Walden University

COLLEGE OF SOCIAL AND BEHAVIORAL SCIENCES

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Walden University 2009



ABSTRACT

The Impact of Moral Intensity and Ethical Climate on the Decision-Making of Finance and Accounting Professionals in Government

by

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M.S., National Defense University, 2005 M.S., University of Maryland University College, 1993 B.S., Howard University, 1987

Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy Public Policy and Administration

Walden University February 2009



ABSTRACT

Unethical decision making by public officials is a concern that jeopardizes confidence in government. Few researchers have studied the moderating effect of ethical climate on decision-making. The purpose of this study was to address this gap in the literature by examining the relationship between moral intensity and ethical decision-making, and the moderating effect of ethical climate within the public sector. The theoretical bases of the study are moral intensity, which deals with the charactersitics of the moral dilemma, ethical climate, Jones's issue-contingent model of ethical decision-making and Victor and Cullen's ethical climate topology. The correlational survey research design included a convenience sample of 130 finance and accounting professionals at a federal agency. Simple regression analysis was performed to determine the direct effect of moral intensity (Moral Intensity Scale) and ethical climate (Ethical Climate Questionnaire, adapted) on ethical decision-making (adapted from vignettes used in previous research). Multiple regression analysis was used to determine if ethical climate served as a moderator of the relationship between moral intensity and ethical decision making. Results indicated that moral intensity was positively associated with ethical decisionmaking; ethical climate did not moderate the relationship (or was it a direct predictor of ethical decision making). This suggested that people's ethical decisions are the result of their moral base and not work climate. While further study on ethical climate is warranted, this research contributes to positive social change by providing public managers with knowledge about how moral intensity affects decision-making. Application of this understanding will help reduce incidents of ethical misconduct and improve trust in and effectiveness of government.



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DEDICATION

This doctoral study is dedicated to my loving husband Paul Roy and my two wonderful children Maurice and Seth. Thank you for your patience, support, and most of all your love. I would also like to dedicate this study to the memory of my paternal grandparents Elizabeth and Everett Daniel Hobson, who demonstrated the joy of intellectual pursuit, and my maternal grandparents Hattie and Herman Page who encouraged spiritual growth.



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CHAPTER 1: INTRODUCTION TO THE STUDY

Unethical decision-making by public officials jeopardizes confidence in government. Despite attempts by government agencies to improve ethical decisionmaking through formal ethics and compliance programs, ethical misconduct of government employees continues (Ethics Resource Center, 2007). A national survey conducted of 3,452 employees at local, state, and federal levels showed that 52% of employees admitted to at least one form of misconduct or ethical violation in the last 12 months (Ethics Resource Center). Society depends on civil servants to make ethical decisions that serve the public interest.

Researchers have examined the role that the environment of an organization plays in influencing decisions involving moral dilemmas. A significant body of research suggested that the ethical environment of the organization can have a wide range of influences on the decision-making process. For instance, how an organization enforces or fails to enforce codes of conduct (Deconinck, 2004; Fang, 2006; Maheshwari & Ganesh, 2006), the organization's rules and procedures that prescribed acceptable behavior (Alleyne, Devonish, Nurse, & Cadogan-McClean, 2006), organizational structures and work units and processes (Miller, Yeager, Hildreth, & Rabin, 2005; Trevino, 1986), and supervisor influence (Fang, 2006; Jones & Ryan, 1998) can all contribute to the way employees analyze and respond to ethical dilemmas. These factors create an ethical climate or "the shared perception of what is ethically correct behavior and how issues should be handled" (Victor & Cullen, 1987, p. 51).



Public officials are particularly challenged in their decision-making because they "face an array of moral issues in their everyday decision-making" (Fudge & Schlacter, 1999, p. 295) that vary in nature and often involve balancing professional, personal, and organizational values. Depending upon the nature of problems that confront them, an individual's behaviors and reactions to moral dilemmas may vary (Schneider, 1975). Jones (1991) created a theoretical construct, known as moral intensity, to address the diversity of moral problems inherent in ethical decision-making. Moral intensity is defined as "the extent to which an issue, event, or act has the characteristics that make it subject to moral consideration, moral judgment, or moral action" (Reynolds, 2006, p. 234). Barnett (2001) wrote that Jones's moral intensity construct implies that before reaching a conclusion decision makers are likely to ask such questions as, How serious are the potential consequences of the action? Thus, moral intensity is a construct that is concerned with the characteristics of the moral problem and the seriousness of potential consequences of a moral act. Empirical research (Barnett, 2001; Barnett & Valentine, 2004; Frey, 2000a, 2000b; Leitsch, 2006; Pauli & May, 2002; Singer & Singer, 1997; Singhapakdi, Vitell, & Kraft, 1996) has demonstrated that Jones's moral intensity construct influences all phases of the ethical decision-making process.

Moral intensity and organzational ethical climate, collectively, are of interest in understanding how public officials make decisions involving ethical dilemmas. The literature review revealed studies that have examined the impact of moral intensity and ethical climate on ethical decision-making. Many of these studies focused on the private sector, largely ignoring the public sector.



Problem Statement

The concern for ethical decision-making among public officials has increased in recent years following numerous instances and allegations of unethical, if not illegal, behavior. Although research has shown that moral intensity and ethical climate influence ethical decision-making and behavior, little is known about the moderating effect of ethical climate, particularly within the public sector. A correlational research design examined the relationship between moral intensity and ethical decision-making, and the moderating role of ethical climate within the public sector. Without an understanding of the nature of the relationship between moral intensity, ethical climate, and decision-making within the public sector, incidents of ethical climate, may persist.

Background of the Problem

Government employees have been affected by a large number of unethical behaviors across diverse areas of governance and responsibility levels, from top government leaders down to local levels (Montanheiro, 1998). For instance, in 2004 a Department of Defense senior contracting official pleaded guilty to conspiracy for seeking a post government job while negotiating with a major defense contractor (Ex-Air Force Official Pleads Guilty, 2004). In another case, a Department of Homeland Security (DHS) official admitted "to issuing fraudulent documents to illegal immigrants" (DHS Official Admits Taking Bribes, 2006, 3). In 2002, a Central Intelligence Agency official was "sentenced on charges of theft of government property" (U.S. Department of Justice, 2002, 1). In 2003, two high-level Pentagon officials were sentenced to "more than 24



years for conspiracy to extort bribes and gratuities from companies seeking business with the federal government" (Strohm & Gruber, 2003, 4).

Ethical violations include offenses that do not result in criminal convictions, such as lying to stakeholders and employees, putting self-interest above the organization's, using abusive or intimidating behavior, misreporting hours worked, using improper hiring practices, misusing confidential organization information, and altering documents and financial records, to name a few. According to a 2007 survey conducted of 3,452 government employees, over 50% of employees witnessed at least one incident of misconduct in the last 12 months; a trend since the year 2000 (Ethics Resource Center, 2007).

Government agencies tend to create formal ethics programs, some of which are mandated by law, to deal with ethics issues (Menson, 1990). These programs include codes of conduct, hotlines for reporting violations, ethics training, discipline for violators, and mechanisms for advice – all designed to set a baseline for expected behavior. Although formal ethics programs are important, they are not sufficient for dealing with the broad ethics issues employees face in their day-to-day decision-making. For instance, public officials face dilemmas involving conflicting personal, professional, and organizational values from within and outside their work group or organization. Rules alone cannot govern every situation or dilemma faced by public officials. As a result, public officials must exercise considerable discretion in their decision-making.

This research study focused on finance and accounting professionals in the public sector because they experience challenges that extend beyond the normal give-and-take



competitive environment (Miller et al., 2005). For instance, Menson (1990) cited a study that identified major ethical issues in budgeting. The most frequently identified concerns were impartiality (including collusion), conflict of interest (including receipt of money and outside employment), accuracy, political loyalty, confidentiality, and fairness. Other ethical concerns included objectivity, honest, compliance with codes, and integrity. In another study, Miller et al. found that finance professionals in particular face external pressure by people outside their work units that ask for special treatment. Incidents of external pressure create an environment where it is more challenging to work.

Nature of the Study

Research Questions and Hypotheses

Research Question 1. What is the relationship between moral intensity and the ethical decision-making of finance and accounting professionals in government?

Null Hypothesis (H₀): There is no statistical relationship between moral intensity and finance and accounting professionals' ethical decision-making.Hypothesis (H₁): Moral intensity is positively associated with finance and accounting professionals' ethical decision-making.

Research Question 2. What is the relationship between ethical climate and the ethical decision-making of finance and accounting professionals in government?
Null Hypothesis (H₀): There is no statistical relationship between ethical climate and finance and accounting professionals' ethical decision-making.
Hypothesis (H₂): Ethical climate is positively associated with finance and accounting professionals' ethical decision-making.



Research Question 3. Does an ethical climate strengthen the relationship between moral intensity and ethical decision-making?

Null Hypothesis (H₀): Ethical climate does not moderate the relationship between the moral intensity and finance and accounting professionals' ethical decision-making.

Hypothesis (H₃): Ethical climate moderates the relationship between the moral intensity and finance and accounting professionals' ethical decision-making, such that the relationship between moral intensity and ethical decision-making is stronger for higher levels of ethical climate.

To test the hypothesized relationship between moral intensity (predictor) and ethical decision-making (dependent variable), and the moderating role of ethical work climate (moderator) within the public sector, a correlational research design (hierarchical regression) was used. This approach is consistent with the purpose of this study, that is, to understand not only the relationship between moral intensity and ethical decisionmaking, but also the moderating effect of ethical climate on that relationship. Regression analysis provides the mechanism for evaluating how closely the relationship is between the predictor variable and the dependent variable, and the effect of the moderator variable on that relationship.

When a moderator variable changes the relationship between the predictor variable and dependent variable, a moderated relationship is present (Baron & Kenny, 1986). Moderated relationships are modeled in a regression analysis, which is the recommended strategy by theorists (Aiken & West, 1991; Baron & Kenny, 1986; Cohen



& Cohen, 1983; Jaccard & Turrisi, 2003). A moderating effect is supported if the interaction between the predictor variable and moderator variable is statistically significant. The moderated relationship that this study examined was whether moral intensity has a greater impact on ethical decision-making for people who work in percieved high levels of ethical work climates. Levels of ethical work climate were divided into high and low based on observations on both sides of the median.

Participants included a convenience sample of finance and accounting professionals working at a large federal agency. This profession was selected because the ethical issues they face reflect common choices of day-to-day governing that involve competing personal, professional and organizational values, as well as responding to legitimate competing demands within and outside their work units.

Participants were randomly assigned one of two versions of a vignette, one involving a situation of high moral intensity, and the other involving a situation of low moral intensity. After reading the vignette, participants answered related questions to measure moral intensity. Moral intensity was measured using the Moral Intensity Scale developed by Singhapakdi, Vitell, and Kraft (1996) and two questions based on the work of Jones (1991). Ethical climate was measured using the Ethical Climate Questionnaire developed by Victor and Cullen (1988).

Purpose of the Study

Moral intensity and ethical climate, collectively, are of interest in understanding how public officials make ethical decisions. Moral intensity is defined as "the extent to which an issue, event, or act has characteristics that make it subject to moral



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consideration, moral judgment, or moral action" (Reynolds, 2006, p. 234). Thus, one purpose of this study was to understand the influence of moral intensity and ethical climate on the ethical decision-making of finance and accounting professionals in government. The research proposed a model that suggests that moral intensity and ethical climate are positively associated with ethical decision-making.

The second purpose was to investigate the moderating effect of ethical climate. A moderated relationship occurs when the predictor variable interacts with the moderator variable in such a way as to causes a change in the strength or direction of the dependent variable. The model proposed by this research suggests that an interaction exists between moral intensity (predictor) and ethical climate (moderator). Figure 1 presents the proposed model that suggests that moral intensity and ethical climate interact to enhance the predictability of moral intensity on ethical decision-making.

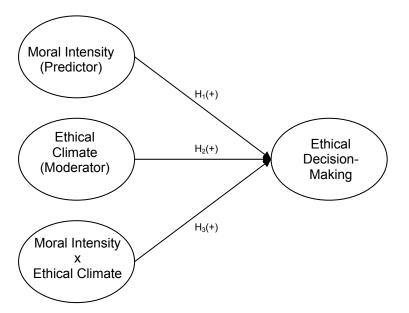


Figure 1. Proposed model of ethical decision-making for finance and accounting professionals in government.



As mentioned earlier, a multiple regression analysis is the most common approach to determine the presence of a moderating effect (Aiken & West, 1991; Baron & Kenny, 1986; Cohen & Cohen, 1983; Jaccard & Turrisi, 2003). The multiple regression equation is expressed as

$$Y = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_1 X_2$$

In this equation, Y is the dependent variable, X_1 is the predictor variable, X_2 is the , moderator variable, b_0 is the intercept, b_1 is the regression coefficient for X_1 , b_2 is the regression coefficient for X_2 , and b_3 is the regression coefficient for the interactive term X_1X_2 .

Theoretical Base

The theoretical base for this study was derived from descriptive approaches to ethical decision-making and ethical climate theory.

Descriptive Approaches to Ethical Decision-Making

Rest (1986) proposed a four-component model that presents a "logical sequence" (p. 5) for understanding moral reasoning and behavior. According to Rest, the ethical reasoning process begins with the moral awareness that a moral dilemma exists (Alleyne, et al., 2006). Rest stated, "A person must say to her/himself, 'This is a moral problem'" (p. 5). The second component of Rest's model is moral judgment, the stage whereby the individual determines "which course of action is morally right" (Rest, p. 8). Thirdly, the individual develops a moral intention, that is, "the individual prioritizes moral values over other values and decides on a choice of action" (Rest, p. 14). Finally, the individual engages in the behavior based on his or her moral intention (Alleyne et al.).



Jones (1991) expanded upon Rest's four-component model by considering the characteristics of the moral dilemma, which he coined moral intensity. While Rest focused on the individual aspect of ethical decision-making, Jones suggested that "moral intensity...has a significant effect on moral decision-making and behavior at all stages of the process" (p. 391). Moral intensity stands for the degree of moral relevance an issue represents to an individual. The higher the relevance is, the stronger the individual's reaction to the moral issue (Fang, 2006). Jones divided moral intensity into "six component parts consisting of magnitude of consequences, social consensus, probability of effect, temporal immediacy, concentration of effect, and proximity" (p. 372).

Trevino (1986) developed a "[a person-situation] interactionist model of ethical decision-making behavior in organizations" (p. 601). Trevino posited that individual and situational variables guide employee behavior. Wittmer (1994) acknowledged Trevino's theory as one of the earliest efforts to "recognize the complexity of ethical decision-making and the numerous factors affecting decision-making in the organizational context" (p. 352). Trevino takes a holistic approach to ethical decision-making that incorporates the effect of individual factors, such as personal convictions and moral reasoning skills, and situational factors, such as work experiences, job context, and organizational culture.

Ethical Climate Theory

The organization is an important component in the decision-making process because "the organization imposes obligations, pressures, and constraints" (Denhardt, 1988, p. 75). Victor and Cullen (1988) developed an ethical climate construct based on



the posit that "organizations have distinct types of ethical climates" (p. 101). According to Victor and Cullen, there are variations of ethical climates within the organization. Their ethical climate topology is a two-dimensional construct that is grounded in Kohlberg's (1981) theory of cognitive development and normative decision-making frameworks. The first dimension parallels the work of Kohlberg. This dimension uses an ethical standard as a guide for ethical decision-making (Weber, 1995), which includes egoism, benevolence, and principled ethical grounding. The second dimension, locus of analysis, frames the construct in terms of the level of analysis in the organization, and includes the individual, local, and cosmopolitan levels. The two-dimensional construct resulted in nine ethical climate types. In a later analysis, Victor and Cullen reduced the number of ethical climate types from nine to five: "caring, law and code, rules, instrumental, and independence" (Wittmer & Coursey, 1996, p. 662).

Operational Definitions

Key concepts in this study involved terminology related to moral intensity, ethical climate, and ethical decision-making.

Ethical climate: "The prevailing employee preceptions of what is ethically correct behavior and how ethical issues should be handled" (Victor & Cullen, 1987, p. 51). Ethical climate and ethical work climate are used interchangeably in this study.

Ethical decision: "A decision that is both legal and morally acceptable to the larger community" (Jones, 1991, p. 367), "the consequences of [which] affects the welfare of [others]" (Rest, 1986, p. 5).



Ethical decision-making: "The process by which individuals use their moral base to determine whether a certain issue is right or wrong" (Carlson, Kacmar, & Wadsworth, 2002, p. 16). It is conceptualized as a four step process: "recognizing a moral issues, making a moral judgment, establishing moral intent, and engaging in moral behavior" (Silver & Valentine, 2000, p. 309).

Ethical dilemma: "A situation where two or more competing values are important and in conflict" (Gortner, 1991, p. 14).

Moral intensity: "The extent to which an issue, event, or act has characteristics that make it subject to moral consideration, moral judgment, or moral action" (Reynolds, 2006, p. 234).

Unethical decision: "A decision that is either illegal or morally unacceptable to the larger community" (Jones, 1991, p. 367).

Assumptions

This study is predicated on three fundamental assumptions. First, it was assumed that the decisions of finance and accounting professionals in a large federal agency were representative of a wide range of employees in this field whose decisions are often entangled in ethics. Second, it was assumed that employees were knowledgeable of their organizational climate and that their responses provided meaningful data. Finally, respondents were asked to self-report personal information. It was assumed that these questions, as well as all the responses, were answered truthfully.



Limitations, Scope, and Delimitations

One limitation of this study was the use of a convenience sample of finance and accounting professionals working full-time at a large federal agency. To ensure a large sample size, the scope of the research encompassed professionals at all levels and across offices and divisions. However, since a random selection method was not be used, the participants cannot be considered a representative sample and results cannot be generalized.

Another limitation concerned the use of vignettes. Although vignettes are frequently used by researchers in the ethics field to survey attitudes and behaviors, they have been criticized because of their artificial and simplistic nature (Weber, 1992). To address the limitations associated with the use of vignettes, a vignette based upon the work of Zeigenfuss and Singhapakdi (1994) specifically related to a finance and accounting issue was used.

This study was limited by the subjective nature of the topic and the realization that what one individual might interpret as ethical may not be accepted as ethical by another individual based on different personal value systems. In addition, participants were asked about their intentions and not actual behavior. However, evidence in literature suggested that individuals often behave consistently with intentions (Ajzen & Fishbein, 1977).

Finally, this study examined potentially sensitive issues. Accordingly, social bias was a concern. As suggested by Nederhof (1985), the threat of social bias was mitigated by preserving participant anonymity.



Significance of the Study

The decisions of public officials have a widespread impact on society (Menson, 1990). Citizens expect public officials to serve the public interest with the highest degree of morality and integrity. The current research increased knowledge about how moral intensity and ethical climate affects ethical decision-making within the public sector. Providing public managers with insight into the link between morality, work climate, and decision-making can affect positive social change by increasing public managers' ability to make ethical decisions.

Implications for Social Change

American citizens place their trust in public officials' abilities and commitment to make decisions which serve the common good of society. When public officials betray that trust by engaging in unethical and illegal behaviors, support for government decision-making and operations often declines. "Reduced support for government actions [can inhibit government's ability] to address wide-ranging policy concerns for public benefit" (Chanley, Rudolph, & Rahn, 2000, p. 239). This study sought to understand how public officials make decisions involving moral dilemmas, particularly in relation to moral intensity and ethical climate. The results of this study may contribute to positive social change by increasing public managers' understanding of and ability to make ethical decisions, and improving public trust in government.

Summary

Reports of unethical, and even illegal, conduct of government officials has brought ethics and government to the forefront of public concern. Unethical decision-



making of public officials undermines public confidence in government, and puts government at risk and its ability to address policy concerns for public benefit (Chanley et al., 2000; Lampe & Finn, 1992; Menson, 1990; Menzel, 2005). Despite attempts by government agencies to improve ethical decision-making, ethical misconduct of government employees continues (Ethics Resource Center, 2007). The decisions of public officials are of grave importance because they can have wide-ranging impacts on society.

Although research has shown that moral intensity and ethical climate influence ethical decision-making and behavior, little is known about the moderating effect of ethical climate, particularly within the public sector. Understanding the nature of the relationship between moral intensity, ethical climate, and decision-making within the public sector may reduce incidents of ethical misconduct. A correlational research design was used to determine the relationship between moral intensity and ethical decisionmaking, and the moderating role of ethical climate within the public sector. Providing public managers with insight into the link between morality, work climate, and decisionmaking can increase public managers' ability to make ethical decisions and lead to a healthier democracy whereby public trust in government is improved.

Chapter 2 provides a critical summary and synthesis of the literature on ethical decision-making, ethical decision-making models, moral intensity, and ethical climate. In addition, a review of the literature on the nature of the environment in which government officials make ethical decisions is provided. Chapter 3 details the research methodology



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used for this study with the results presented in chapter 4. Chapter 5 provides conclusions and recommendations for future research on ethical decision-making in government.



CHAPTER 2: LITERATURE REVIEW

Introduction

The purpose of this study was to examine the influence of moral intensity and ethical climate on the ethical decision-making of finance and accounting professionals in government. This chapter reviews the literature germane to ethical decision-making, moral intensity, and ethical climate. The review begins with a description of the nature of the environment in which public officials make decisions. It is followed by an analysis of the theoretical foundations of ethical decision-making and various ethical decisionmaking models that have emerged in contemporary literature. The review concludes with a critical summary of the literature on ethical climate. Accordingly, the literature review in this chapter includes the following sections: (a) strategy for searching the literature; (b) characteristics of ethical dilemmas in the public sector; (c) ethical decision-making; (d) ethical decision-making models; and (e) ethical climate.

Strategy for Searching the Literature

The literature review was based on published academic journals written from 1999 to the present and primary source documents. A search of the literature was conducted digitally through the EBSCOHost research database and the ProQuest research database. Key word phrases used in combination included *ethics, decision-making, ethical decision-making, public administration, public sector, government, public trust, budget, finance, moral intensity, cognitive moral development, organizational work climate, ethical work climate, and organizational theory.* Primary source documents



originated from books on the topics of ethics and public administration, business ethics, ethical decision-making and moral development.

Characteristics of Ethical Dilemmas in the Public Sector

The purpose of this study was to examine the influence of moral intensity and ethical climate on the ethical decision-making of finance and accounting professionals in government. In order to understand how public officials make decisions, it is important to explore the context and environment in which they make decisions. Most notably is the notion that [public officials] have numerous roles and value sets which are sources for the decisions they make" (Van Wart, 1996, p. 526). Cooper (1998) characterized the dual nature of the public administrator in terms their "objective responsibility, arising from legal, organizational and societal demands, and subjective responsibility, arising from personal beliefs and feelings about responsibility" (p. 78). When organizational and societal demands clash with personal beliefs and feelings about responsibility, it is difficult for public officials to identify a reliable course of action. This complexity is an inevitable outcome of public governance.

Another challenge faced by public officials is that the range of ethical dilemmas is so diverse that rules alone are inadequate to govern every course of action that can be taken. The question for public officials is what governs behavior when laws and rules are ambiguous or outside the realm of the dilemma under consideration. In such instances, public officials must often exercise discretion as to which course of action is appropriate. According to Chapman (1998), all decisions involving discretion have ethical implications. The ethical choices facing public officials become more difficult when



outcomes do not rise to the level of wrongdoing (Emison, 2006). This is more often the case than not in the public sector. Again, this complexity is an inevitable outcome of public governance.

Although competing demands and the diversity of ethical dilemmas are challenging, equally complex is the environment in which public officials make decisions. A recent study conducted by the Ethics Resource Center (2007) highlighted a concern that government employees are increasingly working in environments that are conducive to misconduct. This is supported by several studies on public sector ethics and governance, particularly in the finance and accounting field (Jones and Euske, 1991; Menzel, 1996, 2005; Miller et al., 2005). Jones and Euske observed that behavior, such as the deliberate and systematic overstatement of requirements, is a common practice in budgeting to achieve organizational objectives. Likewise, Menzel (2005) found similar instances involving budget requests that are inflated in anticipation of standard reductions by analysts. When such behavior is deemed acceptable and routinely overlooked, it can breed, what Menzel called, "an organizational climate of deceit, incompetence, and corruption" that can escalate to more severe incidents of wrongdoing. Furthermore, stress filled environments can detract from the ethical environment of public organizations (Menzel, 1996). A study conducted by Miller et al. (2005) found that financial managers in the public sector face pressures from outside and within the organization to bend the rules. When personal values conflict with the prevailing ethical culture of acceptable behavior, it can present a challenging work environment.



Overall, the ethical dilemmas in the public sector create challenges that defy static judgment (Emison, 2006). It is important to understand the context of the public official's environment as issues of moral intensity and ethical work climate are examined.

Ethical Decision-Making

Ethical decision-making is a critical component of public governance because it shapes and defines public policy and public administration. Carlson et al. (2002) defined ethical decision-making as "a process by which individuals use moral rules to determine whether an issue is right or wrong" (p. 16). The principal factor that makes a decision ethical has been debated for centuries. Many researchers turn to ethical theory and philosophical approaches to understand ethical decision-making. Two major groups of ethical theories emerged in the literature that are relevant to the public sector in understanding the basic principles on which ethical decisions are based: utilitarianism and deontology.

"Utilitarianism involves the principle of utility, which calculates the relative benefits and burdens for all members of society, then [selects the alternative with the greatest benefit to the masses]" (Pops, 1994, p. 158). From a utilitarian perspective, an act is judged ethical if the outcome achieves the greatest utility, irrespective of intentions. Utilitarians believe that this is the sole task of government – to serve "the greatest good for the greatest number of people" (Stewart, 1996, p. 74). Utilitarians prescribe that public officials must maximize the greatest benefits to society as a whole, without consideration of the means by which it is achieved.



Deontologists are critical of the utilitarian approach because it concentrates on the consequences of action, largely ignoring intentions and motives (Stewart, 1996). Kanungo and Mendonca (1996) contended that one cannot ignore the relative circumstances of motive in the decision-making process. By ignoring motive and intent, decision-making is void of moral and ethical issues (Kanungo & Mendonca). Public administrators cannot ignore any basic moral principle likely to influence policy making (Pops, 1994). Deontologist prescribe that public officials must display moral character and be guided by core principles and morals in their decision-making.

Denhardt considered both the deontological and utilitarian perspectives as approaches to understanding the moral order. Stewart (1996) agreed, stating that, "Most public administrators are neither pure deontologists, nor pure utilitarians, but rather operate according to a kind of ethical pluralist, a synthesis of moral systems" (p. 96). Nonetheless, Denhardt ultimately concluded in her works that only the deontological perspective of universal rules, not the utilitarian perspective of consequentialism, is the ideal and more defensible approach for resolving moral dilemmas in public organizations.

Ethical Decision-Making Models

Ethical decision-making models provide a systematic way of addressing ethical concerns. Several models have emerged that contribute to understanding ethical decision-making and behavior in the organizational context.

Rest (1986) developed a four-component model of ethical decision-making that was influenced by Kohlberg's cognitive development theory. Rest believed that individuals work through a series of stages to produce ethical behavior. The first stage is



the recognition that a moral dilemma exists. Once a moral dilemma is recognized, individuals make a moral judgment about what is morally right. Thirdly, the individual develops a moral intention; that is, the individual decides on one action over another. Finally, the individual engages in the behavior based on his or her moral intention (Alleyne et al., 2006). Figure 2 presents Rest's (1996) four-component model of ethical decision-making.

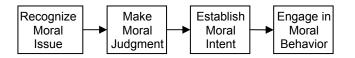


Figure 2. Rest's four-component model of ethical decision-making.

Jones expanded upon the Rest (1986) model, introducing issue contingencies as a significant factor in the decision-making process. Jones's construct is based on the fact that the moral issues vary from situation to situation; causing individuals to react differently. For example, ethical issues that involve injustices of an immediate nature may evoke a different response compared with those that involve long-term effect. Similarly, issues that affect people to whom the decision maker is close may evoke a different response compared with people to whom the decision maker is not close. Jones coined this phenomenon, *moral intensity*. Moral intensity is defined as "the extent to which an issue, event, or act has the characteristics that make it subject to moral consideration, moral judgment, or moral action" (Reynolds, 2006, p. 234). Issues of high-intensity capture the individual's attention more often than issues of low-intensity



(Leitsch, 2006). Ultimately, decision makers are likely to consider the potential consequences of an action before reaching a decision.

Jones identified six dimensions of moral intensity that constitute the characteristics of the moral issue: "magnitude of consequences; social consensus; probability of effect; temporal immediacy; concentration of effect; and proximity" (p, 372). Concentration of effect is defined as "an inverse function of the number of people an individual believes will be affected by an act of a given magnitude" (Jones, 1991, p. 377). "For example, cheating an individual or small group out of a given sum has a more concentrated effect than cheating an institutional entity, such as a corporation or government agency, out of the same sum" (Jones, p. 377). The magnitude of the consequence is defined as "the degree harm an individual believes will result from a given action" (Barnett & Valentine, 2004, p. 339). "For example, an act that causes 1,000 people to suffer a particular injury is of greater magnitude of consequence than an act that causes 10 people to suffer the same injury" (Jones, p. 374). The probability of effect is defined as the "likelihood that an act will both occur and actually cause harm" (Alleyne et al., 2006, p. 22). "For example, selling a gun to a known armed robber has greater probability of harm than selling a gun to a law-abiding citizen" (Jones, p. 375). Proximity is defined as "the feeling of closeness that a decision maker has for those affected by a particular action" (Barnett & Valentine, 2004, p. 339). "For example, the layoffs in a person's work unit have greater moral proximity than do the layoffs in a remote plant" (Jones, p. 376). Social consensus is defined as "the degree of social agreement that an act is good or evil" (Jones, p. 375). "A high degree of social consensus indicates high moral



intensity" (Barnett & Valentine, p. 339). "For example, the evil involved in bribing a customs official in Texas has greater social consensus than the evil involved in bribing a customs official in México" (Jones, p. 375). Temporal immediacy is defined as "the perceived length of time between an action and the onset of its consequences" (Barnett & Valentine, p. 339). "For example, releasing a drug that will cause 1% of people who take it to have acute nervous reactions soon after they take it has greater temporal immediacy than releasing a drug that will cause 1% of those who take it to develop a nervous disorder in 20 years" (Jones, p. 376).

Jones's issue-contingent model, shown in Figure 3, suggested that moral intensity influences all four stages in the ethical decision-making process. Previous research has examined the influence of moral intensity on each stage of the ethical decision-making process. Barnett (2001), Carlson et al. (2002), and Fang (2006) investigated the impact of moral intensity on the perception that a situation involved an ethical dimension. The results were mixed. Barnett found that individuals are more likely to perceive an issue as constituting a moral dilemma when they perceive greater societal condemnations or when they have found themselves in similar situations. The findings of Carlson and his colleagues were slightly different. Using a sample of students, Carlson et al. found that the closer the proximity an individual was to a situation, the greater the perceptions of ethicality. Fang's analysis suggested that it is the higher degree of harm to others that triggers the existence of a moral issue.



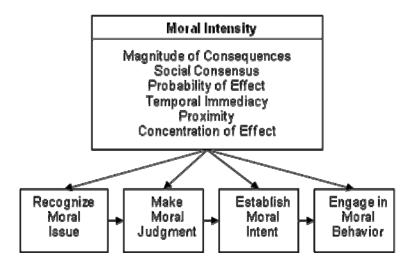


Figure 3. Jones's issue-contingent model of ethical decision-making. From "Ethical decision-making by individuals in organizations: An issue-contingent model," by T. Jones, 1991, *Academy of Management Review, 16*, p. 1991. Copyright 1991 by the Academy of Management Review. Reprinted with permission.

Moral intensity was also found to influence judgments about whether a course of action is morally right (Barnett, 2001; Beu et al., 2003; Carlson et al., 2002). Again, the results were mixed. Barnett found that when respondents felt that the possible magnitude of consequences to others was serious and society found the action unacceptable, they were more likely to judge them as unethical. In addition, Barnett concluded that temporal immediacy and proximity had no effect on ethical judgment. Conversely, Carlson et al. found that proximity had a significant impact on moral judgment. Similarly, Beu et al. found proximity to be a predictor of moral judgment. According to Beu et al., individuals faced with an ethical dilemma will behave more unethical when there is a perceived benefit to those close to them. These differences show that a combination of dimensions influence the recognition of a moral issue depending on the situation, the orientation from which the individual stands, and the type of ethical issue (e.g., bribery, lying, etc.).



The current research study focused on the temporal immediacy and the concentration of effect dimensions of moral intensity. Temporal of immediacy was of interest in this study because decisions of government finance and accounting professionals tend to involve limited resources with long- and short-term implications. Concentration of effect was of interest because the nature of public service involves relative benefits for all members of society as a whole.

Trevino (1986) proposed a "[person-situation] interactionist model to explain ethical decision-making behavior in organizations" (p. 601). Trevino argued that "ethical decision-making in organizations is explained by the interaction of individual and situational variables" (p. 615). Like Denhardt, Trevino believed that organizations are social actors, imposing "obligations, constraints, and pressures on public officials" (Denhardt, 1988, p. 75). Trevino's model, shown in Figure 4, takes a holistic approach to ethical decision-making by combining individual factors, such as personal convictions and moral reasoning skills, and situational factors, such as work experiences, job context, and organizational culture into the decision-making process. Trevino significantly contributed to the literature by noting that the ethical decision-making process within an organization is dependent upon many organizational factors as well.



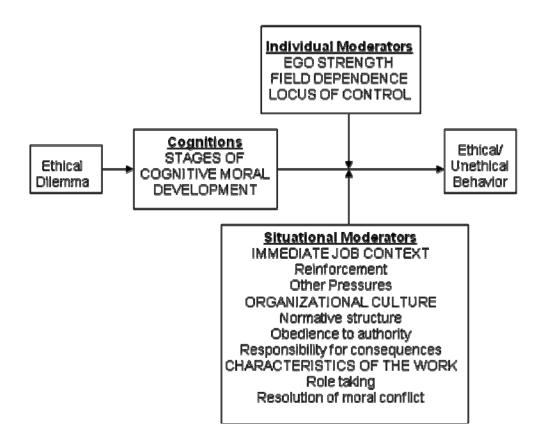


Figure 4. Trevino's person-situation interactionist model of ethical decision-making in organizations. From "Ethical decision-making in organizations: A person-situation interactionist model," by L. Trevino, 1986, *Academy of Management Review, 11*, p. 603. Copyright 1986 by the Academy of Management Review. Reprinted with permission.

Ethical Climate

Literature on individual moral development suggested that "individual characteristics alone are insufficient to explain moral and ethical behavior within organizations" (Victor & Cullen, 1988, p. 103). "While individual moral character is commonly cited as a principle determinant of moral conduct, the work environment itself is an equally critical influence on behavior" (Vidaver-Cohen, 1998, p. 343). In the



1980s, literature emerged which placed ethical conduct and behavior in the organizational context.

A significant body of research suggested that the environment of an organization influences decisions involving moral delimmas. For instance, how an organization enforces or fails to enforce codes of conduct (Deconinck, 2004; Fang, 2006; Maheshwari & Ganesh, 2006), the organization's rules and procedures that prescribed acceptable behavior (Alleyne, et al., 2006), organizational structures and work units and processes (Miller, Yeager, Hildreth, & Rabin, 2005; Trevino, 1986), and supervisor influence (Fang, 2006; Jones & Ryan, 1998) can all contribute to the way employees analyze and respond to ethical dilemmas. These factors create an ethical climate or "the shared perception of what is ethically correct behavior and how issues should be handled" (Victor & Cullen, 1987, p. 51).

Schneider (1975) presented evidence about the importance of organizational climates in understanding employee behavior in work organizations. Climate characterizes organizations "in terms of broad normative characteristics and qualities that tell people what kind of organization it is and what it values" (Trevino, Butterfield, & McCabe, 1998, p. 453). Organizational norms and values dictate how ethical problems should be addressed and create ethical climate, which significantly influences employee motivation and capacity to do the right thing (Victor & Cullen, 1988).

Victor and Cullen (1987) theorized that multiple ethical climates are present in an organization. The ethical climate topology developed by Victor and Cullen depended on two dimensions: "the ethical criteria used for organizational decision-making (e.g.,



egoism); and the loci of analysis used as a referent in the ethical decision-making process (e.g., individual interest)" (Arnaud, 2006, unpublished university manuscript). The cross-tabulation of the two dimensions resulted in nine ethical climate types "based upon three major classes of philosophy (egoism, benevolence, and principle), and three loci of analysis (individual, local, and cosmopolitan)" (Trevino et al., 1998, p. 448).

In a key test of their topology, Victor & Cullen (1988) reduced the nine dimensions reduced to five. Empirical evidence has supported the reduced number of ethical climate dimensions to describe an organization's ethical context (Trevino et al., 1998). Figure 6 presents the five ethical climate types: caring, law and code, rules, instrumental, and independence.

	Individual	Locus of Analysis Local	Cosmopolitan		
Ethical Criterion Egolsm	Instru	Caring			
Senevolence	Caring				
Principle	Independence	Rules	Law and Code		

Figure 5. Victor and Cullen's ethical climate topology. From "Influences upon organizational ethical subclimates: A multi-departmental analysis of a single firm," by J. Weber, 1995, *Organization Science, 4*, p. 512. Copyright 1995 by the Institute for Operations Research and Management Sciences. Reprinted with permission.

Trevino et al. (1998) characterized the topology as follows:

Law and code climate was comprised of items representing the original principlecosmopolitan dimension. Rules climate was comprised of items representing the original principle-local dimension. Independence climate was comprised of items representing the original principle-individual dimension. Instrumental climate was



comprised of egoism items from the individual and local levels. Finally, the caring climate was comprised of a variety of items from all three levels and the benevolence and egoism categories. (p. 449)

Several studies have used Victor and Cullen's ethical climate construct. Vaicys, Barnett, and Brown (1996) conducted a study of 1,000 members of the American Marketing Association to investigate the dimensions of ethical work climate. Their results strongly supported the ethical climate types developed by Victor and Cullen" (Vaicys et al., p. 120).

Summary

This chapter provided an overview of the literature on ethical decision-making, the nature of ethical dilemmas facing public officials, ethical decision-making models that have emerged in contemporary literature, and ethical climate.

Ethical decision-making is a complex process that involves making judgments about what is right and wrong. Public officials face particularly unique challenges in their ethical decision-making because the dilemmas they face involve responding to numerous demands simultaneously that do not always involve issues of right vs. wrong or ethical vs. unethical (Emison, 2006). As a result, it is difficult for public officials to identify a reliable appropriate course of action. The literature suggested that competing demands involving ethical dilemmas is an inherent nature of public administration because "[public officials] have numerous roles and value sets which are the source of the decisions they make" (Van Wart, 1996, p. 526). Cooper (1998) noted that public officials have both "an objective responsibility arising from legal, organizational, professional, and societal demands, as well as a subjective responsibility arising from personal beliefs,



feelings, and values" (p. 78). More often than not, these legitimate roles compete, thereby presenting public officials the challenge of striking a balance to resolve ethical dilemmas.

How public officials resolve ethical dilemmas is the focus of ethical decisionmaking models, which attempt to provide a systematic way of addressing ethical concerns. The literature revealed several models, which suggested that different variables and components contribute to ethical decision-making and behavior in the organizational context. For example, Rest's four-component model suggested that ethical decisionmaking is a process that begins with recognizing a moral issue, followed by making a judgment about the issue, and deciding and acting on a choice of action. Jones expanded upon the Rest model, by introducing issue contingencies as a significant factor. Jones suggested that the nature of the moral issue, otherwise known as moral intensity, plays a significant role in the decision-making process. Finally, Trevino proposed a model that, in part, considered the role of the organization in explaining and predicting ethical decision-making and behavior of individuals in organizations. Victor and Cullen agreed that the climate of the organization can dictate how ethical problems should be addressed and influence employee motivation and capacity to do the right thing.

Collectively, the concepts revealed in the literature review contributed to the focus of this research study. Because public officials face an array of moral issues that vary in their everyday decision-making, the moral intensity construct developed by Jones is a center piece for the current study. In addition, one cannot ignore the role of the organization in the decision-making process because decisions are made in the organizational context. Thus, the ethical climate is another consideration for this research



study. Although many studies investigated the impact of moral intensity and ethical climate on decision-making, it narrowly focused on the private sector. This research study addressed the gap in the literature to understand the effects of moral intensity and ethical climate on ethical decision-making within the public sector.

Chapter 3 describes the procedural overview with regard to the research design employed in this study. Details surrounding data collection procedures and the protection of participant's rights are outlined. Additionally, the rationale for using a correlational design is discussed, as well as the instrumentation, with subsequent adjustments. The chapter concludes with a discussion of the data analysis strategy.



CHAPTER 3: RESEARCH METHOD

Introduction

This chapter provides an introduction to and the rationale for the research design. The chapter discusses the details associated with this correlational research design study, which examined the influence of moral intensity and ethical climate on ethical decisionmaking. This chapter addresses: (a) the research questions and hypotheses; (b) the research design and approach; (c) the target population, setting and sample; (d) the instrumentation and materials; (e) data collection; (f) measures taken to protect participants' rights; (g) the measures for the independent and dependent variables; and (h) data analysis.

Research Questions and Hypotheses

Research Question 1. What is the relationship between moral intensity and the ethical decision-making of finance and accounting professionals in government?

Null Hypothesis (H₀): There is no statistical relationship between moral intensity and finance and accounting professionals' ethical decision-making.
Hypothesis (H₁): Moral intensity is positively associated with finance and accounting professionals' ethical decision-making.

Research Question 2. What is the relationship between ethical climate and the ethical decision-making of finance and accounting professionals in government? Null Hypothesis (H₀): There is no statistical relationship between ethical climate and finance and accounting professionals' ethical decision-making.



Hypothesis (H₂): Ethical climate is positively associated with finance and accounting professionals' ethical decision-making.

Research Question 3. Does an ethical climate strengthen the relationship between moral intensity and ethical decision-making?

Null Hypothesis (H₀): Ethical climate does not moderate the relationship between the moral intensity and finance and accounting professionals' ethical decision-making.

Hypothesis (H₃): Ethical climate moderates the relationship between the moral intensity and finance and accounting professionals' ethical decision-making, such that the relationship between moral intensity and ethical decision-making is stronger for higher levels of ethical climate.

Research Design and Approach

The goal of this research was to address two questions: (a) whether or not moral intensity and ethical climate is positively associated with ethical decision-making, and (b) whether ethical climate positively moderates the relationship between the moral intensity and ethical decision-making, such that the relationship between moral intensity and ethical decision-making is stronger for higher levels of ethical climate. A correlational design using a hierarchical regression strategy was the methodology used for this study. Correlational analysis is widely used as a prediction tool to determine whether a variable is directly correlated or associated with another variable (Jaccard & Turrisi, 2003, McNabb, 2002).



Although a simple regression analysis is commonly used to understand direct effects, there are several approaches to examine moderating effects. "Depending on the type of moderator variable, different statistical analyses, such as multiple regression analysis, structural equation modeling, and analysis of variance, are used to measure and test the moderating or interaction effects" (Kim et al., 2001, p. 66). In this research, both the moderator and predictor are continuous. A hierarchical multiple regression analysis is recommended to analyze interaction effects involving continous variables (Aiken & West, 1991; Baron & Kenny, 1986; Cohen & Cohen, 1983; Jaccard & Turrisi, 2003).

In this study, moral intensity (predictor) was measured using the Moral Intensity Scale developed by Singhapakdi et al. (1996) and two questions based on the work of Jones. Several studies have used similar measurement scales to assess moral intensity (Alleyne et al, 2006; Barnett & Valentine, 2004; Deconinck, 2004, 2005; Leitsch, 2006; Silver & Valentine, 2000). Respondents were asked to complete the Moral Intensity Scale after reading one of two scenarios which were randomly assigned to participants. One scenario involved a situation of high moral intensity, while the other involved a situation of low moral intensity. Researchers agreed that vignettes are "well suited for the study of human attitudes and behavior" (Alexander & Becker, 1978, p. 93) because they elicit context related responses regarding beliefs and moral issues (Alexander & Becker, 1978; Sleed, Durrheim, Kriel, Solomon, & Baxter, 2002).

The moderator variable, ethical climate, was measured using the Ethical Climate Questionnaire (ECQ) developed by Victor and Cullen (1988). The ECQ has been used



extensively by researchers to solicit information about the ethical climate within the organization.

Target Population, Setting, and Sample

Target Population

The target population for this study included finance and accounting professionals. Finance and accounting professionals with less than 1 year experience were excluded. This exclusion criterion was predicated on previous social theory and ethics research that suggested that work experience is a key factor in differences of ethical perception (Franke, Crown, & Spake, 1997; Silver & Valentine, 2000). *Setting and Sample*

The setting for this study was a large federal agency. As the second largest federal employer of civilians in the nation, this federal agency employs almost 700,000 employees (U.S. General Accountability Office, 2004) and has the single largest budget of any government agency (Congressional Budget Office, 2008).

Generally, federal agencies do not permit outside entities to survey their employees, without having a sponsoring office within the agency and the approval of the agency Institutional Review Board (IRB). This study was approved by the agency IRB and sponsored by an office within the agency. The role of the sponsoring office was to demonstrate to the agency an interest in the study results. The sponsoring office beared no influence or had any input to the research strategy, data analysis, or conclusions of this study. The sponsoring office was selected because of its role in the development of the President's Budget.



A nonprobability convenience sample was used for this research study. Most research in the field of public administration and ethics is based on samples of convenience (Northrop, 1999; Weber, 1992). The sample size was based on the recommendation of Aguinis (2004). Aguinis recommended a sample size of at least 120 for detecting a moderating effect. To ensure a large sample, snowball sampling techniques were used by asking recipients of the original email invitation to forward the survey link to colleagues who may be interested in participating in the survey.

Instrumentation and Materials

Vignette

This research study utilized a vignette and related questions. "Vignettes are commonly used in studies of ethical decision-making" (Barnett & Valentine, 2004, p. 341) because actual decision-making situations can be effectively simulated and assessed (Alexander & Becker, 1978). A vignette based upon the work of Zeigenfuss & Singhapakdi (1994), which has been used in recent empirical studies, was adapted for this study. In adapting the vignette for this study, the essential ethical content of the dilemma was retained. Some details of the narrative were altered for variable manipulation, clarity, and brevity.

The vignette depicted an ethical dilemma involving approving an inflated budget request that misrepresents actual requirements. The vignette was relevant because it presented an ethical dilemma that is likely common to finance and accounting professionals; thereby, enhancing the probability that the situation would resonate with the respondent. Two versions of the vignette, representing a high-intensity and low-



intensity situation, were randomly assigned to participants. Manipulation checks were conducted for the scenario to see if participants accurately perceived the intended manipulations in the scenarios. The researcher obtained permission from the instrument authors to use their vignette.

The scenarios were followed by three items used in previous research to assess ethical decision-making. The ethical decision-making process involves moral recognition, moral judgment, and moral intent. Participants were be asked whether the action posed an ethical issue (moral recognition), their judgment regarding the action (moral judgment), and the likelihood they would engage in a similar action (moral intent/behavior). Several studies (Barnett & Valentine, 2004; Deconinck, 2004, 2005; Leitsch, 2006) have used a similar measurement scale to assess ethical decision-making.

The dimensions of moral intensity was measured using two items from the Moral Intensity Scale developed by Singhapakdi et al. and two items based on the work of Jones. Several studies (Alleyne et al, 2006; Barnett & Valentine, 2004; Deconinck, 2004, 2005; Leitsch, 2006; Silver & Valentine, 2000) have used similar measurement scales to assess moral intensity, with demonstrated nomological validity. Valentine and Silver (2001) assessed the dimensionality of the Moral Intensity Scale using ten vignettes and reported an acceptable coefficient alpha that yielded a global alpha score of .90. Similarly, Leitsch (2004, 2006) calculated individual alpha coefficients for four scenarios and reported a global alpha score of .92.



Ethical Climate Questionnaire

An abbreviated 15-item version of the Ethical Climate Questionnaire (ECQ) developed by Victor and Cullen (1988) measured the ethical climate. Victor and Cullen categorized the ethical climate of organizations into five distinct types: (a) caring; (b) independence; (c) instrumental; (d) law and code; and (e) rules. The instrument asks respondents to "report not on their own behavior or values but, rather, on the practices and procedures that they perceive to exist in their organization" (Victor & Cullen, p. 103).

Victor and Cullen's (1987) construct is the most fully developed and has received the greatest acceptance among researchers (Fang, 2006). The instrument was validated by the authors in 1987 and 1988, with a reported reliability score ranging from .6 to .8. In addition, prior research provided relatively strong support for the reliability of the subscales of the ECQ with values of Cronbach alpha ranging from .6 to .85 (Cullen, Victor, & Stevens, 1993). Reliability coefficients obtained by Vaicys et al. (1996) ranged from .62 to .89. The researcher obtained permission from the instrument authors to use the ECQ.

Data Collection

An online survey of finance and accounting professionals was conducted using a Web-based survey tool. Web-based data collection methods are attractive to researchers because of "low costs, ease of data entry, flexible format, and fast response" (Granello & Wheaton, 2004, p. 387). In addition, Web-based surveys have become the most



acceptable means for data collection for researchers and respondents because of its simplicity and ease of use.

An electronic mail invitation was sent to participants inviting them to take a survey online by visiting a designated Web site. The electronic invitation contained the Web link to the survey and explained the purpose and significance of the study, the importance of participation, and the guarantee of anonymity. Because the survey was likely to be completed during office hours, every attempt was made to minimize the time burden on participants. In order to increase the sample population, snowballing techniques were used by asking recipients of the original email invitation to forward the survey to colleagues who may be interested in taking the survey.

Respondents had to acknowledge having read a consent statement by clicking on the "Next" button before they could access the survey. Participation in the survey and clicking on the "Next" button indicated the participant granted consent of the participation.

The survey included a vignette and related questions to measure moral intensity and ethical decision-making using a Likert scale. Ethical climate consisted of 15 questions using a Likert scale. Demographic data was collected using multiple choice questions. It was estimated to take participants approximately 15 minutes to complete the survey. The two scenarios were be randomly assigned to participants. Raw data from Excel was imported into the Statistical Package for the Social Sciences (SPSS) program.



Protection of Participants' Rights

Participants' rights were safeguarded in several ways. First, participation was completely voluntary. The email invitation explained the purpose and significance of the study, the importance of participation, and the guarantee of anonymity. Second, confidentiality was protected by coding the raw data and subsequently entering it into an Excel file for transfer to SPSS for statistical analysis. Only the researcher had access to the raw data to ensure confidentiality. Data will be stored electronically and kept for five years in a fire proof safe. Third, no individual identifiers were collected to preserve anonymity. Finally, approvals by the Walden Institutional Review Board (IRB) and the federal agency IRB were obtained prior to data collection.

Measures

Dependent Variables

This research used one dependent variable, ethical decision-making. Ethical decision-making was measured using three questions pertaining to the stages of the ethical decision-making process: (a) moral recognition; (b) moral judgment; and (c) moral intent and behavior. The respondents' moral recognition was measured by directly asking them to respond to whether or not the situation in the scenario involves an ethical problem. Respondents used a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree) to indicate their degree of agreement or disagreement regarding the statement, "The situation above involves an ethical problem" (Singhapakdi et al., 1996). The respondent's moral judgment was measured by directly asking them to indicate their level of agreement with the action statement in the scenario. Respondents will use a 7-point



Likert scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*) to indicate their degree of agreement or disagreement regarding the statement "Pat should do the proposed action" (Pauli & May, 2002). Moral intent and behavior was measured by asking respondents to respond to whether they would be likely to engage in the same action as represented in the scenario. Respondents used a 7-point Likert scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*) to indicate their degree of agreement or disagreement regarding the statement, "I would act in the same manner as Pat in the scenario" (Singhapakdi et al.). Previous studies have used a similar item to assess ethical issue recognition (Barnett & Valentine, 2004; Deconinck, 2004, 2005; Leitsch, 2006), ethical decision-making judgments (Barnett & Valentine, 2004; Deconinck, 2004; Deconinck, 2004, 2005; Leitsch, 2006), defining, 2004; Deconinck, 2004; Deconinck, 2004; Deconinck, 2004, 2005; Leitsch, 2004; Deconinck, 2004, 2005; Leitsch, 2006), ethical decision-making judgments (Barnett & Valentine, 2004; Deconinck, 2004; Deconinck, 2004, 2005; Leitsch, 2004; Deconinck, 2004, 2005; Leitsch, 2006), ethical decision-making judgments (Barnett & Valentine, 2004; Deconinck, 2004; Deconinck, 2004, 2005; Leitsch, 2006), ethical decision-making judgments (Barnett & Valentine, 2004; Deconinck, 2004; Deconinck, 2004, 2005; Leitsch, 2006), ethical decision-making judgments (Barnett & Valentine, 2004; Deconinck, 2004, 2005; Leitsch, 2004; Deconinck, 2004, 2005; Leitsch, 2006).

Independent Variables

This research used two independent variables, moral intensity and ethical climate. Ethical climate was also a moderating variable.

This study looked specifically at two of the six dimensions of moral intensity: temporal immediacy and concentration of effect. Temporal immediacy refers to "the length of time between the present and the onset of consequences of the act in question – a shorter length of time implies greater immediacy" (Jones, 1991, p. 376). Concentration of effect refers to the number of people an individual believes will be affected by an act (Barnett, 2001). Moral intensity was manipulated in the vignette. High moral intensity, coded 1, involved high temporal immediacy and high concentration of effect. Low moral



intensity, coded 0, involved low temporal immediacy and low concentration of effect. Moral intensity was measured using two items from the Moral Intensity Scale developed by Singhapakdi et al. (1996) and two items adapted from Jones's moral intensity construct. Respondents used a 7-point Likert scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*) with four items: "Pat's decision will cause harm in the immediate future; As time goes by, Pat's action will cause less harm; Pat's decision will harm few people, if any, throughout the company; Pat's decision will have little impact, if any, on other divisions within the company."

Ethical climate was measured using an abbreviated 15-item version of the Ethical Climate Questionnaire. Responses were measured using a 7 point Likert scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*). The *Caring* climate used three items such as, "In my organization, people look out for each other's good; Our major concern is always what is best for the other person; The most important concern here is the good of all the people in the company as a whole." A *Rules* climate was measured with three items, "Everyone is expected to stick by the organization's rules and procedures; It is very important to follow the organization's rules and procedures here; Successful people in this company go by the book." *Instrumental* climate items included, "In my organization, people protect their own interests above all else; In my organization, people are mostly out for themselves; People are expected to do anything to further the organization's interests, regardless of the consequences." *Law and Code* climate items included, "People are expected to comply with the law and professional standards over and above all considerations; In my organization, the law or ethical code of the profession is a major



consideration; In my organization, the first consideration is whether a decision violates any law." *Independence* climate used three items such as, "In my organization, people are expected to follow their own personal and moral beliefs; The most important thing in my organization is each person's own sense of right and wrong; In my organization, people are guided by their own personal ethics."

Control Variables

Previous research found that individual factors, such as age, gender, education, and experience, influence ethical decision-making. Therefore, age, gender, education and experience were collected as possible control variables in this analysis.

Data Analysis

Descriptive Statistics Analysis

Descriptive statistics was used to describe the characteristics of the sample and details specific to the research questions. The mean, standard deviation, and correlations were calculated for each of the variables in the study (ethical decision-making, ethical climate, and moral intensity). The control variables (gender, age, education, and experience) were examined for their level of correlation with the dependent variable. Control variables significantly related to the dependent variables were retained for analysis.

Direct Effects Using Regression Analysis

Hypothesis 1 postulated that moral intensity is positively associated with ethical decision-making. Hypothesis 2 postulated that ethical climate is positively associated with ethical decision-making.



Regression analysis tested for the statistical significance of the hypothesized relationship. Regression coefficients determined the strength and direction of the statistical relationship, controlling for age, gender, education, and experience. The coefficient of determination determined how well the observed variability is explained by the independent variables, moral intensity and ethical work climate.

Moderating Effect Using Hierarchical Multiple Regression Analysis

Hypothesis 3 postulated that ethical climate positively moderates the relationship between the moral intensity and ethical decision-making, such that the relationship between moral intensity and ethical decision-making is stronger for higher levels of ethical climate. According to Morano (2003), "Two conditions must be met to support the moderating hypothesis" (p. 122). "First, the interaction term must be statistically significant" (Morano, p. 122). To determine statistical significance, a multiple regression analysis with a hierarchical strategy is recommended (Aiken & West, 1991; Baron & Kenny, 1986; Cohen & Cohen, 1983; Jaccard & Turrisi, 2003). Baron and Kenny suggested a three step procedure. Using a SPSS statistical software, the control variables were entered in Step 1, followed by the predictor and moderator at Step 2. Finally, the interaction term was entered. The moderating hypothesis is supported if the coefficient of determination (R^2) is significant for the interation term (Kim et al., 2001).

The second condition for a moderating effect is that the "y-intercept and slope of the regression line for the regression equation for the high and low values of the hpothesized moderator must show change in the predicted direction" (Morano, 2003, p. 122). This was presented graphical by plotting the regression lines of ethical decision-



making on moral intensity for high and low ethical work climates. A high ethical work climate was defined as one above the mean and a low ethical work climate was defined as one below the mean. An interaction effect is indicated intersecting lines (Jaccard & Turrisi, 2003).

Manipulation Checks

To determine if participants accurately perceived the intended manipulations in the two scenarios, participants were asked whether the scenario contained information about the onset of the consequences of the act, and whether the scenario contained information about the number of people affected by the act.



CHAPTER 4: RESULTS

Introduction

This chapter reports the research findings from the correlational research design study, which examined the relationship between moral intensity and ethical decisionmaking and the moderating effect of ethical climate on that relationship. This chapter includes the following sections: (a) data collection process, (b) research tool, (c) demographics of the respondents, (d) data analysis, and (e) summary of the findings. The data analysis and summary of the findings are discussed with respect to the research questions and hypotheses below.

1. What is the relationship between moral intensity and the ethical decisionmaking of finance and accounting professionals in government?

Null Hypothesis (H₀): There is no statistical relationship between moral intensity and finance and accounting professionals' ethical decision-making.Hypothesis (H₁): Moral intensity is positively associated with finance and accounting professionals' ethical decision-making.

2. What is the relationship between ethical climate and the ethical decision-

making of finance and accounting professionals in government?

Null Hypothesis (H₀): There is no statistical relationship between ethical climate and finance and accounting professionals' ethical decision-making. Hypothesis (H₂): Ethical climate is positively associated with finance and accounting professionals' ethical decision-making.



3. Does an ethical climate strengthen the relationship between moral intensity and ethical decision-making?

Null Hypothesis (H₀): Ethical climate does not moderate the relationship between the moral intensity and finance and accounting professionals' ethical decision-making.

Hypothesis (H₃): Ethical climate moderates the relationship between the moral intensity and finance and accounting professionals' ethical decision-making, such that the relationship between moral intensity and ethical decision-making is stronger for higher levels of ethical climate.

Data Collection

An electronic mail invitation was sent to 218 finance and accounting professionals working at a large federal agency. The email invitation contained the Web link to the survey and information about the researcher, purpose of the study, voluntary nature of the study, and respondent confidentiality. Participants willing to take part in the study accessed the survey via the Web link contained in the email. The first page of the survey was a consent to participate page. Participants willing to continue with the survey clicked on the "Next" button to indicate their consent to participate. Participants had the option to exit the survey at anytime during the survey.

The Web-based survey tool allowed the researcher to protect participant confidentiality by setting the collector restriction to block Internet Protocol (IP) addresses and email addresses. The results were exported to an Excel spreadsheet and loaded into the Statistical Package for the Social Sciences (SPSS) version 16.0 for Windows.



Research Tool

Adjustments or Instrument Revisions

The current study adapted a vignette from the work of Zeigenfuss and Singhapakdi (1994). In adapting the vignette, the essential ethical content of the dilemma was retained. Two modifications were made due to differences in the finance conditions and terminology between the private sector and public sector. The first modification involved changing the wording in original vignette from an overstatement of *operating results* to an overstatement of *current year budget requirements*, a term commonly used in the public sector. The second modification involved changing the title of the individual authorizing the overstatement from the *district manager* to the *division manager*. A *division manager* is a common position recognized within the public sector, whereas the *district manager* is not. Both changes helped to ensure the vignette described a situation that would resonate with respondents.

The Moral Intensity Scale developed by Singhapakdi et al. (1996) is composed of six items, each item measuring a dimension of moral intensity. Because this research study focused on two of the six dimensions of moral intensity, only two items from the Moral Intensity Scale were used.

Vignette

The vignette depicted an ethical dilemma involving approving an inflated budget request that misrepresented actual budget requirements. Two versions of the vignette were randomly assigned to participants. One version of the vignette involved a high moral intensity scenario, whereby the action taken impacts many others within the



company, and the consequences of the action may be perceived to cause immediate harm others. The other version of the vignette involved a low moral intensity scenario, whereby the action taken impacts few people within the company, and the consequences of the action may be perceived to cause little if any immediate harm to others.

After reading the vignette, participants used a 7-point Likert scale (1 = Strongly*Disagree* to 7 = Strongly Agree) to rate three items pertaining to the stages of the ethical decision-making process: (a) moral recognition; (b) moral judgment; and (c) moral intent and behavior. The responses to each item were combined and averaged to yield an ethical decision-making score. The three items for ethical decision-making were

- 1. The situation above involves an ethical problem (Singhapakdi et al., 1996).
- 2. Pat should do the proposed action (Pauli & May, 2002).
- 3. I would act in the same manner as Pat in the scenario (Singhapakdi et al.).

Moral Intensity Scale

The Moral Intensity Scale was comprised of two items that measured two dimensions of moral intensity: temporal immediacy and concentration of effect. These items were rated by respondents on a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree) to assess respondents' perception of the actions described in the vignette. At the item level, the mean ranged from 3.21 ("The action will harm few people, if any, throughout the company") to 4.82 ("The action will cause harm in the immediate future").

Additionally, two items based on the work of Jones were used to measure temporal immediacy and concentration of effect. These items were rated by respondents



on a 7-point Likert scale (1 = *Strongly Disagree* to 7 = *Strongly Agree*) to assess respondents' perception of the actions described in the vignette. At the item level, the mean ranged from 2.15 ("The action has little impact, if any, on other divisions") to 2.85 ("The action will cause less harm as time goes by"). Figure 7 shows the means of the four items measuring moral intensity.

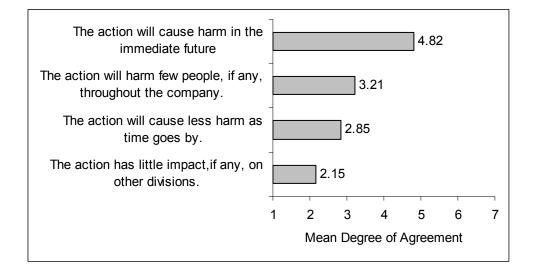


Figure 6. Means of moral intensity.

The internal consistency for the items for temporal immediacy and concentration of effect from the Moral Intensity Scale and questions based on the work of Jones was marginal (Cronbach's alpha = .459), with an average inter-item correlation of .221. This is not surprising since there are only four items in the scale. Cronbach's alpha is greatly affected by the number of items in the scale, especially at lower levels of inter-item correlations. Increasing the number of items could result in an acceptable alpha level. Although most research cites acceptable reliability at .70, Nunnally, the most widely



cited in support of reliability coefficients, noted that in early predictive research reliabilities of .50 may be satisfactory (Henson, 2001; Iacobucci & Duhachek, 2003; Peterson, 1994). The items were retained because they had been used extensively in previous empirical studies with a demonstrated alpha score ranging from .90 to .92. *Ethical Climate Questionnaire*

The Ethical Climate Questionnaire is comprised of 15 questions that measured the five distinct climate types: (a) caring; (b) independence; (c) instrumental; (d) law and code; and (e) rules. Each climate type was measured by 3 questions using a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree). Figure 8 shows the mean response for each ethical climate type.

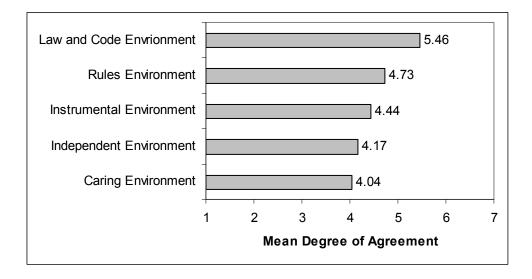


Figure 7. Means of ethical climate types.



A *high ethical work climate* is defined as one above the mean and a *low ethical work climate* is defined as one below the mean. The ethical climate type with the highest mean score was law and code (mean = 5.46), closely followed by rules environment (mean = 4.73). In a law and code environment, people are guided professional codes of conduct. In a rules environment, people are guided by organizational rules, policies, and regulations. The climate type with the lowest mean score was caring (mean = 4.04). In a caring environment people are concerned with the well-being of others. Instrumental climates (mean = 4.44) promote self-serving behaviors, while independence climates (mean = 4.17) encourage people to follow their own beliefs and values.

The internal consistency for the Ethical Climate Questionnaire showed good reliability (Cronbach's alpha = .730) and was consistently good for the five subscales: Law and Code (Cronbach's alpha = .733), Rules (Cronbach's alpha = .747), Instrumental (Cronbach's alpha = .792), Independent (Cronbach's alpha = .692), and Caring (Cronbach's alpha = .696). This is within the ranges obtained by Victor and Cullen (1987), where the Cronbach's alpha ranged from .6 to .8, and Vaicys et al. (1996), where the Cronbach's alpha ranged from .62 to .89.

Demographics of the Respondents

A total of 142 surveys were completed, of which 12 were unusable and removed from the analysis because participants indicated they had less than 1 year work experience in the finance, budgeting, resource, and/or accounting field.



Table 1 provides demographic data collected on the participants, including gender, age, education, and work experience in the finance, budgeting, resource, and/or accounting field.

Table 1

	п	%
Age		
Under 30	4	3.1
30 – 39	18	13.8
30 - 39 40 - 49	52	40.0
40 – 49 50 – 59	47	36.2
	9	6.9
60 and over		
Gender	67	51.5
Male	63	48.5
Female	05	-0.5
Education	2	2.2
High school or GED	3	2.3
Associate's degree	7	5.4
Bachelor's degree	30	23.1
Master's degree	83	63.8
PhD or professional degree	7	5.4
Experience in the finance and/or		
accounting field		
1 to 5 years	42	32.3
6 to 10 years	25	19.2
11 to 15 years	13	10.0
More than 15 years	50	38.5

Sample Characteristics (N = 130)



Slightly more than half of the respondents were male (51.5%). A large portion of the respondents were between the ages of 40 and 49 (40.0%) and had more than 15 years of work experience in the finance, budgeting, resource, and/or accounting field (38.5%). A significant percentage of participants had at least a master's degree (63.8%).

Data Analysis

Manipulation Check

Two scenarios were randomly assigned to participants. One scenario involved a high-intensity situation and the other involved a low-intensity scenario. The scenario was measured on a categorical scale. The scenario involving high-intensity was coded 1, while the low-intensity was coded 0.

An analysis of variance (ANOVA) was performed to see if the respondents receiving the high-intensity scenario perceived the intended manipulations differently from the respondents receiving the low-intensity scenario. The results of this analysis are shown in Table 2.

Respondents of the low- and high-intensity scenarios used a 7-point Likert scale (1 = Strongly Disagree to 7 = Strongly Agree) to indicate their degree of agreement or disagreement regarding the statements, "This scenario contained information as to when the division intends to repay the overstated amount to the company's central budget account" and "This scenario contained information regarding the impact of the overstatement on the company's ability to cover other requirements." Respondents receiving the high-intensity scenario perceived the intended manipulations at a higher level (mean = 5.27, standard deviation = 1.38), as compared to those receiving the low



moral intensity scenario (mean = 4.43, standard deviation = 1.78). The significance value of the F test is .003, suggesting that the difference between the mean values of the two groups is statistically significant; therefore rejecting the hypothesis that the mean value for both groups is the same.

Table 2

ANOVA Table for High- and Low-Intensity Manipulation Check

	SS	df	MS	F	Sig.
Between Groups	21.909	1	21.909	9.137	.003
Within Groups	306.909	128	2.398		
Total	328.817	129			

Note. SS = sum of the squares; *Sig.* = statistical significance.

Descriptive Statistics Analysis

The mean, standard deviation, and correlations between the variables in the study are shown in Table 3.



Table 3

		Age	Gender	Degree	Years	EDM	EWC	MI
Age Mean = 3.30 <i>SD</i> = .903		1.000	084	.054	.429**	.027	.025	042
	Sig.		.343	.544	.000	.761	.775	.636
Gender Mean = 1.48 SD = .502		084	1.000	155	.114	.112	093	.036
	Sig.	.343		.077	.195	.206	.293	.684
Degree Mean = 3.65 <i>SD</i> = .766		.054	155	1.000	210*	015	.119	083
	Sig.	.544	.077		.016	.865	.178	.349
Years working in fiel Mean = 3.55 SD = 1.29		.429**	.114	210*	1.000	.102	.057	.035
	Sig.	.000	.195	.016		.247	.523	.693
Ethical decision-make Mean = 3.82 SD = .988	•	.027	.112	015	.102	1.000	.022	.343**
	Sig.	.761	.206	.865	.247		.803	.000
Ethical work climate Mean = 4.57 SD = .854		.025	093	.119	.057	.022	1.000	.016
	Sig.	.775	.293	.178	.523	.803		.854
Moral intensity Mean = 3.26 SD = .915	~	042	.036	083	.035	.343**	.016	1.000
	Sig.	.636	.684	.349	.693	.000	.854	

Means, Standard Deviations, and Correlation Among All Variables

^{*}Correlation is significant at the 0.05 level (2-tailed) or the 95% level for a normal distribution. ^{**}Correlation is significant at the 0.01 level (2-tailed) or the 99% level for a normal distribution.

The correlation reported in Table 3 for age, gender, and work experience in the finance and accounting field is positive, although not significantly different from 0 because the p-values are greater than 0.50. The correlation reported in Table 3 for degree is negative, although not significantly different from 0 because the p-value is greater than 0.05. This suggests that these variables do not have a significant effect on the dependent



variable, ethical decision-making. As a result, they were not retained as control variables in the analysis.

The correlation between moral intensity and ethical decision-making is positive, with an *R* value of .343. This linear association is significant at the 0.01 level because the *p*-value of 0.000 is smaller than .05. The correlation between ethical climate and ethical decision-making is positive, although not significantly different from 0 because the *p*value is greater than 0.05.

Direct Effects Using Regression Analysis

Regression analysis was used to understand the direct effects of moral intensity and ethical climate on ethical decision. This analysis addressed two questions: (a) whether or not moral intensity is positively associated with ethical decision-making, and (b) whether or not ethical climate is positively associated with ethical decision-making. The following hypotheses were developed to test this premise:

Null Hypothesis (H₀): There is no statistical relationship between moral intensity and finance and accounting professionals' ethical decision-making.
Hypothesis (H₁): Moral intensity is positively associated with finance and accounting professionals' ethical decision-making.
Null Hypothesis (H₀): There is no statistical relationship between ethical climate and finance and accounting professionals' ethical decision-making.
Hypothesis (H₂): Ethical climate is positively associated with finance and accounting professionals' ethical decision-making.



Regression analysis models predict the value of the dependent variable based on its linear relationship to the independent variable or predictor. Table 4 presents the results of the regression analysis for moral intensity.

Table 4

Direct Effect of Moral Intensity on Ethical Decision-Making

	В	R	R^2	Sig.
Constant	2.616			
Moral Intensity	.371	.343	.118	.000

The results indicate that the best regression line to describe the association between ethical decision-making, Y_{EDM} , and moral intensity, X_{MI} , is expressed as

$$Y_{EDM} = 2.616 + 0.371 X_{MI}$$

The regression coefficient (B = .371) indicates a positive linear relationship between ethical decision-making and moral intensity. The regression coefficient represents the amount ethical decision-making changes when moral intensity changes by 1 unit. The Pearson's coefficient (R = .343) shows a moderate linear relationship, indicating how well the relationship conforms to a straight line. The coefficient of determination, R^2 , shows that moral intensity only accounts for 11.8% of the variation in ethical decisionmaking, suggesting that the remaining variation is not explained by the model. The significance value of the F statistic is less that 0.05, suggesting that the variation explained by the model is not due to chance. The t test found that the coefficients were



statistically significant, indicating that moral intensity is a significant predictor of ethical decision-making. As a result, Hypothesis 1 is supported.

As mentioned in chapter 3, this research study focused on two dimensions of moral intensity: temporal immediacy and concentration of effect. Supplemental analysis was conducted to determine the relative importance of temporal immediacy and concentration of effect in predicting ethical decision-making. Table 5 shows the results of this analysis.

Table 5

Correlation Coefficient Results of Supplemental Analysis for Temporal Immediacy and Concentration of Effect

	В	R	Sig.
Constant	2.927		.000
Temporal immediacy	.002	.002	.985
Concentration of effect	.333	.409	.000

Concentration of effect has a large regression coefficient compared with temporal immediacy, suggesting that it contributes more in predicting ethical decision-making. The Pearson's coefficient indicates that the linear correlation is stronger for concentration of effect (R = .409), than temporal immediacy (R = .002), suggesting that the change in ethical decision-making is largely due to variations in the concentration of effect. The *t* test found that the coefficients for concentration of effect were statistically significant (p < .05), whereas the coefficients for temporal immediacy were not statistically significant



(p = .985), indicating that concentration of effect is a significant predictor of ethical decision-making.

Regression analysis results for ethical climate is shown in Table 6.

Table 6

Direct Effect of Ethical Climate on Ethical Decision-Making

	В	R	R^2	Sig.
Constant	3.707			
Ethical work climate	.026	.022	.000	.803

The results indicate that the best regression line to describe the association between ethical decision-making, Y_{EDM} , and ethical climate, X_{EC} , is expressed as

$$Y_{EDM} = 3.707 + 0.026 X_{EC}$$

The regression coefficient (B = .026) indicates a positive linear relationship between ethical decision-making and ethical climate. The Pearson's coefficient (R = .022) shows a weak linear relationship. The coefficient of determination, R^2 , shows that ethical climate does not account for any variation in ethical decision-making, suggesting that none of the variation in ethical decision-making is explained by the model. The significance value of the *F* statistic is .803, suggesting that the regression model is not statistically significant. The *t* test found that the coefficients were not statistically significant, indicating that ethical climate is not a significant predictor of ethical decision making. As a result, Hypothesis 2 is not supported.



Moderating Effect Using Hierarchical Multiple Regression Analysis

Hierarchical multiple regression analysis was used to determine whether ethical climate positively moderates the relationship between the moral intensity and ethical decision-making, such that the relationship between moral intensity and ethical decision-making is stronger for higher levels of ethical climate. The following hypothesis was developed to test this premise:

Null Hypothesis (H₀): Ethical climate does not moderate the relationship between the moral intensity and finance and accounting professionals' ethical decision-making.

Hypothesis (H₃): Ethical climate moderates the relationship between the moral intensity and finance and accounting professionals' ethical decision-making, such that the relationship between moral intensity and ethical decision-making is stronger for higher levels of ethical climate.

Table 7 shows the mean and standard deviations. Low moral intensity and low ethical work climate have a higher ethical decision-making mean compared to low moral intensity and high ethical work climate. High moral intensity and low ethical work climate have a lower ethical decision-making mean compared to high moral intensity and high ethical work climate.



Table 7

Moral intensity	Ethical climate	Mean	SD	Ν
Low	Low	3.67	1.02	31
	High	3.54	.836	41
	Total	3.60	.914	72
High	Low	4.05	.936	25
	High	4.14	1.08	33
	Total	4.10	1.01	58
Total	Low	3.84	.992	56
	High	3.81	.992	74
	Total	3.82	.988	130

Ethical Decision-Making Means for Moral Intensity and Ethical Climate Interaction

The descriptive statistics are graphically presented in Figure 9. Respondents who rated a high ethical work climate were more likely to make an ethical decision involving a high-intensity issue, while the pattern is reversed for low ethical climates. In general, the slope of the high ethical work climate line was steeper than the low ethical work climate line, suggesting that there may be a greater propensity for employees to make ethical decisions when working in high ethical work climates, especially when faced with dilemmas involving a high-intensity situation.



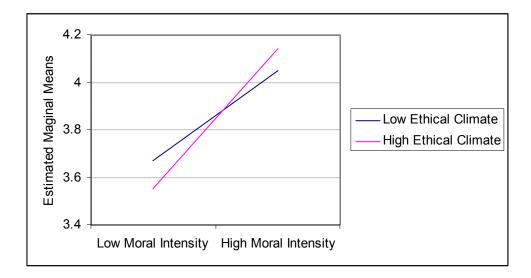


Figure 8. Estimated marginal means of ethical decision-making.

In order to support the moderating hypothesis, the coefficient of determination (R^2) for the interaction term must be statistically significant. To determine statistical significance, a multiple regression analysis with a hierarchical strategy was conducted. Using the SPSS statistical software, the predictor and moderator are entered hierarchically, followed by the interaction term. The results of this analysis are shown in Table 8. Results indicate that, while moral intensity is significant, ethical work climate and the interaction term are not significant, therefore indicating that ethical work climate does not interact with moral intensity on ethical decision-making. The partial eta squared statistic shows that the model does not account for the variation in ethical decision-making. As a result, Hypothesis 3 is not supported.



Table 8

	SS	df	MS	F	Sig.	Partial <i>Eta</i> ²
Corrected Model	8.605 ^a	3	2.868	3.077	.030	.068
Intercept	1869.61	1	1869.61	2005.93	.000	.941
Moral intensity	7.617	1	7.617	8.173	.005	.061
Ethical climate	.009	1	.009	.010	.922	.000
Moral intensity x Ethical climate	.347	1	.347	.373	.543	.003
Error	117.437	126	.935			
Total	2026.11	130				
Corrected Total	126.04	129				

Test of Between-Subjects Effects for Moral Intensity and Ethical Climate

 ${}^{a}R^{2} = .068$ (Adjusted $R^{2} = .046$)

Summary

Direct Effects Using Regression Analysis

Research Question 1. What is the relationship between moral intensity and the ethical decision-making of finance and accounting professionals in government? Hypothesis 1 predicted that moral intensity is positively associated with ethical decisionmaking. Results indicate that moral intensity is a significant predictor of ethical decisionmaking, therefore supporting a moderate positive linear relationship between moral intensity and ethical decision-making. Supplemental analysis to determine the relative importance of the dimensions of moral intensity indicates that concentration of effect contributed more than temporal immediacy to ethical decision-making.



Research Question 2. What is the relationship between ethical climate and the ethical decision-making of finance and accounting professionals in government? Hypothesis 2 predicted that ethical work climate is positively associated with ethical decision-making. Results indicate that ethical work climate is not a significant predictor of ethical decision-making. The regression analysis model was not statistically significant, and therefore there was no significant association between ethical work climate and ethical decision-making. As a result, Hypothesis 2 is not supported. *Moderating Effect Using Hierarchical Multiple Regression Analysis*

Research Question 3. Does an ethical climate strengthen the relationship between moral intensity and ethical decision-making? The estimated marginal means and profile plots revealed an interaction between moral intensity and ethical work climate, suggesting that people who rated their ethical work climate as high were more likely to make an ethical decision involving a high-intensity issue, while the pattern was reversed for low ethical climates. However, the results indicated that, while moral intensity was significant, ethical work climate and the interaction term were not significant, therefore indicating that ethical work climate did not significantly interact with moral intensity on ethical decision-making. As a result, Hypothesis 3 is not supported.

Chapter 4 presented the results of the analysis in relation to the hypothesis being tested. Chapter 5 completes the study with an interpretation of findings, as it pertains to the research findings. The findings rendered future research opportunities, which are identified in chapter 5. Additionally, recommendations for future action are provided



based on the results of the literature review and findings of the study. Finally, chapter 5 concludes with a discussion of the limitations and implications for social change.



CHAPTER 5: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS Overview

The purpose of this study was to examine the influence of moral intensity and ethical climate on the ethical decision-making of finance and accounting professionals in government. Studies in the literature suggest that moral intensity and ethical work climate influence the ethical decision-making process. This study was designed to better understand the effect of moral intensity and ethical climate on ethical decision-making, particularly within the public sector. It was hypothesized that moral intensity and ethical climate is positively associated with ethical decision-making and that an interaction exists between moral intensity and ethical climate such that high levels of ethical climate strengthens the relationship between moral intensity and ethical decision-making. Using a correlational research design, a convenience sample of 218 federal employees at a large federal agency were surveyed online using a Web-based survey tool. A total of 142 surveys were completed, of which 12 were unusable and removed from the analysis because participants indicated they had less than 1 year work experience in the finance, budgeting, resource, and/or accounting field. This exclusion criterion was predicated on previous social theory and ethics research that suggested that work experience is a key factor in differences of ethical perception (Franke, Crown, & Spake, 1997; Silver & Valentine, 2000).

The next section interprets the research findings, as it pertains to the research questions.



Interpretation of Findings

This section discusses the research findings and provides interpretation to the research questions below:

1. What is the relationship between moral intensity and the ethical decisionmaking of finance and accounting professionals in government?

2. What is the relationship between ethical climate and the ethical decisionmaking of finance and accounting professionals in government?

3. Does an ethical climate strengthen the relationship between moral intensity and ethical decision-making?

Research Question 1. What is the relationship between moral intensity and the ethical decision-making of finance and accounting professionals in government?

The research model predicted that a positive relationship exists between moral intensity and ethical decision-making. The results provide evidence that moral intensity is a significant predictor of ethical decision-making. This finding is consistent with Jones's issue-contingent model of ethical decision-making and empirical research (Barnett, 2001; Deconinck, 2004, 2005; Leitsch, 2006) that has shown that moral intensity dimensions are associated with ethical decision-making.

The regression analysis results suggest that moral intensity is positively associated with ethical decision-making (B = .371, p < .05). An examination of the correlation coefficient supported a moderate positive linear relationship between moral intensity and ethical decision-making (R = .343, p < .05). The overall regression model was significant (p < .05), with an R^2 value of .118.



As mentioned in chapter 3, this study focused on two dimensions of moral intensity: temporal immediacy and concentration of effect. Because this research study focused on two of the six dimensions of moral intensity, supplemental analysis was conducted to determine the relative importance of temporal immediacy and concentration of effect. Correlation results indicated that temporal immediacy did not contribute significantly to the model (R = .002, p = .985). This is consistent with earlier studies (Barnett, 2001; Barnett & Valentine, 2004; Singhapakdi et al., 1996), which found that temporal immediacy was unrelated to aspects of the ethical decision-making process.

Correlation results showed that concentration of effect contributed more to the model because it had a larger correlation coefficient (R = .409, p < .05). This is consistent with Singhapakdi et al. (1996), which found the concentration of effect is a significant predictor of moral judgment and intention.

Overall, the findings suggest that finance and accounting professionals in government are more likely to make an ethical decision when there is a potential to cause harm to many people vice a few people. The findings also suggest that situations in which the consequences of the action have an impact in the near-term or far-term have no impact on ethical decision-making. These findings are important because it suggests a combination of moral intensity dimensions influence the decision-making process.



Research Question 2. What is the relationship between ethical climate and the ethical decision-making of finance and accounting professionals in government?

The research model predicted that a positive relationship exists between ethical climate and ethical decision-making. The results of the regression analysis indicated that ethical work climate is not a significant predictor of ethical decision-making (B = .026, p = .803). The regression analysis model was not statistically significant ($R^2 = .000, p = .803$), and therefore there was no significant association between ethical work climate and ethical decision-making.

Although this finding is consistent with empirical studies (Barnett & Vaicys, 2000; Deconinck, 2004) that found no support for ethical work climate as a predictor of ethical behavior or intention, it is largely contradictory to theoretical frameworks that suggested the decision-making process within an organization is dependent on organizational factors (Denhardt, 1988; Schneider, 1975; Trevino, 1986; Victor & Cullen, 1988). This disparity may be explained by other factors that influence ethical decision-making, which this study did not consider, such as personal value systems. *Research Question 3. Does an ethical climate strengthen the relationship between moral intensity and ethical decision-making*?

The research predicted that an interaction exists between moral intensity and ethical climate such that high levels of ethical climate strengthens the relationship between moral intensity and ethical decision-making. In order for an interaction effect to exist, two conditions must be met. "First, the interaction term must be statistically significant" (Morano, 2003, p. 122). Second, "the regression line for the high and low



values of the hypothesized moderator must [intersect]" (Morano, p. 122), thereby indicating an interaction effect.

The graphical presentation indicated an interaction because the slope of the high ethical work climate line was steeper than the low ethical work climate line, suggesting that there may be a greater propensity for employees to make ethical decisions when working in high ethical work climates, especially when faced with dilemmas involving a high-intensity situation. However, the results of the multiple regression analysis indicated that the interaction term was not significant (p = .543), with an R^2 value of .068. The partial eta squared statistic shows that the model does not account for the variation in ethical decision-making, suggesting that the terms do not have a great effect on ethical decision-making. This suggests that an ethical work climate does not influence the relationship between moral intensity and ethical decision-making.

Implications for Social Change

Unethical decision-making by public officials jeopardizes confidence in government. American citizens place their trust in public officials' abilities and commitment to make decisions which serve the common good of society. When trust is compromised, Chanley et al. (2000) predicted that "it can lead to reduced support for government actions to address wide ranging policy concerns for public benefit" (p. 239). This study increased knowledge about how moral intensity and ethical climate affects ethical decision-making within the public sector. Providing public managers with insight into the link between morality, work climate, and decision-making may help reduce incidents of ethical misconduct and promote a healthy democracy whereby public



officials make decisions that improve trust in government. As Feldheim and Wang (2003) noted, "public trust is an important goal of governmental agencies [because] it provides legitimacy for governmental decision-making and operations" (p. 63).

Recommendations for Future Action

The following recommendations were based predominantly on the findings in this study. In addition, the literature review in this study also influenced the recommendations made in this section.

The literature review in this study revealed that ethical decision-making is a complex phenomenon influenced by (a) individual factors, such as cognitive moral development and personal values, (b) situational factors, such as ethical work climate and characteristics of work, and (c) issue contingencies, such as the nature of the moral dilemma. This research focused on two factors, hypothesized to influence ethical decision-making: (a) the nature of the moral dilemma, otherwise referred to as moral intensity, and (b) the ethical work climate. Specifically, the goal of the study was to understand the influence of moral intensity and ethical climate on the ethical decision-making of finance and accounting professionals in the public sector.

Consistent with Jones's issue-contingent model of ethical decision-making, moral intensity was found to be positively associated with ethical decision-making. Supplemental analysis revealed that concentration of effect was significant and contributed more toward ethical decision-making than temporal immediacy. This finding is consistent with other empirical studies (Barnett, 2001; Barnett & Valentine, 2004; Singhapakdi et al., 1996), which found that temporal immediacy was unrelated to aspects



of the ethical decision-making process. The finding generally supports Singhapakdi et al. (1996), who found the concentration of effect is a significant predictor of moral judgment and intention. This suggests that finance and accounting professionals are more likely to make an ethical decision when there is a potential to cause harm to many people vice a few people. It is recommended that managers encourage employees to make ethical decisions irrespective of the number of people harmed or negatively affected by an action.

Concerning ethical climate, the study found that ethical climate did not have a significant direct effect or moderating effect on ethical decision-making. This is inconsistent with earlier studies and theoretical frameworks that suggested ethical climate influences behavior in organizations. This disparity may be explained by other factors that influence ethical decision-making, which this study did not consider, such as individual value systems. Despite this finding, it is recommended that managers continue to foster an ethical working environment.

Recommendations for Further Study

The findings and information provided by this study rendered future research opportunities. This study focused on two dimensions of moral intensity: temporal immediacy and concentration of effect. Results indicated that the dimensions contributed differently to ethical decision-making. It is recommended that future research investigate the effect all dimensions of moral intensity on ethical decision-making in the public sector.



Although this study did not find a direct association or moderating effect of ethical climate on ethical decision-making, future research may investigate which ethical climate types are more likely to encourage ethical behavior. In addition, future research may investigate the role of personal values on ethical decision-making and whether it moderates the relationship between ethical work climate and ethical behavior. All of these recommendations for future study relate specifically to the public sector.

Limitations

Several limitations in the current study can be identified. Most notable among these was the use of a convenience sample of finance and accounting professionals working at only one federal agency. This limits the ability to generalize the results to all finance and accounting professionals in government. The study was also limited by the fact that it relied on the use of vignettes. Although vignettes are frequently used by researchers in the ethics field to survey attitudes and behaviors, they have been criticized because of their artificial and overly simplistic nature (Weber, 1992).

Another limitation was the internal consistency reliability concerns raised about the Moral Intensity Scale (Cronbach's alpha = .459). The low internal consistency of the Moral Intensity Scale does not come as a surprise since there are only four items in the scale. Cronbach's alpha is greatly affected by the number of items in the scale, especially at lower levels of inter-item correlations. Although most research cites acceptable reliability at .70, Nunnally, the most widely cited in support of reliability coefficients, noted that in preliminary predictive research reliabilities of .50 to .60 may be satisfactory (Henson, 2001; Iacobucci & Duhachek, 2003; Peterson, 1994).



Another limitation concerned the fact that participants were asked about their intentions and not actual behavior. Furthermore, the study was limited by the subjective manner of the topic and the realization that what one individual might interpret as ethical may not be accepted as ethical by another individual based on different personal value systems.

Conclusion

The decisions of public officials have widespread impacts on society (Menson, 1990). Citizens expect public officials to serve the public interest with the highest degree of morality and integrity. However, reports of unethical, and even illegal, conduct of government officials has brought ethics and government to the forefront of public concern. Unethical decision-making undermines public confidence in government, and puts government at risk and its ability to address policy concerns for public benefit (Chanley et al., 2000; Lampe & Finn, 1992; Menson, 1990; Menzel, 2005). Research suggested that moral intensity, which is the nature of a moral dilemma, and ethical climate influence ethical decision-making. Less is known about the moderating effect of ethical climate, particularly within the public sector. This study used a correlational research design to address the gap in the literature and understand the relationship between moral intensity and ethical decision-making, and the moderating role of ethical climate within the public sector.

This study increased knowledge about how moral intensity and ethical climate affects ethical decision-making within the public sector. It proposed a model which predicted that moral intensity and ethical climate would be positively associated with



ethical decision-making, and that ethical climate would have a moderating effect, such that high levels of ethical work climate would strengthen the relationship between moral intensity and ethical decision-making. Based on the results of the study, the correlation analysis showed that moral intensity is positively associated with ethical decisionmaking. Supplemental analysis showed that each dimension of moral intensity contributes differently to ethical decision-making. Given that the dimensions contribute differently to ethical decision-making, it is recommended that future research investigate the effect all dimensions of moral intensity on ethical decision-making.

Concerning ethical climate, the study found that ethical climate did not have a significant direct effect or moderating effect on ethical decision-making. This is inconsistent with earlier studies and theoretical frameworks which suggested that ethical climate influences behavior in organizations. This disparity may be explained by other factors that influence ethical decision-making, which this study did not consider, such as individual value systems. Although this study did not find a direct association or moderating effect of ethical climate types are more likely to encourage ethical behavior. In addition, future research may investigate the role of personal values on ethical decision-making and whether it moderates the relationship between ethical work climate and ethical behavior. All of these recommendations for future study relate specifically to the public sector.



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APPENDIX A: ELECTRONIC INVITATION TO PARTICIPANTS

Dear Federal Employee,

As a resource professional in the Federal government, you are being asked to participate in a research study on decision-making in government. Please read this form and ask any questions you have before agreeing to be part of the study.

This study is being conducted by Carolyn Roy, a doctoral candidate at Walden University.

Background Information:

The purpose of this study is to research the factors that influence ethical decision-making in government, particularly within the resource profession whereby decisions often involve balancing competing obligations and value systems.

Procedures:

If you agree to be in this study, you will be asked to complete a an online survey that takes approximately 15 minutes.

Volunteer Nature of the Study:

Your participation in this study is strictly voluntary. Your decision whether or not to participate will not affect your current or future relations with your agency. If you initially decide to participate, you are still free to withdraw at any time without affecting those relationships.

Risks and Benefits of Being in the Study:

There are no risks associated with participating in this study. The benefits of the study are that it will increase knowledge of ethical decision-making, and contribute to positive social change, not only for public managers to make ethical decisions, but also toward a healthy democracy whereby public officials make decisions that improve public confidence in government.

Compensation:

You will not be paid to take part in this study.

Confidentiality:

Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:

The researcher's name is Carolyn Roy (phone: 703-695-3137 or email:



carolyn.roy@waldenu.edu). The researcher's faculty advisor is Dr. Dale Swoboda (phone: 573-875-6588 or email: dale.swoboda@waldenu.edu). You are free to contact the researcher or advisor with any questions. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Director of the Research Center at Walden University. Her phone number is 1-800-925-3368, extension 1210.

Please retain a copy of this Consent Form for your records.

Thank you for considering my request.

Sincerely,

Carolyn Roy Walden University PhD Candidate

Click on the link below to access the survey:

[survey link]



APPENDIX B: ETHICAL DECISION-MAKING SURVEY

Consent to Participate

Exit this survey >>>>>

Dear Federal Employee,

As a resource professional in the Federal government, you are being asked to participate in a research study on decision-making in government. Please read this page before agreeing to be part of the study.

This study is being conducted by Carolyn Roy, a doctoral candidate at Walden University.

Background Information: The purpose of this study is to research the factors that influence ethical decision-making in government, particularly within the resource profession whereby decisions often involve balancing competing obligations and value systems.

Procedures: If you agree to be in this study, you will be asked to complete an online survey that takes approximately 15 minutes.

Volunteer Nature of the Study: Your participation in this study is strictly voluntary. Your decision whether or not to participate will not affect your current or future relations with your agency. If you initially decide to participate, you are still free to withdraw at any time without affecting those relationships.

Risks and Benefits of Being in the Study: There are no risks associated with participating in this study. The benefits of the study are that it will increase knowledge of ethical decision-making, and contribute to positive social change, not only for public managers to make ethical decisions, but also toward a healthy democracy whereby public officials make decisions that improve public confidence in government.

Compensation: You will not be paid to take part in this study.

Confidentiality: Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions: The researcher's name is Carolyn Roy (phone: 703-695-3137 or email: carolyn.roy@waldenu.edu). The researcher's faculty advisor is Dr. Dale Swoboda (phone: 573-875-6588 or email: dale.swoboda@waldenu.edu). You are free to contact the researcher or advisor with any questions. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Director of the Research Center at Walden University. Her phone number is 1-800-925-3368, extension 1210.

Please retain a copy of this Consent Form for your records. Thank you for considering my request.

Sincerely,

Carolyn Roy Walden University PhD Candidate

By clicking on the "NEXT" button and completing the online survey, you are providing your consent to participate in the study and indicating that you have read the above information and received answers to any questions you may have.



PART 1 – Decision-Making Scenario

Decision-Making Study

The scenario below deals with an issue that you might face in the work place. Please read it and then use the scale below to record your response to the following questions. This survey should take you about 15 minutes to complete. Keep in mind that there are no right or wrong answers; we are only interested in you perceptions. Your participation is entirely voluntary and totally anonymous. Please begin by reading the scenario below:

Pat is a budget analyst in the comptroller's office of a large organization. After reviewing the company's current year budget, Pat determines that one of the divisions overstated their current year budget requirements. The overstatement is less than 20% of the organization's overall budget, and will prevent the company's ability to cover other requirements in a few [several] other divisions. Pat wants to adjust the division's budget to reflect the correct requirements; however, Pat learns the division manager supports the overstatement. The division recognizes its overstatement and intends to repay the money to the organization's central budget account the following year [5 years from today]. Pat decides not adjust the budget to reflect the division's correct budget requirements.

Your reactions to the	scenario						
	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree or Agree	Slightly Agree	Agree	Strongly Agree
The scenario involves an ethical issue.	0	0	0	0	0	0	0
Pat should do the proposed action in the scenario.	0	0	0	0	0	0	0
I would act in the same manner as Pat in the scenario.	0	0	0	0	0	0	0
Pat's decision will harm a few people, if any, throughout the company.	Ο	Ο	0	0	Ο	ο	0
Pat's decision will cause harm in the immediate future.	0	0	0	0	0	0	0
Pat's decision will have little impact, if any, on other divisions within the company.	0	0	Ο	0	0	0	0
As time goes by, Pat's action will cause less harm.	0	0	0	0	0	0	0
This scenario contained information as to when the division intends to repay the money to the company's central budget account.	0	0	Ο	0	Ο	Ο	0
This scenario contained information regarding the impact of the overstatement on the company's ability to cover other requirements.	0	0	0	0	0	0	0



Exit this survey >>>>>

PART 2 - Questions about your organization

Please indicate the degree to which you agree or disagree with the following statements

	Strongly Disagree	Disagree	Slightly Disagree	Neither Disagree or Agree	Slightly Agree	Agree	Strongly Agree
In my organization, people look out for each other's good.	0	0	0	0	0	0	0
The most important concern here is the good for all the people in the company as a whole.	Ο	0	0	0	0	0	Ο
The first consideration is whether a decision violates any law.	0	Ο	0	0	0	0	Ο
Everyone is expected to stick by the organization's rules and procedures.	0	0	0	0	0	0	0
In my organization, people protect their own interests above all else.	0	0	0	0	0	0	0
The most important thing in my organization is each person's own sense of right and wrong.	0	0	0	0	0	0	0
In my organization, people are guided by their own personal ethics.	0	0	0	0	0	0	0
Our major concern is always what is best for the other person.	0	0	0	0	0	0	Ο
Successful people in this organization go by the book.	0	0	0	0	0	0	0
In my organization, people are mostly out for themselves.	0	0	0	0	0	0	0
It is very important to follow the organization's rules and procedures here.	0	0	0	0	0	0	0
People are expected to do anything to further the organization's interests, regardless of the consequences.	0	0	Ο	0	Ο	Ο	0
In my organization, the law or ethical code of their profession is a major consideration.	0	0	0	0	0	0	0
People are expected to comply with the law and professional standards over and above all considerations.	Ο	0	Ο	0	0	0	Ο
In my organization, people are expected to follow their own personal and moral beliefs.	0	0	0	0	0	0	0



PART 3 - Demographic Information

Instructions: In this section we would like you to provide some information about your background to help us better interpret the research results of this survey. As mentioned at the beginning of the survey, please be assured that your participation is completely anonymous. Survey results will only be reported as a group, not as individuals. Information will not be used for any other purpose other than this research project.

1. Gender

0

Male

2. Age

- O Under 30
- O 30 to 39
- O 40 to 49
- O 50 to 59
- O 60 and over

3. Highest education level

- O High school diploma or GED
- O Associates degree
- O Bachelor's degree
- O Master's degree
- O Doctorate or Professional degree

4. Do you currently work in the finance, budgeting, and/or accounting field or involved in the management of financial resources as your primary job responsibility?

- O Yes
- O No

5. Number of years employed by the Federal government?

- O Less than 1 year
- O 1 to 5 years
- O 6 to 10 years
- O 11 to 15 years
- O More than 15 years



6. Select the series that best describes your current position.

- O Less than 1 year
- O 1 to 5 years
- O 6 to 10 years
- O 11 to 15 years
- O More than 15 years
- 7. Number of years working in the finance, budgeting, and/or accounting field within the Federal government?
 - O Less than 1 year
 - O 1 to 5 years
 - O 6 to 10 years
 - O 11 to 15 years
 - O More than 15 years

APPENDIX C: PERMISSION TO USE THE VIGNETTE AND MORAL INTENSITY SCALE

From: Anusorn Singhapakdi [asinghap@odu.edu]
Sent: Friday, April 18, 2008 1:17 PM
To: Roy, Carolyn, Ms, NII/DoD-CIO
Cc: svitell@bus.olemiss.edu
Subject: Re: Request Permission to Use Scenario and Moral Intensity Scale (U)

Attachments: Insti - JAMS 2007.pdf

Dear Carolyn,

Yes, you have our permission to use/adapt the scale and the vignette for your study. But please note that some of these vignettes were adopted from other studies as we have provided appropriate citations.

It sounds like you have an interesting research project. You mentioned ethical climate of the organization as the moderator in your research. I definitely agree that organizational ethical culture would play an important role in ethical decision-making in government. You may interested in knowing that my coauthor and I have recently developed a scale to measure ethics institutionalization (explicit and implicit forms, see attached). Please also feel free to adopt/adapt this scale if you think it's appropriate.

Good luck with your research.

Anusorn Singhapakdi, Ph.D. Professor and Marketing Area Coordinator College of Business & Public Administration Old Dominion University 2123 Constant Hall Norfolk, VA 23529-0220

Direct: (757) 683-5129 Department: (757) 683-3557 Fax: (757) 683-3258 E-Mail: <u>asinghap@odu.edu</u> <u>http://web.odu.edu/~asinghap</u>

-----"Roy, Carolyn, Ms, NII/DoD-CIO" <Carolyn.Roy@osd.mil> wrote: -----

To: <asinghap@odu.edu> From: "Roy, Carolyn, Ms, NII/DoD-CIO" <Carolyn.Roy@osd.mil> Date: 04/18/2008 11:37AM Subject: Request Permission to Use Scenario and Moral Intensity Scale (U)



Classification: UNCLASSIFIED

Dr. Singhapakdi,

I am a doctoral student at Walden University, and I am conducting research on decision-making in government, particularly, within the finance and accounting profession whereby decisions often involve balancing competing obligations and value systems. The purpose of my study is to increase knowledge about how moral intensity affects decision-making of public managers, and whether the ethical climate of the organization moderates that relationship. To achieve this, my research will employ a fully crossed factorial experimental research design using vignettes.

Your research has contributed significantly to the study of moral intensity and ethical decision-making. I am requesting your permission to adapt and modify your Scenario 3 from "Professional Values and the Ethical Perceptions of Internal Auditors" (1994) for my research. In adapting the vignette for my study, the essential ethical content of the dilemma will be retained. However, some details of the narrative may be altered for variable manipulation, clarity, brevity and possible misinterpretation by the reader. In addition, I am requesting your permission to use your Moral Intensity Scale from "Moral Intensity and Ethical Decision-Making of Marketing Professionals" (1995) in my research of public managers.

Please feel free to contact me if you have questions, suggestions or concerns. Thank you.

Very respectfully,

Carolyn Roy Walden University Doctoral Student



APPENDIX D: PERMISSION TO USE THE ETHICAL CLIMATE QUESTIONNAIRE

From: Cullen, John [cullenj@cbe.wsu.edu]
Sent: Tuesday, May 06, 2008 11:31 AM
To: Roy, Carolyn, Ms, NII/DoD-CIO
Subject: RE: Request Permission to Use the Ethical Climate Questionnaire (U)

You can get the ECQ in a Psy Reports article we did in 93...slightly updated from the ASQ version. You have our permission to use it. You can get most of my pubs on ethical climate including a recent meta analysis at: www.cb.wsu.edu/~cullenj/articles/article_index.htm You might want to check out the following for more validation work: Stone, R. W., & Henry, J. W. (2003).

You might want to check out the following for more validation work: Stone, R. W., & Henry, J. W. (2003). Identifying and developing measures of information technology ethical work climates. Journal of Business Ethics, 46(4), 337-350.

Peterson, D. K. (2002). The relationship between unethical behavior and the dimensions of the ethical climate questionnaire. Journal of Business Ethics, 41(4), 313-326.

Good luck and let us know what you find. John Cullen

From: Roy, Carolyn, Ms, NII/DoD-CIO [mailto:Carolyn.Roy@osd.mil]
Sent: Tuesday, May 06, 2008 8:21 AM
To: Cullen, John
Subject: Request Permission to Use the Ethical Climate Questionnaire (U)

Classification: UNCLASSIFIED

Dr. Cullen,

I am a doctoral student at Walden University, and I am conducting research on decision-making in government, particularly, within the finance and accounting profession whereby decisions often involve balancing competing obligations and value systems. The purpose of my study is to increase knowledge about how moral intensity affects decision-making of public managers, and whether the ethical climate of the organization moderates that relationship. To achieve this, my research will employ a fully crossed factorial experimental research design using vignettes.

Your research has contributed significantly to the study of ethical work climates. I am requesting your permission to use a shortened version of the Ethical Climate Questionnaire provided in "The Organizational Bases of Ethical Work Climates" (1988) in my doctoral research at Walden University.

Please feel free to contact me if you have questions, suggestions or concerns. Thank you.

Carolyn Roy Walden University Doctoral Student







Telephone: (703) 314-2280 e-mail: carolyn.roy@waldenu.edu

Executive Profile

Seasoned senior-level manager experienced at providing leadership, strategic direction and administrative oversight to million dollar defense programs. Strategic networker leveraging relationships with congressional staff and legislative partners to gain congressional acceptance of key organizational programs and priorities. Areas of ability include organizational leadership, strategic and tactical planning, fiscal management, congressional liaison, program management, team building and development, meeting financial objectives, core management team activities

Education

Ph.D., Public Policy and Administration (*candidate*) – Walden University, Minneapolis, MN
M.S., National Resource Strategy – National Defense University, Fort McNair, Washington, DC, 2005
M.S., Engineering Management – University of Maryland, University College, College Park, MD, 1993
B.S., Mechanical Engineering – Howard University, Washington, DC. 1987 (*Cum Laude*)

Professional Development and Certifications

Senior Acquisition Certification, 2005 Defense Leadership and Management Program, 2005 Women's Executive Leadership Program, 1998

Memberships

Pi Alpha Alpha Honor Society - Walden University



Experience

CONGRESSIONAL LIAISON

Office of the Assistant Secretary of Defense (ASD) for Networks Information and Integration/DOD Chief Information Officer – Washington, DC (2005 – Present) Senior Staff Advisor to ASD on the development of legislative requirements and priorities. Responsible for ensuring that all Armed Services Committees and Committees on Appropriations are informed regarding all matters relating to budgetary, fiscal, programmatic, and analytic activities under the supervision of the ASD/CIO. Leads outreach activities with members of Congress and their staff. Maintains an awareness of pertinent congressional activity, pending legislation, and special interests that may affect substantive programs. Participates with senior executives in discussions on policy formulation and administration matters of high congressional interests.

SENIOR PROGRAM ANALYST

Defense Threat Reduction Agency – Fort Belvoir, VA (October 2000 – June 2005)

Senior Program Analyst responsible for the day to day financial management of the Chemical and Biological Defense Program (CBDP) appropriated funds. Performed planning analysis, formulation, justification, and execution review of the CBDP \$1 billion budget. Ensured a balanced program that addresses shortterm problems and long-term issues. Participated in budget crafting, Capitol Hill discussions and OMB processes. Operated with full authority for directing and administering budget activities to ensure optimal effectiveness, efficiency and utilization of resources. Directed the formulation and establishment of strategic planning products and efforts. Supported strategic planning efforts.

STAFF ADVISOR/ENVIRONMENTAL ENGINEER

U.S. Army Test and Evaluation (ATEC) Command – Alexandria, VA (October 1999 – October 2000)

Staff advisor on environmental matters to various levels in ATEC. Provided oversight, management, technical support and guidance to subordinate commands of ATEC for implementation and execution of the environmental program. Responsible for directing the environmental budget formulation, justification and execution activities for the budget years and out-years. Set goals, objectives, policies and priorities for compliance with environmental regulations and policies.

