PC as predicted in hypothesis 2. As with the testing of hypothesis 1, I specify each regression using a three block model. In the hierarchical regression, I utilize the mean centered, continuous form of the variables. In the first block, I identify the dependent variable (PMSO, URT, or OTHER) and enter the control variable (SDB_PMSO, SDB_URT, or SDB_OTHER) as an independent variable. Second, I add the main effect variable of PC and the moderator variable of EL. Finally, I add the two-way interaction between the moderator variable and the auditor PC (PCxEL). I repeat this process for each dependent variable/moderator combination.

Hypothesis 2 states that perceived EL of the audit supervisor will negatively moderate the relationship between the auditor's PC and the auditor's likelihood of engaging in RAQ acts. Results of the regression analysis utilizing PMSO as the dependent variable can be seen in Table 4.10. Results of the regression analysis utilizing URT as the dependent variable can be seen in Table 4.11. Results of the regression analysis utilizing OTHER as the dependent variable can be seen in Table 4.12.

Table 4.10 Regression Results: Premature Signoff and Prof. Commit.

		Dependent Variable = Premature Signoff					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		2.240**	16.229 (0.000)	2.256**	17.305 (0.000)	2.002**	14.311 (0.000)
SDB		-0.306*	-2.324 (0.022)	-0.344**	-2.715 (0.008)	-0.302*	-2.518 (0.013)
EL	-			-0.269*	-1.781 (0.039)	-0.242*	-1.695 (0.047)
PC	-			-0.234*	-2.137 (0.018)	-0.211*	-2.034 (0.022)
PC x EL	-					0.373**	3.806 (0.000)
R ²		0.046		0.170		0.267	
ΔR ²				0.124**		0.097**	
F		5.401*		7.503**		9.938**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

Table 4.11 Regression Results: Underreporting of Time and Prof. Commit.

		Dependent Variable = Underreporting of Time					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		4.033**	22.276 (0.000)	4.027**	23.352 (0.000)	3.989**	20.199 (0.000)
SDB		-0.604**	-5.685 (0.000)	-0.596**	-5.885 (0.000)	-0.591**	-5.767 (0.000)
EL	-			-0.161	-0.848 (0.199)	-0.159	-0.830 (0.204)
PC	-			-0.364**	-2.607 (0.005)	-0.361**	-2.565 (0.006)
PC x EL	-					0.054	0.400 (0.690)
R ²		0.224		0.170		0.310	
ΔR ²				0.124**		0.001	
F		32.319**		7.503**		12.234**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

Table 4.12 Regression Results: Other RAQ Acts and Prof. Commit.

		Dependent Variable = Other RAQ Acts					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		2.753**	23.596 (0.000)	2.788**	26.136 (0.000)	2.710**	22.512 (0.000)
SDB		-0.260*	-2.103 (0.038)	-0.343**	-2.922 (0.004)	-0.327**	-2.782 (0.006)
EL	-			-0.439**	-3.609 (0.000)	-0.429**	-3.535 (0.001)
PC	-			-0.095	-1.084 (0.141)	-0.090	-1.024 (0.154)
PC x EL	-					0.112^	1.382 (0.085)
R ²		0.038		0.226		0.310	
ΔR ²				0.188**		0.001	
F		4.421*		10.678**		12.234**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

The hierarchical regression results in Table 4.11 indicate the interaction term is not significant when URT is the dependent variable meaning that perceived EL of the audit supervisor does not moderate the relationship between an auditor's PC and the auditor's likelihood of engaging in URT. The results do indicate significant main effects of PC but not perceived EL with regards to an auditor's likelihood of engaging in URT meaning that as an auditor's level of PC increases, the likelihood of the auditor engaging in URT will decrease regardless of the perceived EL of the audit supervisor. The regression results in Table 4.10 and Table 4.12 indicate that the interaction term is significant when PMSO or OTHER is used as the dependent variable providing evidence that the perceived EL of the audit supervisor does moderate the relationship between auditor's PC and the auditor's likelihood of engaging in PMSO or OTHER RAQ acts.

These results can also be seen graphically in the figures below. The three levels of high, medium, and low (for both the continuous main effect as well as the continuous moderating variable) are computed using the mean as the medium value, one standard deviation above the mean as the high mean, and one standard deviation below the mean as the low mean (following Aiken & West, 1991).

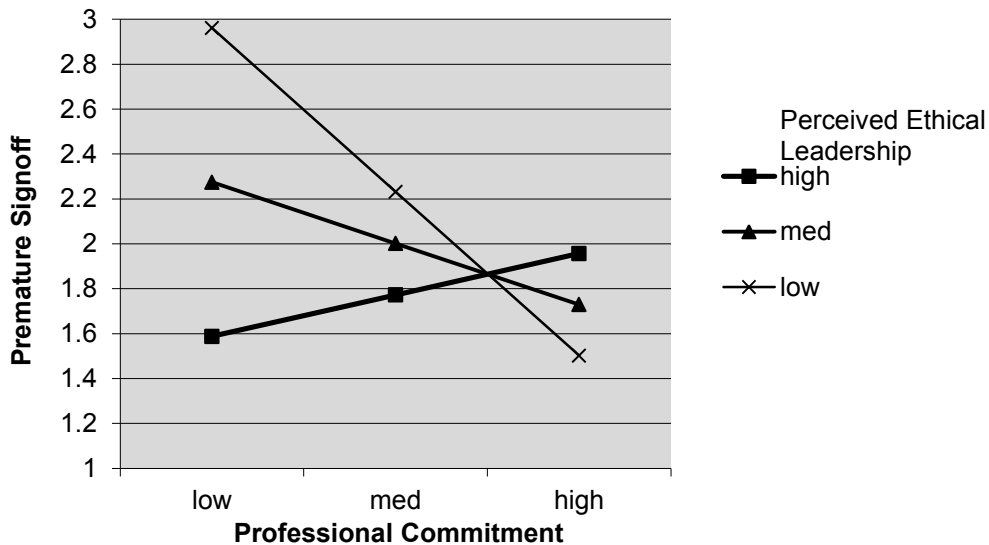


Figure 4.4 Prof. Commit. x Ethical Leadership with PMSO as DV

Figure 4.4 shows the interaction of perceived EL and PC when PMSO is the dependent variable. When perceived EL is low and medium, the graph shows a decline in likelihood to engage in PMSO as PC increases which is consistent with hypothesis 2. When perceived EL is high, the graph shows an increase in the likelihood to engage in PMSO as PC increases. The graph also shows that at low levels of auditor PC the likelihood of engaging in PMSO is highest when perceived EL is low, lower when perceived EL is medium, and lowest when perceived EL is high.

To better understand the nature of the significant interaction related to PMSO, it is helpful to look at the regression equation.

Equation 4-2 Professional Commitment x Ethical Leadership with PMSO as DV

$$\text{Likelihood of PMSO} = 2.002 - 0.302\text{SDB} - 0.211\text{PC} + (-0.242 + 0.373\text{PC})\text{EL}$$

Remembering that all independent variables are mean centered, a negative value for PC or EL indicates it is below the mean while a positive value for PC or EL indicates it is above the mean. When interpreting the impact of perceived EL, equation 4 indicates that when PC is below the mean (negative) the overall impact of EL will be negative thus reducing the likelihood of engaging in PMSO. When PC is at the mean (zero), the impact of overall EL will be negative thus reducing the likelihood of engaging in PMSO. When PC is above the mean (positive), the overall impact of EL will be positive thus increasing the likelihood of engaging in PMSO. I will perform an ANCOVA with follow up simple effects testing to determine which aspects of this interaction are significant. These results provide support for hypothesis 2.

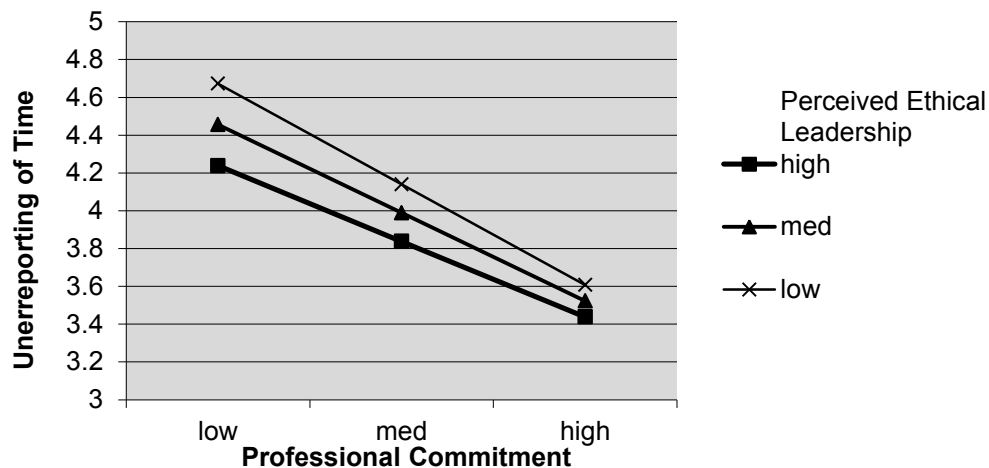


Figure 4.5 Prof. Commit. x Ethical Leadership with URT as DV

When URT is the dependent variable, Figure 4.5 indicates no interaction effect between perceived EL and PC although there is a main effect for PC which is significant per the regression results. As the auditor's level of PC increases, the likelihood of engaging in URT decreases without regard to the perceived EL of the audit supervisor. These results do not provide support for hypothesis 2 as neither the direct effects or moderating effects of perceived EL of the audit supervisor are significant.

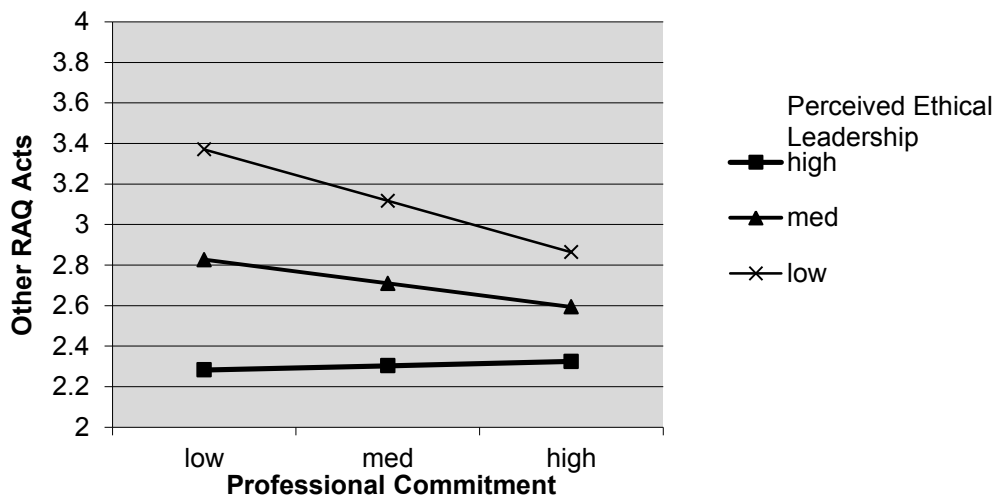


Figure 4.6 Prof. Commit. x Ethical Leadership with Other RAQ Acts as DV

Figure 4.6 shows the interaction of perceived EL and PC when OTHER RAQ is the dependent variable. When perceived EL is low and medium, the graph shows a decline in likelihood to engage in OTHER RAQ as PC increases. When perceived EL is high, the graph shows negligible change in likelihood to engage in OTHER RAQ as PC increases. The graph also shows that at low levels of auditor PC the likelihood of engaging in OTHER RAQ is highest when perceived EL is low, lower when perceived EL is medium, and lowest when perceived EL is high.

To better understand the nature of the significant interaction related to OTHER RAQ, it is helpful to look at the regression equation.

Equation 4-3 Professional Commitment x Ethical Leadership with Other RAQ acts as DV
Likelihood of Other RAQ Acts = 2.710 – 0.327SDB – 0.090PC + (–0.429 + 0.112PC)EL

Remembering that all independent variables are mean centered, a negative value for PC or EL indicates it is below the mean while a positive value for PC or EL indicates it is above the mean. When interpreting the impact of perceived EL, Equation 4-3 indicates that when PC is below the mean (negative) the overall impact of EL will be negative thus reducing the likelihood of engaging in OTHER RAQ acts. When PC is at the mean (zero), the impact of overall EL will be negative thus reducing the likelihood of engaging in OTHER RAQ acts. When PC is above the mean (positive), the overall impact of EL could be positive or negative depending upon the PC value thus increasing or decreasing the likelihood of engaging in OTHER RAQ acts. I will perform an ANCOVA with follow up simple effects testing to determine which aspects of this interaction are significant. These results do provide support for hypothesis 2.

4.4.4 Hypothesis 2 – ANCOVA Analysis

To further understand the interaction effect with regards to PMSO and OTHER RAQ acts, I computed an ANCOVA with post hoc simple effects testing using a binary variable for PC based upon a median split and a 3 level variable for perceived EL splitting EL into three even categories. To determine which parts of the interaction were significant, I computed pairwise comparisons using a Bonferroni adjustment for multiple comparisons. The results are reported in Tables 13 and 14 below.

With regards to PMSO, Table 4.13 indicates that when PC is low, the pairwise comparison among high and low levels of perceived EL was significant meaning that when an auditor has lower levels of PC, s/he will be less likely to engage in PMSO when

perceived EL is high but not when perceived EL is medium or low. When PC was high, there were no significant differences among the three levels of perceived EL.

Additionally, auditors with low versus high levels of PC are less likely to engage in PMSO only when perceived EL is low but not at medium or high levels of perceived EL. These results indicate that with regard to PMSO, the perceived EL of the audit supervisor will significantly reduce the likelihood of an auditor engaging in PMSO for auditors who have lower levels of PC but will not make a significant difference for auditors who have higher levels of PC. These results also indicate that an auditor's level of PC only impacts his or her likelihood of engaging in PMSO when perceived EL is at the lowest level. These results for PMSO provide support for hypothesis 2.

With regards to OTHER RAQ acts, Table 4.14 indicates that when PC is low, the pairwise comparisons among high and low levels and among medium and low levels of perceived EL are significant meaning that when an auditor has lower levels of PC, s/he will be less likely to engage in OTHER RAQ acts when perceived EL is high or medium as compared to when perceived EL is low. When PC is high, the pairwise comparisons among high and low levels and among high and medium levels of perceived EL are significant meaning that when an auditor has higher levels of PC, s/he will be less likely to engage in OTHER RAQ acts when perceived EL is high as compared to when perceived EL is low or medium. These results for PMSO provide support for hypothesis 2.

Table 4.13 ANCOVA: Prof. Commit. x Ethical Leadership with PMSO as DV

Panel A: Unadj. Mean (Adj. Mean) [Standard Deviation] of Likelihood of Engaging in PMSO

	Lower Perceived Ethical Leadership	Medium Perceived Ethical Leadership	Higher Perceived Ethical Leadership	Totals
Lower Professional Commitment	2.86 (2.88) [1.776] n= 30	2.10 (2.11) [1.136] n= 21	1.38 (1.48) [0.744] n= 8	2.39 (2.16) [1.543] n= 59
Higher Professional Commitment	1.25 (1.39) [0.463] n= 8	2.00 (1.90) [1.323] n= 17	1.87 (1.83) [1.106] n= 30	1.82 (1.71) [1.124] n= 55
Totals	2.53 (2.14) [1.720] n= 38	2.05 (2.00) [1.207] n= 38	1.76 (1.65) [1.051] n= 38	2.11 (1.93) [1.381] n= 114

Panel B: Conventional ANCOVA Analysis

Variable	Sum of Squares	df	Mean Square	F	p-value
Professional Commitment	4.331	1	2.615	2.615	0.055
Perceived Ethical Leadership	3.181	2	1.59	0.960	0.193
PC x Ethical Leadership	11.174	2	5.587	3.373	0.019
Social Desirability Bias	8.903	1	8.903	5.376	0.011
Error	177.215	107	1.656		

Panel C: Follow-Up Simple Effects Test

Contrast	df	F	p-value
Effect of EL given Higher PC	2,107	0.449	0.320
Effect of EL given Lower PC	2,107	4.672	0.006
Effect of Higher EL versus Medium EL given Lower PC			0.354
Effect of Medium EL versus Lower EL given Lower PC			0.057
Effect of Higher EL versus Lower EL given Lower PC			0.011
Effect of PC given Lower EL	1,107	8.435	0.002
Effect of PC given Medium EL	1,107	0.269	0.303
Effect of PC given Higher EL	1,107	0.482	0.245

All p-values are one-tailed.

Table 4.14 ANCOVA: Prof. Commit. x Ethical Leadership, Other RAQ Acts as DV

Panel A: Unadj. Mean (Adj. Mean) [Standard Deviation] of Likelihood of Engaging in OTHER RAQ Acts

	Lower Perceived Ethical Leadership	Medium Perceived Ethical Leadership	Higher Perceived Ethical Leadership	Totals
Lower Professional Commitment	3.24 (3.24) [1.194] n = 30	2.56 (2.53) [0.852] n = 21	2.04 (2.11) [0.677] n = 8	2.84 (2.63) [1.104] n = 59
Higher Professional Commitment	2.79 (3.00) [1.411] n = 8	2.82 (2.78) [0.980] n = 17	2.11 (2.09) [1.035] n = 30	2.43 (2.62) [1.116] n = 55
Totals	3.15 (3.12) [1.237] n = 38	2.68 (2.66) [0.908] n = 38	2.09 (2.10) [0.963] n = 38	2.64 (2.62) [1.124] n = 114

Panel B: Conventional ANCOVA Analysis

Variable	Sum of Squares	df	Mean Square	F	p-value
Professional Commitment	0.001	1	0.001	0.001	0.489
Perceived Ethical Leadership	13.114	2	6.557	6.179	0.002
PC x Ethical Leadership	0.879	2	0.440	0.414	0.331
Social Desirability Bias	5.931	1	5.931	5.589	0.010
Error	113.550	107	1.061		

Panel C: Follow-Up Simple Effects Test

Contrast	df	F	p-value
Effect of EL given Lower PC	2,107	5.189	0.004
Effect of Higher EL versus Medium EL given Lower PC			0.487
Effect of Medium EL versus Lower EL given Lower PC			0.027
Effect of Higher EL versus Lower EL given Lower PC			0.011
Effect of EL given Higher PC	2,107	3.802	0.013
Effect of Higher EL versus Medium EL given Higher PC			0.044
Effect of Medium EL versus Lower EL given Higher PC			0.500
Effect of Higher EL versus Lower EL given Higher PC			0.049
Effect of PC given Lower EL	1,107	0.325	0.285
Effect of PC given Medium EL	1,107	0.522	0.236
Effect of PC given Higher EL	1,107	0.003	0.479

All p-values are one-tailed.

Overall, these results indicate that hypothesis 2 is partially supported. The perceived EL of the supervisor does moderate the negative relationship between auditor PC and auditor likelihood of engaging in PMSO and OTHER RAQ acts such that the negative relationship is stronger for auditors with lower levels of PC. These results provide support for hypothesis 2. The perceived EL of the supervisor does not moderate the negative relationship between auditor PC and auditor likelihood of engaging in URT, but there are significant direct effects of auditor PC in this case such that as the auditor's PC increases, the auditor's likelihood of engaging in URT decreases without regard to the

perceived EL of the audit supervisor. This result provides partial support for the predicted direct effects of perceived EL in hypothesis 2.

4.4.5 Hypothesis 3 - Hierarchical Regression Analysis

This section reports the results of the hierarchical regression analyses performed to address the predicted moderating effects of perceived ethical leadership of the audit supervisor (EL) and auditor organizational commitment (OC) as predicted in hypothesis 3. As with hypotheses 1 and 2, I specify each regression using a three block model. In the hierarchical regression, I utilize the mean centered, continuous form of the variables. In the first block, I identify the dependent variable (PMSO, URT, or OTHER) and enter the control variable (SDB_PMSO, SDB_URT, or SDB_OTHER) as an independent variable. Second, I add the main effect variable of OC and the moderator variable of EL. Finally, I add the two-way interaction between the moderator variable and the auditor OC (OCxEL). I repeat this process for each dependent variable/moderator combination.

Hypothesis 3 states that perceived ethical leadership of the audit supervisor will negatively moderate the relationship between the auditor's OC and the auditor's likelihood of engaging in RAQ acts. Results of the regression analysis utilizing PMSO as the dependent variable can be seen in Table 4.15. Results of the regression analysis utilizing URT as the dependent variable can be seen in Table 4.16. Results of the regression analysis utilizing OTHER as the dependent variable can be seen in Table 4.17.

Table 4.15 Regression Results: Premature Signoff and Org. Commit.

		Dependent Variable = Premature Signoff					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		2.240**	16.229 (0.000)	2.264**	17.231 (0.000)	2.151**	14.463 (0.000)
SDB		-0.306*	-2.324 (0.022)	-0.363**	-2.860 (0.005)	-0.371**	-2.934 (0.004)
EL	-			-0.273^	-1.646 (0.052)	-0.261^	-1.582 (0.059)
OC	-			-0.218^	-1.607 (0.056)	-0.174	-1.269 (0.104)
OC x EL	-					0.170^	1.574 (0.059)
R ²		0.046		0.155		0.174	
ΔR ²				0.109**		0.019**	
F		5.401*		6.738**		5.741**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

Table 4.16 Regression Results: Underreporting of Time and Org. Commit.

		Dependent Variable = Underreporting of Time					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		4.033**	22.276 (0.000)	4.032**	23.266 (0.000)	4.059**	20.286 (0.000)
SDB		-0.604**	-5.685 (0.000)	-0.603**	-5.929 (0.000)	-0.604**	-5.910 (0.000)
EL	-			-0.110	-0.523 (0.301)	-0.113	-0.535 (0.297)
OC	-			-0.409**	-2.363 (0.010)	-0.418**	-2.360 (0.010)
OC x EL	-					-0.038	-0.272 (0.393)
R ²		0.224		0.302		0.276	
ΔR ²				0.078**		0.000	
F		32.319**		15.833**		10.365**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

Table 4.17 Regression Results: Other RAQ Acts and Org. Commit.

		Dependent Variable = Other RAQ Acts					
		Model 1		Model 2		Model 3	
	Prediction	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
Intercept		2.753**	23.596 (0.000)	2.796**	26.726 (0.000)	2.783**	24.116 (0.000)
SDB		-0.260*	-2.103 (0.038)	-0.361**	-3.199 (0.002)	-0.368**	-3.172 (0.002)
EL	-			-0.345**	-2.697 (0.004)	-0.345**	-2.681 (0.004)
OC	-			-0.216*	-2.072 (0.021)	-0.210*	-1.960 (0.027)
OC x EL	-					0.023	0.267 (0.395)
R ²		0.038		0.247		0.247	
ΔR ²				0.209**		0.000	
F		4.421*		12.006**		8.946**	
df		112		110		109	
n		114		114		114	

^ < .1, * < .05, ** < .01

P-values are one tailed for variables with directional predictions and two tailed for all others.

The hierarchical regression results in Table 4.16 and Table 4.17 indicate that the interaction term is not significant when URT or OTHER RAQ acts is used as the dependent variable indicating that perceived ethical leadership of the audit supervisor does not moderate the relationship between auditor's OC and the auditor's likelihood of engaging in URT or OTHER RAQ acts. With regards to URT, the regression results in table 16 indicate that the main effects of auditor OC are significant and will reduce the likelihood of an auditor engaging in URT without regard to the perceived EL meaning that as the auditor's level of OC increases, the less likely the auditor will be to engage in URT regardless of the perceived EL of the audit supervisor. With regards to OTHER RAQ acts, the regression results in Table 4.17 indicate that the main effects of perceived EL of the audit supervisor are significant and will reduce the likelihood of the auditor engaging in OTHER RAQ acts regardless of the auditor's OC meaning that as the perceived EL of

the audit supervisor increases, the less likely the auditor will be to engage in OTHER RAQ acts regardless of the auditor's level of OC. The regression results in Table 4.15 indicate that the interaction term is significant when PMSO is used as the dependent variable indicating the perceived EL of the audit supervisor does moderate the relationship between auditor's OC and the auditor's likelihood of engaging in PMSO.

These results can also be seen graphically in the figures below. The three levels of high, medium, and low (for both the continuous main effect as well as the continuous moderating variable) are computed using the mean as the medium value, one standard deviation above the mean as the high mean, and one standard deviation below the mean as the low mean (following Aiken & West, 1991).

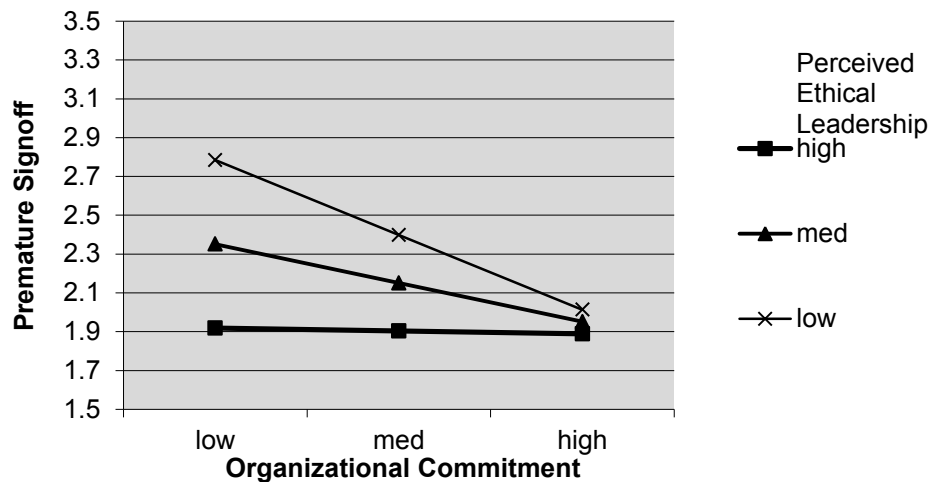


Figure 4.7 Org. Commit. x Ethical Leadership with PMSO as DV

When PMSO is the dependent variable, Figure 4.7 shows the significant interaction effect between OC and perceived EL as the slope of the three lines are different. When perceived EL is low and medium, the graph shows a decline in likelihood to engage in PMSO as OC increases. When perceived EL is high, the graph shows

negligible change in the likelihood to engage in PMSO as OC increases. The graph also shows that at low levels of auditor OC the likelihood of engaging in PMSO is highest when perceived EL is low, lower when perceived EL is medium, and lowest when perceived EL is high. At high levels of auditor OC, the difference in likelihood of engaging in PMSO is negligible. These results provide support for hypothesis 3.

To better understand the nature of the significant interaction related to PMSO, it is helpful to look at the regression equation.

Equation 4-4 Organizational Commitment x Ethical Leadership with PMSO as DV

$$\text{Likelihood of PMSO} = 2.151 - 0.371SDB - 0.174OC + (-0.261 + 0.170OC)EL$$

Remembering that all independent variables are mean centered, a negative value for OC or EL indicates it is below the mean while a positive value for OC or EL indicates it is above the mean. When interpreting the impact of perceived EL, Equation 4-4 indicates that when OC is below the mean (negative) the overall impact of EL will be negative thus reducing the likelihood of engaging in PMSO. When OC is at the mean (zero), the impact of overall EL will be negative thus reducing the likelihood of engaging in PMSO. When OC is above the mean (positive), the overall impact of EL could be positive or negative depending upon the OC value thus increasing or decreasing the likelihood of engaging in PMSO. I will perform an ANCOVA with follow up simple effects testing to determine which aspects of this interaction are significant. These results provide support for hypothesis 3.

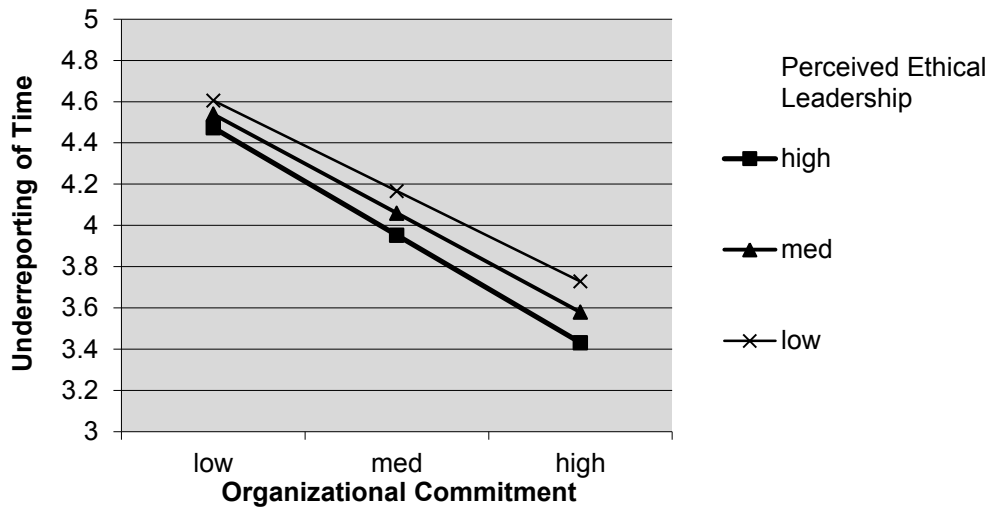


Figure 4.8 Org. Commit. x Ethical Leadership with URT as DV

When underreporting of time is the dependent variable, Figure 4.8 indicates no interaction effect between perceived EL and OC although there is a main effect for auditor OC which is significant per the regression results. As the auditor's level of OC increases, the likelihood of engaging in URT decreases without regard to the perceived EL of the audit supervisor. There are no main effects for perceived EL of the audit supervisor. These results do not provide support for hypothesis 3 as neither the predicted moderating effects nor direct effects of perceived EL of audit supervisor are significant.

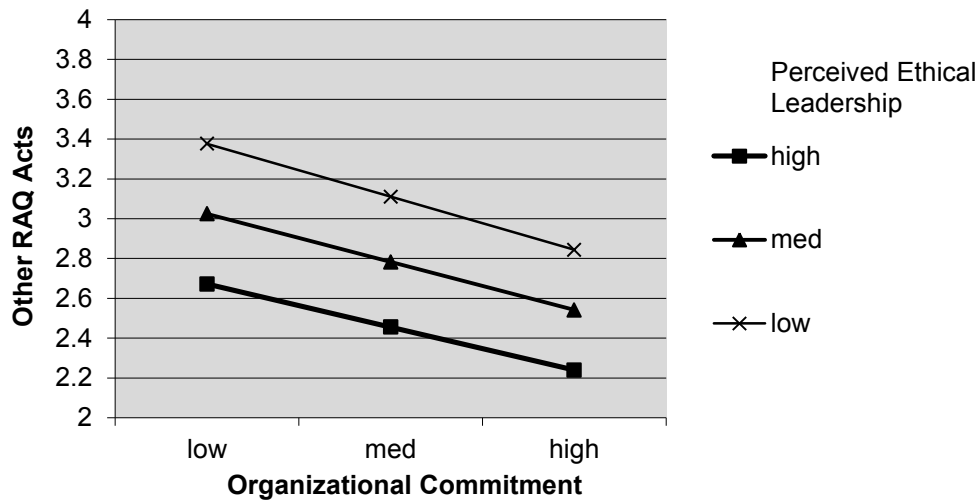


Figure 4.9 Org. Commit. x Ethical Leadership with Other RAQ Acts as DV

Figure 4.9 indicates that there is no interaction of perceived EL and OC when the combined OTHER RAQ is the dependent variable. The graph shows that there are main effects of both auditor OC and perceived EL of the audit supervisor. As the auditor's level of OC increases, the likelihood of engaging in OTHER RAQ acts decreases without regard to the perceived EL of the audit supervisor. As the perceived EL of the audit supervisor increases, the likelihood of engaging in OTHER RAQ acts decreases without regard to the perceived EL of the audit supervisor. These result provide partial support for hypothesis 3 with regards to the predicted direct effects of perceived EL of the audit supervisor.

4.4.6 Hypothesis 3 – ANCOVA Analysis

To further understand the interaction effect present for PMSO, I computed an ANCOVA and pairwise comparisons using a binary variable for OC based upon a median split and a 3 level variable for perceived EL splitting EL into three even categories. To determine which parts of the interaction were significant, I computed pairwise

comparisons using a Bonferroni adjustment for multiple comparisons. The results are reported in Table 4.18 below. In post hoc simple effects testing, the only significant comparison is between high and low levels of OC when perceived supervisor EL is low indicating that increases in an auditor's level of OC only reduce the likelihood of engaging in PMSO when perceived supervisor EL is low. This provides support for hypothesis 3.

Table 4.18 ANCOVA: Org. Commit. x Ethical Leadership with PMSO as DV

Panel A: Unadj. Mean (Adj. Mean) [Standard Deviation] of Likelihood of Engaging in PMSO

	Lower Perceived Ethical Leadership	Medium Perceived Ethical Leadership	Higher Perceived Ethical Leadership	Totals
Lower Organizational Commitment	2.69 (2.71) [1.804] n = 32	2.15 (2.15) [1.040] n = 20	2.40 (2.40) [1.673] n = 5	2.47 (2.42) [1.560] n = 57
Higher Organizational Commitment	1.67 (1.86) [0.817] n = 6	1.94 (1.87) [1.392] n = 18	1.67 (1.66) [0.924] n = 33	1.75 (1.79) [1.073] n = 57
Totals	2.53 (2.28) [1.720] n = 38	2.05 (2.01) [1.207] n = 38	1.76 (2.03) [1.051] n = 38	2.11 (2.11) [1.381] n = 114

Panel B: Conventional ANCOVA Analysis

Variable	Sum of Squares	df	Mean Square	F	p-value
Organizational Commitment	6.514	1	6.514	3.753	0.028
Perceived Ethical Leadership	1.037	2	0.519	0.299	0.371
OC x Ethical Leadership	1.272	2	0.636	0.367	0.347
Social Desirability Bias	10.520	1	10.520	6.061	0.008
Error	185.716	107	1.736		

Panel C: Follow-Up Simple Effects Test

Contrast	df	F	p-value
Effect of EL given Higher OC	2,107	0.164	0.425
Effect of EL given Lower OC	2,107	1.121	0.165
Effect of OC given Lower EL	1,107	2.077	0.076
Effect of OC given Medium EL	1,107	0.427	0.258
Effect of OC given Higher EL	1,107	1.352	0.124

All p-values are one-tailed.

Overall, these results indicate that hypothesis 3 is partially supported. The predicted negative moderating effect of perceived EL is significant with regard to PMSO but not the other two RAQ acts tested. With regards to PMSO, the auditor's level of OC only reduces the likelihood of engaging in PMSO under conditions of low perceived EL of the audit supervisor which is what is predicted in hypothesis 3. Under conditions of

medium and high perceived EL, the auditor's level of OC has no impact on likelihood of engaging in PMSO. The direct effect of the perceived EL of the audit supervisor does decrease the likelihood of engaging in OTHER RAQ acts without regard to the auditor's level of OC. This result provides partial support for the predicted direct effects of perceived EL in hypothesis 3.

Chapter 5

Conclusion

5.1 Discussion

The purpose of this dissertation was to study the potential impact of perceived supervisor EL upon an auditor's propensity to engage in RAQ acts. Improving audit quality is a significant concern of the profession, and this study will make a contribution by providing insight into conditions under which undesirable auditor behavior may be reduced. Although studies in the EL area have found that EL is positively associated with desirable employee behavior and negatively associated with undesirable employee behavior, we cannot assume that these results will hold in the audit environment. Bonner (2008) notes that the audit environment is unique and as a result, theories developed in other disciplines may not be well suited for the accounting setting; therefore, it is important to study EL in this environment.

In studying the potential impact of perceived supervisor EL, I was particularly interested in two aspects of this potential relationship. First, I was interested in whether perceived supervisor EL would have a direct effect on an auditor's propensity to engage in RAQ acts as this leadership quality has not been previously studied in relation to RAQ acts. I hypothesized that it would reduce an auditor's propensity to engage in RAQ acts. Second, I was interested in whether perceived supervisor EL would moderate the relationship between auditor personal characteristics and an auditor's propensity to engage in RAQ acts. I offered three hypotheses regarding the effect of the perceived supervisor EL on the relationship between individual auditor attributes (LOC, PC, and OC) and likelihood to engage in RAQ acts.

I test these theoretical predictions using a non-experimental design utilizing a survey instrument with both a paper and online completion option and a sample of 114

staff and senior level audit professionals. The survey instruments along with instructions for completing the surveys were distributed to auditors by a firm representative (partner, senior manager, or human resource personnel) or by myself at a firm training event. The survey required the participant to rate the likelihood that they would engage in eight different RAQ acts as well as the likelihood that another auditor would engage in the same RAQ acts. Participants also provided responses to previously validated scales of perceived ethical leadership, locus of control, professional commitment, and organizational commitment in addition to demographic information.

With regards to the main effects relationship between perceived supervisor EL and likelihood to engage in RAQ acts, my results provide support for the hypothesized main effects of perceived EL for the RAQ acts of PMSO and the composite other RAQ acts variable but generally does not provide support for the act of URT. It is not surprising that the results would vary among the three different RAQ acts as Coram et al. (2008) found that auditors perceived the moral intensity of various RAQ acts to be different. Specifically, URT was viewed as having a lower level of moral intensity and thus not viewed as negatively as other RAQ acts. It has been observed that although audit firm stated policies usually discourage URT, auditors often feel pressure to URT in order to bring an audit in on budget or to improve their performance evaluations (McNair, 1991; Otley & Pierce, 1996a; Sweeney & Pierce, 2006). This pressure may be internal pressure that the auditor puts upon herself but may also be external pressure coming from the audit supervisor who is incentivized to complete audits within budget. These results suggest that the perceived EL of the audit supervisor does not reduce likelihood of engaging in URT, and thus an auditor's internal pressures to URT may override the potential influence of the perceived EL of the audit supervisor.

With regards to the hypothesized moderating effects of perceived supervisor EL upon the three auditor characteristics, the results are mixed. When considering the likelihood of engaging in PMSO, there was a significant interaction effect between perceived supervisor EL and both auditor PC and auditor OC but not for auditor LOC. Upon further investigating these interaction effects, the results show that the perceived supervisor EL will reduce an auditor's likelihood of engaging in PMSO more for auditor's with lower levels of PC and OC as opposed to higher levels of PC and OC. This indicates that auditors who have low levels of commitment to the profession or to their firm will be less likely to engage in PMSO if they work for an audit supervisor whom they perceive to be an ethical leader. The auditor characteristic of LOC does not impact the likelihood of the auditor engaging in PMSO nor does it interact with perceived EL to impact this likelihood. Therefore, whether an auditor has more of an internal versus external LOC will not impact his or her likelihood of engaging in PMSO. These results support the moderating effects of hypotheses 2 and 3 but not 1 with regards to the RAQ act of PMSO.

When considering the likelihood of engaging in URT, there were no significant interaction effects between perceived supervisor EL and any of the three auditor characteristics tested. These results do not support the moderating effects of hypotheses 1-3 with regards to the RAQ act of URT. Considering that the interaction effects are not significant, it then becomes important to look at the main effects of the auditor characteristics. As expected, auditor PC and OC both have a significant negative relationship with the auditor's likelihood to engage in URT. This indicates that as an auditor's OC and PC increase, the likelihood of that auditor engaging in URT decreases without regards to the perceived EL of the audit supervisor. The auditor's LOC does not impact his or her likelihood of engaging in URT.

When considering the likelihood of engaging in the composite OTHER RAQ variable, there was a significant interaction effect between perceived supervisor EL and both auditor LOC and auditor PC but not for auditor OC. Upon further investigating these interaction effects, the results show that the perceived supervisor EL will reduce an auditor's likelihood of engaging in OTHER RAQ acts more for auditors with an internal LOC as opposed to an external LOC and more for auditors with lower levels of PC as opposed to higher levels of PC. This indicates that auditors with an internal LOC who feel that their personal actions will significantly impact their personal future will be less likely to engage in OTHER RAQ acts if they perceive their audit supervisor to be an ethical leader. In addition, auditors with lower levels of PC will be less likely to engage in OTHER RAQ acts when they perceived their audit supervisor to be an EL. The auditor characteristic of OC is not moderated by perceived supervisor EL, but the results do find significant main effects of auditor OC. This indicates that the likelihood of an auditor engaging in OTHER RAQ acts will decrease as the auditor's level of OC increases regardless of the perceived audit supervisor EL. Overall, these results support the moderating effects of hypotheses 1 and 2 but not 3 with regards to the composite OTHER RAQ acts.

5.2 Contributions

The results of this research study provide several contributions both from a theoretical and practitioner perspective. From a theoretical perspective, this is the first study to investigate the potential impact of an audit supervisor's EL on auditors' propensity to engage in dysfunctional audit behavior. The findings indicate that perceived EL reduces the auditor's likelihood of engaging in RAQ acts and that this negative relationship is moderated by the auditor characteristics of LOC, PC, and OC under certain circumstances. Additionally, in the accounting and audit environment, EL is

often considered more so in regards to upper management and the “tone at the top”. This study provides evidence that the EL of lower level supervisors who have more day to day interactions with their subordinates, in this case the auditor’s direct supervisor, has a significant negative association with the auditor’s propensity to engage in RAQ acts thus providing support for the trickledown effect of EL (Mayer et al., 2009).

From a practitioner perspective, this research makes contributions related to the profession’s interest in improving audit quality. Audit quality is on the top of the agenda for many auditing professional and regulatory bodies around the world such as the PCAOB (2013), the AICPA’s CAQ (2014), the FRC (2006), and the IAASB (2013). This research provides further insight into the under researched aspect of audit quality related to audit input factors which includes characteristics of the audit team and the implementation of the audit procedures. This research provides evidence supporting the significant influence that the perceived EL of the auditor’s direct supervisor may have on the auditor’s decision to engage in RAQ acts and how this may moderate the relationships between auditor personal characteristics and this undesirable behavior. Audit firms could utilize this information to enhance their training of auditors in supervisory positions by incorporating EL training.

5.3 Limitations

This study involves several limitations including extensive reliance upon single source data collected at a single point in time. The data for all variables, both criterion and predictor variables, utilized in the study was provided by the same respondent. This can bring about the potential for common method bias. Podsakoff, MacKenzie, Lee & Podsakoff (2003) suggest that when it is not feasible to collect study data from different sources, that the researcher provide complete anonymity and reduce evaluation apprehension which was done in this study. In addition, an exploratory factor analysis

was utilized to perform a Harmon's one factor test which provided results that a single factor is not present within the data. Siemsen, Roth, & Oliveira (2010) also provide evidence that common method variance cannot generate an artificial interaction effect but rather can only deflate existing interactions. Evidence of significant interaction effects in this study provide evidence that common method variance is not inappropriately inflating the results. Future research could minimize this limitation by designing a longitudinal study collecting the criterion and predictor variables at different times such as predictor variables prior to a specified audit and the criterion variable after the specified audit. Future research could also minimize this risk by utilizing multiple methods from multiple sources such as matching responses from both the auditor and the supervisor. Both of these future research options would eliminate anonymity of responses as identifying information would need to be captured in order to link the responses.

Another concern facing this study is the use of self-reported data and the potential social desirability bias. The findings of the study are based upon self-reported data gathered via a survey which is consistent with prior research in this area (Kelley & Margheim, 1990, 2002; Malone & Roberts, 1996; Kelley et al., 1999; Donnelly et al., 2003a, 2003b; Coram et al., 2003, 2008; Sweeney et al., 2010; Nor et al., 2010; Paino et al., 2011a, 2011b; Morris, 2009; Otley & Pierce, 1995, 1996a, 1996b; Pierce & Sweeney, 2004, 2006, 2010). Each respondent was asked questions related to the ethical leadership characteristics of their immediate audit supervisor, questions about their own characteristics, and questions about their likelihood of engaging in RAQ acts. With self-reported data, there is always the possibility that respondents might find it difficult to answer questions about themselves objectively particularly when questions are of a sensitive nature such as some used in this study. To combat this limitation, I used indirect questioning, carefully selected the order of questions, and guaranteed complete

anonymity and confidentiality of responses. If social desirability bias does influence the results, the bias would serve to understate the incidence of RAQ acts which would provide more conservative estimates.

5.4 Summary

Many audit professional and regulatory bodies around the world have proposed audit quality frameworks which have identified the audit engagement team and characteristics of the team members as one of the significant elements of audit quality (FRC, 2006; Francis, 2011; Knechel et al., 2013; IAASB, 2013; PCAOB, 2013; CAQ, 2014). Prior research has also found that various stakeholders in the audit process indicate that attributes related to the audit team members are more closely tied to audit quality than firm wide attributes acknowledging the significant influence that individuals on the audit team have on audit quality (Schroeder et al., 1986; Carcello et al., 1992; Christensen et al., 2014). This research contributes to the body of knowledge on auditor RAQ behavior by studying the effect of the direct audit supervisor, particularly the perceived EL of the supervisor, upon RAQ behavior finding that the perceived EL of the audit supervisor reduces the auditor's propensity to engage in RAQ behavior. Furthermore, the study provides evidence that the perceived EL of the audit supervisor will reduce PMSO more significantly for auditor's with low PC and low OC and will reduce the composite measure of RAQ acts more significantly for auditors with low PC and an internal LOC. The results of this study provide further insights into our understanding of factors and circumstances that might be relevant to reducing instances of auditor dysfunctional behavior.

Appendix A

Scales Used for Dependent and Independent Variables

Ethical Leadership Scale (Brown et al., 2005)

For each of the following questions, consider your audit supervisor to whom you reported on your largest audit in the prior year. Please indicate the degree of your agreement or disagreement with each statement in regards to this audit supervisor. (Seven point scale ['strongly disagree' to 'strongly agree']):

1. My manager listens to what employees have to say.
2. My manager disciplines employees who violate ethical standards.
3. My manager conducts his/her personal life in an ethical manner.
4. My manager has the best interests of employees in mind.
5. My manager makes fair and balanced decisions.
6. My manager can be trusted.
7. My manager discusses business ethics or values with employees.
8. My manager sets an example of how to do things the right way in terms of ethics.
9. My manager defines success not just by results but also the way that they are obtained.
10. When making decisions, my manager asks "What is the right thing to do?"

Organizational Commitment Questionnaire (Mowday, Steers, and Porter 1979)

Listed below are a series of statements that represent possible feelings that individuals might have about the organization for which they work. With respect to your own feelings for the organization for which you now work, please indicate the degree of your agreement or disagreement with each statement by circling one of the seven alternatives. (Seven point scale ['strongly disagree' to 'strongly agree']):

1. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.
2. I talk up this organization to my friends as a great organization to work for.
3. I would accept almost any type of job assignment in order to keep working for this organization.

4. I find that my values and the organization's values are very similar.
5. I am proud to tell others that I am part of this organization.
6. This organization really inspires the very best in me in the way of job performance.
7. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.
8. I really care about the fate of this organization.
9. For me this is the best of all possible organizations for which to work.

Professional Commitment Questionnaire (Dwyer et al., 2000 as adapted from Aranya et al., 1981)

Listed below are a series of statements that represent possible feelings that individuals might have about the profession for which they work. With respect to your own feelings for the audit profession, please indicate the degree of your agreement or disagreement with each statement by circling one of the seven alternatives. (Seven point scale ['strongly disagree' to 'strongly agree']):

1. For me this is the best of all possible professions for which to work.
2. Often I find it difficult to agree with this profession's policies on important matters relating to its members.
3. Being a member of this profession really inspires the very best in me in the way of job performance.
4. I am willing to put forth a great deal of effort beyond that normally expected in order to help make my profession successful.
5. I am proud to tell others that I am part of this profession.

Work Locus of Control Questionnaire (Spector, 1988)

Listed below are a series of statements that represent possible feelings that individuals might have about their job. With respect to your own feelings, please indicate the degree of your

agreement or disagreement with each statement by circling one of the seven alternatives.

(Seven point scale ['strongly disagree' to 'strongly agree']):

1. A job is what you make of it.
2. On most jobs, people can pretty much accomplish whatever they set out to accomplish.
3. If you know what you want out of a job, you can find a job that gives it to you.
4. If employees are unhappy with decisions made by their boss, they should do something about it.
5. Getting the job you want is mostly a matter of luck.
6. Making money is primarily a matter of good fortune.
7. Most people are capable of doing their jobs well if they make the effort.
8. In order to get a really good job, you need to have family members or friends in high places.
9. Promotions are usually a matter of good fortune.
10. When it comes to landing a really good job, who you know is more important than what you know.
11. Promotions are given to employees who perform well on the job.
12. To make a lot of money, you have to know the right people.
13. It takes a lot of luck to be an outstanding employee on most jobs.
14. People who perform their jobs well generally get rewarded for it.
15. The main difference between people who make a lot of money and people who make a little money is luck.

Reduced Audit Quality Acts Questionnaire

For each of the following statements, consider the largest audit on which you have worked in the prior year and the direct supervisor to whom you reported on this audit. In a similar audit environment, please indicate your belief as to the likelihood that an auditor with your level of experience would act in the following manner. (Seven point scale ["very unlikely" to "very likely"]):

1. Failing to research a technical accounting or auditing issue even though the auditor was unsure of the proper accounting or auditing treatment.
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?
2. Signing off on an audit step that had been completed according to the general practices of the firm, but for which the auditor felt s/he should have spent more time due to questionable transactions and/or practices by the client.
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?
3. Making tickmarks on audit working papers after an essentially superficial review of supporting client documentation.
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?
4. Accepting client explanations that are weaker than would normally be accepted due to tight time-budget pressure.
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?

5. Signing off on a procedure required on the audit program without completing the work or noting the omission of procedures in the audit working papers.
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?
6. Completing all required audit steps but not charging the total time spent on the audit work on his/her timesheet (underreporting chargeable time).
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?
7. Deleting awkward or unusual looking items from a sample and replacing with another item.
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?
8. Accepting client explanations that are weaker than would normally be accepted because gathering corroborating evidence would be difficult.
 - a. Considering the audit you identified above, what is the likelihood of this action being taken by other auditors in your firm?
 - b. Considering the audit you identified above, what is the likelihood of this action being taken by you?

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Biographical Information

Kimberly Webb received her PhD in accounting from the University of Texas at Arlington. Kimberly also holds a Master of Science degree in accounting from the University of Texas at Arlington and a Bachelor of Science degree in accounting from the University of the Cumberlands. Kimberly is a Certified Public Accountant licensed in the state of Texas and prior to her career in academia, she worked in public accounting providing audit and tax services. Kimberly is an associate professor of accounting at Texas Wesleyan University in Fort Worth, Texas.