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Impact of Federal Acquisition Regulation Change on Contractor Misconduct

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Walden University

College of Management and Technology

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Jeffery Patrignani

has been found to be complete and satisfactory in all respects,
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the review committee have been made.

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Walden University
2014

Abstract

Impact of Federal Acquisition Regulation Change on Contractor Misconduct

by

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MBA, Regent University, 2003

BS, Regents College, 2000

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

December 2014

Abstract

The Project on Government Oversight listed 632 reported acts of government contractor misconduct since 2007 that resulted in settlements or fines totaling \$41.95 billion in the government contracting industry. Government contracting officials changed the Federal Acquisition Regulation (FAR) in 2009 to reduce acts of misconduct. The purpose of this causal-comparative study was to discover if the change to the FAR in 2009 significantly reduced the rate of reported contractor misconduct and to investigate the impact of the change on government contractor ethics business processes. Deterrence theory guided this study of how the change to the FAR in 2009 impacted the rate of reported government contractor misconduct (dependent variable) and government contractor ethics business processes (dependent variable). Data were collected on the top 100 government contractors over 2 separate 3-year time periods (independent variable), 2006 through 2008 and 2010 through 2012, before and after the change to the FAR. Data extracted from official government databases and government oversight organizations included annual contract awards ($n = 600$), contractor misconduct reports ($n = 600$), and contractor ethics business process records ($n = 600$). A Wilcoxon Signed-Ranks test resulted in 2 findings. First, the rate of reported government contractor misconduct was not significantly reduced by the change to the FAR in 2009, $z = -0.949$, $p = .34$, $r = -.072$. Second, government contractor ethics business processes were significantly impacted by the change to the FAR in 2009, $z = -12.263$, $p < .001$, $r = -.763$. This study may contribute to positive social change by informing federal contracting authorities and corporate executives that implementing ethics business processes did not reduce misconduct. These findings call for further action to improve corporate ethical behavior.

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Dedication

I dedicate this work to those who made completing this journey possible. First, I dedicate this work to my Lord and Savior, Jesus Christ. Through Him all things are made possible and apart from Him I can do nothing! Next to my mother, who instilled in me a drive to be better and the confidence that with hard work, the Lord, and the support from family there is nothing I cannot accomplish. Finally, I dedicate this work to my wife. Tammy is truly my better half. The Lord saw fit to bless me greatly and I am ever appreciative. Tammy inspired me to try, supported me in my efforts, held me accountable to my goals, and cheered me onward. She pushed me when I needed it, checked my ego when I was too self-important, focused me on the end goal, and helped keep me strong throughout the entire process. She is the love of my life and I will forever be grateful for her love and support! Thank you, Sweetheart!

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Section 1: Foundation of the Study

The U.S. government and governments throughout the world are concerned with reducing expenses (Herbert & Rothwell, 2013). Employing contractors can mitigate that concern by creating efficiencies and reducing government expenses (Hansson & Holmgren, 2011). Employing contractors reduces cost and increases efficiency by reducing government infrastructure and streamlining business processes (Herbert & Rothwell, 2013).

Government contracting began in colonial America but reliance on contracting has increased since George Washington's use in the 1770s (Jenks, 2010). Kean (2011) discovered that during World War II, between 1940 and 1944, the U.S. government spent \$175 billion on government contracts, resulting in a 1500% increase in contractor profits. Government contracting dependence increased in the 1980s and 1990s because business experts advised cost saving measures to increase efficiencies and adaptable business processes (Terman & Yang, 2010). Government contracting companies comprised nine of the top 10 U.S. businesses in 2009 (Hayden, Campbell, & Cummins, 2010). The U.S. government employs contractors to reduce expenses; however, government contractors seek to maximize profits (Cordery, Baskerville, & Porter, 2011). The desire for maximum profit leads to contractor misconduct (Olusegun, Ogunbode, Ariyo, & Alibi, 2011). As a result, increasing employment of government contractors increases the U.S. government's exposure to contractor misconduct (Roberts, 2010).

Representatives of the Project on Government Oversight (POGO) determined that 632 known instances of contractor misconduct have occurred since 2007 (POGO, 2014).

Corporations that committed the known acts of misconduct paid \$41.9 billion in fines and settlements (POGO, 2014). The U.S. government's escalated employment of contractors and increased exposure to contractor misconduct has resulted in numerous laws, regulations, and government oversight programs designed to deter contractor misconduct (Roberts, 2010).

The lack of oversight and contract clarity caused increased contractor misconduct within the private security industry (Gomez del Prado, 2011). Warnock (2012) believed political agendas, biased enforcement of contracting rules and regulations, and poor oversight compromise the U.S. government's ability to influence contractor misconduct.

I selected deterrence theory as the foundational theory for my study. Deterrence theory explores the influencing of unethical or illegal activity through the threat of imposed penalties or sanctions (Paternoster, 2010). Best (2013) listed prevention, detection, and prosecution as the three components of deterrence theory. Dickinson (2013) argued that oversight is the most important part of deterrence because it is the foundation for accountability and prosecution. Compromising any of the three elements will result in an ineffective deterrence program (Best, 2013).

The U.S. government changed the Federal Acquisition Regulation (FAR) in 2009 (FAR, 2008). The change included self-reporting of contractor misconduct, ethics and compliance programs, ethics training, and expanded debarment and suspension enforcement (FAR, 2008). Government officials designed the change to deter contractor misconduct (Dorey, Oehmen, & Valerdi, 2012).

Congressional acts and U.S. government contracting official rule changes were implemented to reduce instances of misconduct (Dorey et al, 2012). The Weapon Systems Acquisition Reform Act of 2009 required that all contractor cost estimates be within 80% of actual costs in an effort to reduce fraudulent pricing strategies (Dorey et al., 2012). The Fraud Enforcement and Recovery Act of 2009 (FERA) empowered both private citizens and the U.S. government in their role of policing contractor behavior (Titolo, 2011). FERA was an extension of the Whistleblowers Protection Act of 1989 designed to protect those reporting misconduct (Titolo, 2011). The Close the Contractor Fraud Loophole Act (CCFLA) required federal government contractors begin self-reporting all instances of misconduct in 2009 (Warnock, 2012). The Federal Awardee Performance and Integrity Information System (FAPIIS) development began in 2009 as a component of The Duncan Hunter National Defense Authorization Act of 2009. Government officials designed FAPIIS to improve contractor responsibility through shared awareness of contractor misconduct between government agencies (Nackman, Rathbone, Myers, & Pannier, 2011; Warnock, 2012).

The U.S. Senate's Subcommittee on Financial and Contracting Oversight investigated the federal government contracting industry due to continued contractor misconduct (Sonn & Gebreselassie, 2010). Warnock (2012) believed the U.S. government's contractor oversight program was ineffective without prosecuting violations. Coleman (2011) believed that self-reporting has not improved corporate ethical behavior. The U.S. government's contractor misconduct deterrence program lacked violation enforcement (Office of Small Business Programs [OSBP], 2011). I

explored the effectiveness of the U.S. government's change to the FAR in 2009 on reducing contractor misconduct.

Background of the Problem

Instances of government contractor misconduct are traceable to 80 of the top 100 government contractors (POGO, 2014). Fines and settlements for misconduct total \$41.9 billion since 2007 (POGO, 2014). The U.S. Senate's concern about the seriousness of contractor misconduct led the Subcommittee on Financial and Contracting Oversight to investigate government contracting industry business practices (Sonn & Gebreselassie, 2010). The U.S. government instituted a change to the FAR in 2009 in an effort to reduce misconduct violations (OSBP, 2011; POGO, 2014). Changes included whistleblower protections, mandatory corporate ethics programs, and self-reporting of all misconduct violations (OSBP, 2011). While reported instances of misconduct violations continue, there is no information available to determine if the governmental changes and requirements have reduced misconduct violations (OSBP, 2011; POGO, 2014).

The FAR (2014) lists penalties for contractor misconduct. Penalties for misconduct include exclusion from bidding on current and future contracts, fines and financial penalties, debarment of the offending contractor or individual, and prosecuting individual violators and corporate executives. The punitive actions listed in the FAR are designed to deter contractor misconduct (FAR, 2014; Roberts, 2010). Understanding the effectiveness of the penalties on those committing acts of misconduct may help to identify if the existing penalties reduce the propensity to commit misconduct violations (Roberts, 2010).

Despite the availability of information about the quantity of contractor misconduct and governmental actions taken to reduce misconduct, academic information on the effect of the U.S. government's deterrent actions upon unethical behavior within the federal government contracting industry is lacking. Statistical information on contractor misconduct is available, as well as information on government actions to deter misconduct within the federal government contracting industry. Understanding the impact of change to the FAR in 2009 upon the contracting industry may lead to future changes in government requirements, reporting procedures, and government penalties that may lead to reductions in federal government contractor misconduct.

Problem Statement

There have been 632 reported misconduct violations resulting in settlements or fines totaling \$41.9 billion in the federal government contracting industry since 2007 (POGO, 2014). Researchers found instances of misconduct in 80% of the top 100 government contractors and 60 of the top 100 with multiple violations (POGO, 2014; Sonn & Gebreselassie, 2010). The U.S. government created policy changes requiring federal government contractors to self-report violations and to create business ethics awareness and compliance programs (FAR, 2014). Misconduct violations result in the U.S. government pursuing fines, terminations of contracts, debarment, suspension, imprisonment, or a combination of these penalties in an effort to curtail future violations. The general business problem is the rate of misconduct violations within the federal government contracting industry. The specific business problem is the lack of understanding regarding (a) how the change to the FAR in 2009 affected rate of reported

federal government contractor misconduct and (b) the impact of the change on federal government contractor ethics business processes.

Purpose Statement

The purpose of this quantitative, nonexperimental, retrospective, causal-comparative study was to discover if the change to the FAR in 2009 has influenced the rate of reported contractor misconduct and to investigate the impact of the change on federal government contractor ethics business processes. The independent variable in this study was time, which was divided into two parts. Time 1 was a 3-year (2006 through 2008) time period prior to the change to the FAR in 2009. Time 2 was a 3-year (2010 through 2012) time period after the change to the FAR in 2009. The two dependent variables were the instances of reported contractor misconduct and the government contractor ethics business processes. I conducted secondary quantitative research and quantitative data collection to gather information.

Secondary quantitative research included reviewing and analyzing articles, studies, and statistical data collected on past contractor misconduct violations. Quantitative analysis indicated that the change to the FAR in 2009 did not significantly reduce the instances of reported misconduct within the top 100 federal government contractors. The top 100 government contractors represented 55% of government contract awards for the 450,000 registered with the U.S. government (Federal Procurement Data System [FPDS], 2014). The intent was to determine if the change to the FAR in 2009 significantly affected the reported rates of reported contractor misconduct or significantly impacted the government contractor ethics business

processes. DeCremer, Mayer, and Schminke (2010) believed that reducing instances of government contractor misconduct increases ethical conduct throughout the entire organization and improves corporate social responsibility.

Nature of the Study

I proposed conducting a quantitative, nonexperimental, retrospective, causal-comparative design study. Data collection techniques included structured record reviews, legal documents and findings, and statistical analysis of historical information retrieved from government contract reporting databases. Collection and analysis of historical information from government archives was consistent with Kristin and Robbins's (2010) belief that quantitative methodology is the best method for studies comprising historical records and archived statistical information research.

Statistical information and data collection included online U.S. government and government oversight organization databases. Quantitative methodology was best suited for online statistical research (Barnham, 2012). Data collection efforts for this study included information on federal government contractor misconduct instances from 2006 through 2012. Yu-Jia (2012) believed causal-comparative design was an effective choice for researchers seeking to infer causality between a dependent variable and an ex post facto independent variable.

Loidolt (2009) stated that the type of methodology is determined by what the researcher is trying to determine. Qualitative methodology was the optimum choice to determine decision-making reasons, values, and experiences; however, quantitative methodology was the preeminent choice to measure the results at one or more points in

time (Loidolt, 2009). Examining both the reported government contractor misconduct rate and contractor ethics business processes for 3-year periods pre and post the change to the FAR in 2009 made quantitative methodology the appropriate choice.

Research Question

The purpose of this quantitative, nonexperimental, retrospective, causal-comparative study was to discover if the change to the FAR in 2009 had influenced the rate of reported contractor misconduct and to investigate the impact on federal government contractor ethics business processes. The goal of the study was to determine if a causal relationship existed between an independent variable (time before and after the change to the FAR in 2009) and two dependent variables (rate of reported government contractor misconduct and government contractor ethics business processes). I examined reported contractor misconduct and components of contractor ethics programs for 3 years prior to 2009 and for 3 years after 2009. The study of the independent variable consisted of official government documents and regulations. The study of the dependent variables consisted of government contractor oversight databases. The research questions for this study included

1. Has the change to the FAR in 2009 reduced the rates of reported government contractor misconduct?
2. Has the change to the FAR in 2009 affected government contractor ethics business processes?

Hypotheses

H1₀: There was no statistically significant decline in the rate of reported contractor misconduct after the change to the FAR in 2009.

H1_a: There was a statistically significant decline in the rate of reported contractor misconduct after the change to the FAR in 2009.

H2₀: There was no statistically significant change in the government contractors ethics business processes after the change to the FAR in 2009.

H2_a: There was a statistically significant change in the government contractors ethics business processes after the change to the FAR in 2009.

Theoretical Framework

My study was based upon deterrence theory. Simply stated, deterrence theory is the threat of imposed penalties or sanctions to prevent illegal or unethical acts (Paternoster, 2010). A key component of deterrence is the perceived possibility of detecting misconduct (Ogilvie & Stewart, 2010). Dickinson (2013) stated that oversight is an important part of deterrence because it is the foundation for accountability and prosecution. Paternoster (2010) believed deterrence is the foundation of legal systems. Laws are created, penalties and punishments are determined for violating the law, violations are discovered, and penalties imposed, all with the hope that the mere threat of punishment modifies behavior (Paternoster, 2010).

Paternoster (2010) stated that the intellectual study of deterrence theory is traced to the writings of Beccaria (1764) and Bentham (1789). According to Paternoster, Beccaria's (1764) work *On Crimes and Punishments* was a collection of nine principles.

Beccaria's principles ranged from linking human motivation to wanting pleasure or avoiding pain to establishing a scale matching punishments to crimes (Paternoster, 2010). Moreover, Beccaria's nine principles helped inform early understanding of deterrence theory (Paternoster, 2010). Bentham's (1789) work *An Introduction to the Principles of Morals and Legislation* was a coupling of prospective punishments and penalties attached to the principles espoused by Beccaria (Paternoster, 2010). Bentham believed that punishments must be harsh enough to outweigh the prospective reward of mischievous behavior and applied without regarding outside considerations (Paternoster, 2010). Paternoster believed that Beccaria and Bentham together formed deterrence theory.

Deterrence theory is effective if two aspects are present (Ogilvie & Stewart, 2010; Qing, Zhengchuan, Tamara, & Hong, 2011). First, individuals must believe their misconduct is likely to be discovered (Ogilvie & Stewart, 2010). Secondly, punishment must exceed the potential reward for misconduct violations (Qing et al., 2011).

Ogilvie and Stewart (2010) believed that the likelihood of discovery is the greatest deterrent. The U.S. government conducts contract audits and uses contractor self-reporting to discover misconduct (OSBP, 2011). Self-reporting is the U.S. government's solution for detecting misconduct that otherwise may go undetected (Bhojwani, 2012). Qing et al. (2011) stated that the voluntary disclosure of acts of misconduct is contrary to normal behavior and is therefore a questionable method for discovering misconduct. Self-reporting influences the deferment of punishment for voluntarily reporting misconduct (Coleman, 2011). Furthermore, Coleman (2011) believed that if the punishment for self-reporting were the same as for outside discovery, then concealing acts of misconduct are

more likely than self-reporting misconduct. The U.S. government's emphasis on self-reporting runs counter to the belief that increasing the probability of detection is the most important factor for reducing unethical conduct (Ogilvie & Stewart, 2010).

Ogilvie and Stewart (2010) believed that as penalty severity increased, so does the deterrent effect. Furthermore, Qing et al. (2011) found that deterrence is rendered ineffective when an individual perceives the benefit of an unethical behavior was greater than the probability of punishment. The U.S. government's implementation of the prescribed penalties for misconduct is subjective and may not be effective (FAR, 2014; OSBP, 2011).

Understanding the use and effectiveness of deterrence theory in areas outside of the business world is important. Reviewing academic literature in other areas such as speed limits (Ritchey & Nicholson-Crotty, 2011), corporate antitrust actions (Lande & Davis, 2011), nuclear deterrence or mutually assured destruction (O'Neil, 2011), and information security policies (Chen, Ramamurthy, & Wen, 2012) showed how deterrence theory effectiveness can be determined within the federal government contracting industry. Understanding the effectiveness of deterrence in general helped determine if the government's actions to reduce misconduct and the change to the FAR in 2009 are deterring misconduct. Qing et al. (2011) believed that the perceived cost and benefit of a behavior influences an individual's behavioral decision. Ogilvie and Stewart (2010) found that perceived cost and benefit affected the propensity for unethical behavior. Determining the deterrent effect of the change to the FAR in 2009 was necessary before

considering why the change was or was not effective. My quantitative study indicated the effectiveness of the change to the FAR in 2009 in deterring misconduct.

Definition of Terms

The following definitions were key terms used within the study.

Change to the FAR in 2009: In November 2008, members of the FAR Council issued a change to the FAR for fiscal year 2009 (FAR, 2008). The change included mandatory ethics awareness and compliance programs, mandatory self-reporting of contractor misconduct, mandatory written code of business ethics and conduct, mandatory ethics awareness and compliance employee training, and potential debarment or suspension for noncompliance to the changes (Federal Acquisition Regulation, 2008).

Contracting officer representative (COR): CORs are U.S. government contracting officials that have received training in contract administration and are responsible for contract administration and contractor oversight (Karstrom, 2013).

Contracting officer technical representative (COTR): COTRs are U.S. government officials responsible for performing contractor oversight on technical contracts (Karstrom, 2013). Karstrom (2013) stated that COTRs might not have contract administrative training.

Contractor Performance Assessment Reporting System (CPARS): Warnock (2012) defined CPARS as the U.S. government's database designed to store the procuring contracting officer's report on contractor performance.

Corporate ethics programs: The FAR (2014) defined corporate ethics programs as mandatory structured corporate programs designed to foster ethical awareness and

corporate compliance to ethical processes and procedures. Exact corporate ethics program requirements are listed in FAR part 32.203.1 and included ethical behavior standards, procedures, communications plans, training, compliance, internal control system, periodic reviews, and reporting procedures (FAR, 2014).

Debarment: Tillipman (2013) defined debarment as the exclusion of a federal contractor from any contract or subcontract award for a period not exceeding 3 years. Debarment action applies to an individual, corporate affiliate, entire government contracting corporation, or any combination thereof (Tillipman, 2013).

Federal Acquisition Regulation (FAR): The FAR is the primary regulatory document governing U.S. government agency contracting and acquisition efforts (FAR, 2014).

Federal Awardee Performance and Integrity Information System (FAPIIS): Willard (2013) stated that FAPIIS is the publically available, U.S. government database that stores contractor performance records and reports. The FAPIIS database combines information from CPARS and SAM (Willard, 2013).

Federal government contractor: A federal government contractor is a business entity that is registered as an active participant in the Central Contractor Registry (FAR, 2014).

Federal Procurement Data System (FPDS): FPDS is the U.S. government's procurement award repository that provides public access to federal procurement spending information (FPDS, 2014)

Government Accountability Office (GAO): The GAO is the U.S. government agency that provides oversight on all federal government spending (Healthcare Financial Management Association [HFM], 2011).

Government penalties: Government penalties are actions the U.S. government imposes upon a federal government contractor that committed misconduct. Government penalties include exclusion from contract bid, fines and financial penalties, restitution, debarment, and prosecution of individual violators and corporate executives (FAR, 2014).

Misconduct: Misconduct is an intentional or unintentional violation of FAR part 52.203-13, the Contractor Code of Business Ethics and Conduct, or other applicable contract clauses (FAR, 2014). The FAR (2014) provides a list of misconduct violations including fraud, improper pricing, human resource violations, and other legal or ethical violations as defined by the FAR and applicable contract clauses.

Office of Federal Contract Compliance Programs (OFCCP): Lessack (2013) stated that the OFCCP provides oversight on federal government contractor performance and contract compliance.

Project on Government Oversight (POGO): POGO is an independent organization that investigates government contractor misconduct and maintains a contractor misconduct database on the top 100 government contractors (Warnock, 2012).

System for Award Management (SAM): SAM is the U.S. government's centralized contractor registry where all federal government contractors must register and maintain an active status to participate in contract awards (FAR, 2014).

Top 100 federal government contractors: The top 100 federal government contractors are the top 100 federal government contractors listed by contract obligation dollars for a given fiscal year (FPDS, 2014).

Assumptions, Limitations, and Delimitations

Assumptions

The following assumptions were considered true for this study. I researched multiple sources to ensure the accuracy of all archived and statistical data. Government statistical information and the legal documentation available were accurate, complete, and factual. The archived data, academic sources, and peer-reviewed references were accurate, unbiased, and factual.

Limitations

The study's considered limitations included the statistical reliance on the U.S. government contracting industry's self-reporting procedures and the reliance on public documentation regarding information on sealed legal settlements and classified contract vehicle violations. Quantifying previous research and studies was a potential limitation. Replication of information and findings due to similarities in secondary research materials, topics, participants, and organizations was an additional limitation.

The ex post facto nature of causal-comparative design was a limitation (Brewer & Kuhn, 2010). Researchers using an ex post facto design cannot control the variables because variable manipulation has already occurred (Brewer & Kuhn, 2010). Brewer and Kuhn (2010) stated that the inability to conduct random sampling is a limitation of causal-comparative design.

Delimitations

I collected data from FPDS, SAM, FAPIIS, and POGO. Collecting and comparing data from multiple sources reduced the limitation of reliance on government contractor self-reporting and publically available documentation. Careful review of secondary data when collecting data and compiling statistical information decreased the risk of duplicating data collected from similar sources. The delimitation for random sampling is purposive sampling (Brewer & Kuhn, 2010). Purposive sampling is the intentional selection of a homogeneous subset from a population (Huck, Beavers, & Esquivel, 2010). I selected the top 100 federal government contractors from the 450,000 registered and active government contractors (FPDS, 2014).

I conducted focused research and allowed for the concentrated study of statistical information associated with the top 100 federal government contractors. I controlled personal bias by using proven research tools, trusted materials, and approved methods to collect information. I used SPSS to perform data collation and analysis.

Significance of the Study

Reduction of Gaps

Available academic literature indicated that regulations and penalties designed to deter unethical or illegal behavior had mixed results. Lande and Davis (2011) found that Department of Justice anticartel policies had no effect upon antitrust violations. O'Neil (2011) discussed the positive effect of deterrence in the nuclear arms race and Cold War between the United States and the Soviet Union. Government-imposed self-reporting requirements and costly penalties have not improved corporate ethical behavior in the

pharmaceutical industry (Coleman, 2011). Lande and Davis found that governmental deterrent actions led to reductions in unethical or illegal behavior within private industry. The OSBP (2011) listed government programs, policies, and procedures for deterring misconduct within the federal government contracting industry, yet information is unavailable on the effectiveness of these deterrent efforts.

Findings from the doctoral study provided researchers, academicians, and U.S. government leaders information on the effectiveness of deterrent measures and their influence on corporate ethical behavior. The findings provided the federal government contracting industry with information to aid in reducing or deterring misconduct. The findings informed leaders throughout the federal government contracting industry on the trends in contractor misconduct and government oversight.

Implications for Social Change

This quantitative, nonexperimental, retrospective, causal-comparative study involved understanding the effect of the change to the FAR in 2009 on reported government contractor misconduct and on government contractor ethics business processes. The U.S. government mandates corporate ethics programs to reduce instances of misconduct (FAR, 2014). Reducing instances of misconduct may improve ethical behavior and responsibility throughout the organization (DeCremer et al., 2010). Yolles and Sawagvudcharee (2010) believed that misconduct stems from placing private gain over all other interests within an organization. The corporate ethics program's purpose is to affect all corporate stakeholders positively, which include employees, U.S. government customers, and the American people (DeCremer et al., 2010).

Understanding the effectiveness of the change to the FAR in 2009 on reducing instances of government contractor misconduct helps the U.S. government determine if further action is required. Furthermore, understanding the effect of the change to the FAR in 2009 on government contractor ethics business processes helps government contractors determine if further change is needed. Instances of misconduct are found throughout an organization and not confined to a single area (Cragg, Arnold, & Muchlinski, 2012). Reducing instances of government contractor misconduct increases the probability of reducing unethical conduct throughout an organization and benefit the corporate stakeholders (DeCremer et al., 2010).

A Review of the Professional and Academic Literature

I conducted a literature review to further understand the history of government contracting, government contracting misconduct, and the deterrent steps the U.S. government took to reduce contractor misconduct. I searched university provided electronic databases. The electronic databases I primarily used were Business Source Complete, ABI/INFORM Complete, and Military and Government Collection. The keywords used for the search on contractor misconduct included *contract violations*, *contractor misconduct*, *government contractor*, *ethics violations*, and *contractor ethics*. I reviewed 70 articles from 41 journals. Furthermore, I reviewed archived information on two trusted government websites.

Through my review, I found that decreasing the expense of government was a global concern (Herbert & Rothwell, 2013). The business of government never declines thus creating a need to find other ways to reduce costs (Terman & Yang, 2010).

Government contracting fills the cost savings need through reduced government size. The U.S. government employs federal government contractors to reduce costs and create efficiencies (Hansson & Holmgren, 2011). Contracting governmental services cost less than paying government employees in those same roles (Kilbride, 2010). Employing contractors enables the government to reduce costs and increase efficiencies through force reduction and streamlining of business processes (Herbert & Rothwell, 2013). Cost savings are a result of contracting services for shorter terms and eliminating the costs of missed time and long-term cost of retirement pensions (Parker, 2010). Business efficiencies result from federal contractors functioning in a dynamic business environment where government organizations function in a bureaucratic environment (Herbert & Rothwell, 2013).

Government Contracting

Reducing the cost of government services is not a new concept. George Washington employed contractors for services and support during the Revolutionary War (Jenks, 2010). Jenks (2010) believed the U.S. government began employing contractors to meet requirements; however, reasoning shifted to employing contractors for increased efficiency and cost effectiveness. Government contracting continued and increased throughout U.S. history (Kaen, 2011). Kaen (2011) found that DuPont increased corporate profits by 990% during a 3-year period in World War I. The U.S. government spent over \$175 billion in government contracts from 1940 to 1944 (Kaen, 2011). The top 100 contractors were awarded the majority contracts with \$35 billion awarded to the top five contractors (Kaen, 2011). Kaen determined that the increase in contracting resulted

in increased contractor profits of 1500% from 1939 to 1944. Increased contractor profits led Congress to investigate 6,900 federal contractors (Kaen, 2011).

Government contractor critics suggested that the higher profit margins of contractors were due to unethical business practices and not because of lower capital investments and lower overhead costs (Wang & San Miguel, 2012). Business experts promoted increased contracting during the 1980s and 1990s to improve government efficiency and reduce government spending (Terman & Yang, 2010). Jenks (2010) believed that increased contracting led to problems measuring efficiency due to the government's inability to determine the number of contractors deployed to support Iraq and Afghanistan. Dickinson (2013) found that the contractor to troop ratio in Afghanistan and Iraq was approximately 1-to-1. U.S. government officials believed the number of contractors exceeded the number of U.S. military members in the Iraqi Theater (Jenks, 2010).

Government contracting has continued increasing in the United States (Dickinson, 2013). Hayden et al. (2010) found that nine of the top 10 U.S. business conglomerates were government-contracting organizations. The conglomerates have operated businesses throughout the United States and wielded significant political influence down to congressional districts (Hayden et al., 2010). Hayden et al. believed the government contracting industry's political influence has increased dramatically in the last 50 years.

The industry's influence is seen in the increased contract spending over the past 15 years to a total of over \$560 billion annually (Amey, 2012). Mori and Doni (2010) found that government contracting accounted for 20% of the U.S. gross domestic product

(GDP). Mori and Doni believed that job creation is a byproduct of America's dependence upon government contracting. U.S. government contracting companies provided millions of jobs (Sonn & Gebreselassie, 2010). Sonn and Gebreselassie (2010) found that government contractor jobs increased by 43% between 2000 and 2006.

The decline in government provided services caused the U.S. government's increased reliance on contracting (Knott, 2011). Moreover, government provided services, such as interrogation and force protection, transitioned to government contractors in 2001 (Jenks, 2010). Military contractors performed support roles in wartime that allow the military to focus on combat operations (Kilbride, 2010). Karstrom (2013) believed that contractors coexist where military presence is required. The U.S. government turned to government contractors for other services such as human resources (HR), finance and accounting, equipment repair and maintenance, and logistical support (Herbert & Rothwell, 2013).

Howlett and Migone (2013) found government services contracting growth beyond normal services to policy-making and organizational management activities. Krishnan (2011) stated that the U.S. government has historically employed government contractors in intelligence operations. The use of contractors in intelligence expanded between the end of the Cold War and the late 1990s to approach 70% of the 2009 Intelligence budget. Moreover, the U.S. government has spent approximately \$50 billion annually for contracted services related to intelligence (Krishnan, 2011).

The U.S. government's reliance on contractors has been because of a desire for faster response, innovative thinking, accomplishing targeted objectives, precision skill

sets, efficiencies, and cost savings (Krishnan, 2012; Parker 2010). This reliance was due to a desire to promote economic prosperity (Parker, 2010). However, the result was the U.S. government's reliance on contractors to perform governmental functions and made the government susceptible to increased political costs, legal complications, and instances of contractor misconduct (Demessie, 2012).

Demessie (2012) stated that government officials contradict themselves in contracting. Government officials created rules and regulations to decrease misconduct, yet they created rules and regulations that foster a business atmosphere that increases the propensity for misconduct (Demessie, 2012). Congress determined the federal government contracting industry practiced widespread fraud in 2007 (Titolo, 2011). Maser and Thompson (2011) stated the government contracting process is rife with misconduct opportunities. Clarke (2012) found that contractors believed the bidding process was corrupt; however, the contractors did not believe that employees within their own organization behave unethically.

Hayden et al. (2010) stated that government contracting continued to increase despite widespread fraud, corruption, waste, and nonperformance. Lewis and Bajari (2011) determined that highway construction contractors cost the state of California 1.2 billion annually due to failure to meet contract requirements. The need to deter contractor misconduct and maximize the benefit of U.S. government contracting for services led to increased laws, regulations, and government oversight programs (Roberts, 2010).

Government Contracting Misconduct

The growth of U.S. government contract services has increased the opportunities for contractor misconduct (Roberts, 2010). The U.S Government uses contracting to reduce cost; however, federal contractors operate with the opposite mindset of increasing corporate profitability (Cordery et al., 2011). Corporations operate on a for-profit basis and make decisions accordingly (Olusegun et al., 2011). Olusegun et al. (2011) believed the desire for maximum profit was the leading cause of corporate misconduct. Cordery et al. (2011) found that government contractors focused on solutions for government problems that maximized their profits and not necessarily on the government's priorities. Kean (2011) produced historical evidence of corporate greed through the 1500% increase in profits during WWII. Cordery et al. found that government contracting for healthcare services has not delivered on the promise of reduced cost but increased cost by 60%. The profitability gap between the government contracting industry and similar nongovernment contracting industries increased since 1992 (Wang & San Miguel, 2012).

Knott (2011) believed contractor misconduct is derived from the U.S. government structure. The U.S. functions as a republic and creates opportunities for misconduct (Knott, 2011). Wang and San Miguel (2012) found that top government contractors exercised political influence and a strong bargaining position to create opportunities for their companies. Corporate influence is possible because the U.S. political system allows contractors to employ lobbyists to influence the political system (Knott, 2011). Knott believed that lobbyists used their influence to increase contractor profitability while reducing the risk of enforcement for contractual misconduct. Howlett and Migone (2013)

believed the federal government contracting industry's ability to shape government policy invites misconduct.

The misconduct environment has included a variety of opportunities (Knott, 2011). Dorey et al. (2012) found that improper cost estimating in 2009 resulted in a doubling of the actual costs for procurements. Kean (2011) determined that contractors used creative accounting practices to mask increased corporate profits during World War II. Hayden et al. (2010) discovered that government contractors formed alliances to reduce competition and increase corporate profits. Rogers (2010) believed the root of the problem was that government-contracting companies weigh the costs of compliance against the penalties for noncompliance and make the decision that creates the most profit.

The U.S. government has recognized the misconduct atmosphere exists and has taken steps to mitigate misconduct (Bhojwani, 2012). Bhojwani (2012) stated that the U.S. government instituted self-reporting to deter instances of misconduct. The mitigation steps have been ineffective because government lacks the ability to collect data, perform analysis, and report contractor performance in a shared environment (Bradshaw & Su, 2013). Bradshaw and Su (2013) believed the government has not emphasized monitoring performance but instead focused on establishing ethical contracting standards. Rogers (2010) believed the government's focus was misguided. The government may require corporations to acknowledge ethical standards; however, a corporation's ethical change emanates from within (Rogers, 2010). Rogers believed that the government should monitor behavior while creating the impetus for change.

Amirkhanyan, Kim, and Lambright (2010) believed even Roger's ideas have not changed the environment because, despite the level of government involvement, contractor performance will not change. Influencing change within any organization or industry begins with understanding the different parts of the problem (Bell & Barkhuizen, 2011).

Contractor Misconduct Influencers

Government contractor misconduct has existed since government contracting began (Kean, 2011). Kean (2011) believed that understanding where misconduct originates is important to deterring future misconduct. Rogers (2010) found that the government contracting process promoted contractor misconduct. Sonn and Gebreselassie (2010) believed that government contractors condone misconduct to increase profitability. Roberts stated that the U.S. government enables contractor misconduct.

Contracting process influences misconduct. Understanding the different parts of the government contracting misconduct atmosphere begins with understanding the different types of contractors (Wang & San Miguel, 2012). Wang and San Miguel (2012) determined that corporate ethics and corporate profits do not differ among diverse business segments and various sized corporation. Removing segment and size from the equation narrows the areas to create emphasis for change (Wang & San Miguel, 2012).

The federal government contracting industry consists of both for-profit and nonprofit companies. Members of the public believe that nonprofits, or not-for-profit corporations, are trustworthy and less prone to misconduct than for-profit companies (Amirkhanyan, 2010). The belief that nonprofits are more trustworthy than for-profits

created an unbalanced government oversight program that handles for-profit and nonprofit corporations differently (Amirkhanyan, 2010). Amirkhanyan (2010) found that the public's trust in nonprofits allows for a decreased government emphasis on performing contract oversight. The trust appears misplaced because nonprofit contractors self-report misconduct at a 25% higher rate than for-profit companies (Amirkhanyan, 2010). There are focused efforts on oversight of for-profits while nonprofits are not a priority unless there is reason to suspect misconduct (Amirkhanyan, 2010).

Government contracts range from purchases of less than \$3,000 to contracts worth billions of dollars (Rogers, 2010). Less complex contracts require lower degrees of specialization, which in turn involves less government involvement and decreased government oversight (Amirkhanyan, 2010). Less government oversight increases opportunities for contractor misconduct to remain undetected and undeterred (Rogers, 2010).

Complex contracts require different contractors to team together to meet the government's requirement (Amirkhanyan, 2010). Amirkhanyan (2010) said the government requires a bid response that consists of a prime contractor and a team of subcontractors. Prime contractors win contract awards based upon their teaming approach (Parker, 2010). Parker (2010) found that prime contractors take one of two actions once awarded a contract. Prime contractors may continue with the proposed teaming and perform tasks they are capable of while subcontracting selected services to other contractors as indicated in the proposal (Parker, 2010). However, prime contractors may choose to end teaming relationships to increase profitability (Amirkhanyan, 2010).

Kidalov (2013) stated that prime contractors formed initial alliances for competition then severed the teaming relationship once awarded a contract. Severing subcontracts after a contract award complies with the FAR; however, severing fails to meet the contracting program's intent (Kidalov, 2013). Severing teaming agreements counters the government's intent to provide work to specialized subcontractors (Parker, 2010).

The prime/sub relationship makes contract oversight difficult (Rogers, 2010). The U.S. government requires prime contractors to monitor and report subcontractor performance (Kidalov, 2013). Moreover, Kidalov (2013) stated that prime contractors are responsible for subcontractor performance and subject to penalties for subcontractor misconduct.

Subcontracting increases the government's exposure to misconduct by creating an additional oversight layer (Kidalov, 2013). Kidalov (2013) found instances of misconduct exist between a prime contractor and subcontractors, which included high overhead charges, improper pricing, improper payment, and improper distribution of work. Prime contractors may subcontract to individuals instead of companies to minimize their risk (Calvasina, Calvasina, & Calvasina, 2011). Moreover, Calvasina et al. (2010) believed that prime contractors subcontracted to individuals to reduce corporate overhead, create additional profits, and distance the corporation from employee misconduct liability.

The types of contractor business models and teaming relationships are not the only segments of the government-contracting environment that invite misconduct (Mori & Doni, 2010). The contract bidding, contractor selection, and other contracting

processes provide opportunities for misconduct (Bradshaw & Su, 2013; Mori & Doni, 2010). Contractor misconduct is not limited to awarded contracts but is present throughout the proposal and bidding processes (Mori & Doni, 2010).

The government may inadvertently promote misconduct early in the contract bid process through the contract vehicle selection (Amey, 2012). Contract bundling, the combining of multiple contract requirements into one contract, exposes the government to increased risk of fraud, waste, and abuse (Demessie, 2012; Dorey et al., 2012). Demessie (2012) found that contract stacking and omnibus contracts create a limited contractor pool that increases the propensity for profit gouging due to intercompany agreements. Dorey et al. (2012) discovered that government contracts include financial incentives designed to reduce government risk by promoting the meeting of cost estimates and timelines. However, this tactic is not effective because contractors build in overestimates of time and expenses in a bid to ensure they can meet the requirements for incentives (Dorey et al, 2012). Contractors violate contract law when employees work off-book hours to meet timelines and expenses (Dorey et al., 2012). The government's practice of short or limited response for proposal (RFP) times, as low as 5-days, limits the pool for respondents and increases the opportunities for response errors that lead contractor misconduct to hide the errors (Demessie, 2012).

Jensen (2010) believed the government contract bidding process is difficult to navigate and led to contractor misunderstanding, which increased contract protests, contract violations, and accusations of misconduct. Problems related to the complex bidding process and short RFP times increased when the U.S. government implemented

the electronic bidding process (Elmorshidy, 2012). Terman and Yang (2010) stated that government risk reduction efforts increased contractor misconduct. Contractors emphasize maximizing profits and reducing risk when replying to RFPs, which increases the government's risk and cost (Amirkhanyan, 2010; Terman & Yang, 2010).

Government contractors influence misconduct. The reasons for contractor misconduct extend past the contracting process (Sonn & Gebreselassie, 2010). Deterring contractor misconduct requires the U.S. government create, impose, and enforce effective measures against misconduct (Roberts, 2010). Understanding the atmosphere of misconduct must include a review of how the federal government contracting industry and the U.S. government inadvertently promoted misconduct (Roberts, 2010).

The SAM lists over 450,000 active registrants in the federal government contracting industry database (FPDS, 2014). All contractors are required to abide by the standards of ethical conduct outlined in the FAR (Roberts, 2010). Sonn and Gebreselassie (2010) believed that contractor misconduct would continue to exist if all contractors performed within the specifications outlined in certain government contracts. Calvasina (2011) discovered that contractors continued to operate within the government's standards yet deceived government organizations by misclassifying employees, resulting in billions of dollars in lost tax revenue. Sonn and Gebreselassie found that government contractors violated employee pay and benefits regulations by paying less than the required living wage.

Larger contracting organizations may have complex organizational structures designed to render identification of affiliates and subordinates difficult to differentiate

from subcontracting requirements (Thomas, 2012). Contractors provided incentives for employees to develop personal relationships with influential government employees to solicit unpublished information on contracting efforts (Roberts, 2010). Roberts (2010) found that contractors used personal relationships to give government employees gifts, which circumvented the FAR's gifting prohibition.

The U.S. government attempted to decrease costs through increased competition; however, increased contractor competition did not improve contractor performance (Terman & Yang, 2010). Terman and Yang (2010) found that contractors decreased cost estimates to receive contract awards then increased costs once awarded the contract; thereby decreasing efficiency and increasing costs beyond projections. Thomas (2012) described contractor deception that included companies with reputations for misconduct that renamed and rebranded the organization; thereby, masking their negative history. Uhoka (2013) believed that continued U.S. government attempts to influence contractor ethical behavior are futile and that industry and corporate norms alone determine corporate ethical behavior.

The U.S. government influences misconduct. Roberts (2010) argued that while the U.S. government attempts to reduce misconduct, the government also fosters contractor misconduct. Roberts found that senior government officials and military officers transition to government contractor executive positions. Contractor incestuous hiring practices skirt the FAR rules regarding the hiring of government employees and create a propensity for operating outside ethical boundaries (Roberts, 2010). The FAR allows for circumventing procurement regulations if extenuating circumstances are met

(Hansson & Holmgren, 2011). Hansson and Holmgren (2011) believed circumventing the FAR minimized cost savings and efficiencies, while increasing the potential for contracting misconduct.

Restrictive or noncompetitive contracting actions increase the government's risk for misconduct (Sonn & Gebreselassie, 2010). The U.S. government historically awards 20% of all contract efforts to the top five government contractors (Warnock, 2012). Reliance on small numbers of contractors makes it difficult to enforce responsibility standards (Hansson & Holmgren, 2011). Dependence on a select few coupled with familiarity created an atmosphere where government procurement agents show favoritism and give preferential treatment to select contractors (Hansson & Holmgren, 2011). Presidential administrations increase influence and power of the government contracting industry by encouraging consolidation and mergers of contractors and further limiting choices (Hayden et al., 2010).

Government officials influence contract awards beyond limiting competition (Lewis & Bajari, 2011). The U.S. government contributed to misconduct by selecting lower-cost bids (Sonn & Gebreselassie, 2010). The government transitioned from the low-bid strategy after determining that awarding to the lowest-bidder contributed to the problem of contractor misconduct (Elyamany & Abdelrahman, 2010). Lewis and Bajari (2011) found the U.S. government changed the awardee selection criteria from lowest bidder to the lowest qualified bidder; however, the lowest qualified bidder failed to improve contractor performance (Elyamany & Abdelrahman, 2010).

The U.S. government transitioned to awarding contracts on the best value criteria, which assigns values to criteria including price, technical approach, management plan, and past performance (Elyamany & Abdelrahman, 2010). Elyamany and Abdelrahman (2010) believed the best-value selection method discriminated against new and smaller firms and fostered contractor misconduct. Bradshaw and Su (2013) found that government procurement placed less emphasis upon a contractor's past performance and more on a promise of performance. Procurement officials viewed past performance as a pass-or-fail and not a graduated scale (Bradshaw & Su, 2013).

The contract award process may foster misconduct; however, some contract vehicles require contractor misconduct (Krishnan, 2011). Moreover, the U.S. government condones and contributes to government contractor misconduct (Krishnan, 2011). The U.S. government knowingly contracts services in an effort to undermine accountability for unethical and illegal techniques and tactics involved in intelligence gathering (Krishnan, 2011). Moreover, Krishnan (2011) stated that government requested that contractors create false reports to justify a desired outcome.

The U.S. government encouraged unethical behavior in companies by requesting contractors to perform illegal wiretapping and electronic surveillance services (Greengard, 2010). The U.S. government's intelligence community (IC) promotes corruption, inefficiency, and unethical practices, while shielding the contractor from federal oversight and control (Greengard, 2010). Greengard (2010) determined that the National Security Agency (NSA) accomplished the monitoring of U.S. citizens through

contracts with U.S. telecommunication corporations that provided the government with illegal access to private information.

The U.S. government promoted contractor misconduct by condoning unethical behaviors (Gomez del Prado, 2011). Moreover, the U.S. government employed private security contractors to distance the administration from hazardous policing and peacekeeping situations (Gomez del Prado, 2011). Gomez del Prado (2011) found that the security firms have committed violent and deadly acts resulting in poor cultural relations and politically embarrassing situation for the U.S. government.

Private security firms have changed since 2001 by shifting from security guard services to a mercenary role (Gomez del Prado, 2011). The U.S. government's spending on private security contracts has increased with the shifting in roles (Gomez del Prado, 2011). Gomez del Prado (2011) stated that the cost of security contractor misconduct extended past money to lives and international goodwill. Private security contractors were for-profit businesses that seek maximum profitability, which caused contractor misconduct ranging from unauthorized use of deadly force, to acts of fraud, and falsifying documents (Gomez del Prado, 2011).

The U.S. government's inability to correct misconduct may be as harmful as condoning misconduct (Mayrell, 2012). The U.S. government provides no defined requirement for what constitutes an acceptable ethics program, and does not require the contractor to submit the program for approval (Roberts, 2010). The lack of defined requirements and contract vehicle complexity may render the government incapable of litigating cases of contractor misconduct, thereby making settlement the best solution to

recover as much lost revenue as possible (Mayrell, 2012). Furthermore, the U.S. government may choose contract expiration over termination because the burden of proof extends beyond contractor performance and includes the ability to improve (Loulakis, 2010). Warnock (2012) believed political agendas, biased enforcement of contracting rules and regulations, and poor oversight compromise the U.S. government's ability to influence contractor misconduct.

Deterring Government Contractor Misconduct

Paternoster (2010) stated that deterrence theory is preventing illegal or unethical acts through the threat of penalties for violations. O'Neil (2011) credited the U.S. government's nuclear deterrence policy of mutual assured destruction for preventing war during the late 20th century. The nuclear deterrence policy was effective because the Soviet Union believed the U.S. government watched for violations, could affect mutual destruction, and would enforce the policy (O'Neil, 2011).

In government contracting, the U.S. government seeks to create an ethical contracting atmosphere where contracting officials and contractors follow the rules and strive to decrease costs and increase efficiency (Rogers, 2010). The U.S. government creates rules, regulations, and guidance to establish ethical contracting business practices (Rogers, 2010). Rogers (2010) believed that government contractor misconduct continues despite the U.S. government's deterrent actions. Best (2013) believed that effective misconduct deterrent programs consist of prevention, detection, and prosecution. Furthermore, compromising any of the three elements will result in an ineffective government contractor misconduct deterrence program (Best, 2013).

The U.S. government's misconduct deterrence program includes rules and regulations governing conduct, oversight in the execution of the contracted requirements, and punishment for violations (Amirkhanyan et al., 2010). Problems exist with the U.S. government's current approach because establishing ethical rules and regulations does not guarantee change in unethical behavior (Roberts, 2010). Furthermore, Roberts (2010) stated that misconduct would continue to increase without a stringent government oversight program. The U.S. government's methods for identifying contractor misconduct are ineffective, and determining responsible contractor behavior is difficult (Roberts, 2010; Warnock, 2012). Enforcing misconduct violations is problematic and fosters a legal environment where settlement and compromise are preferred (Young, 2010).

Government contractor oversight. Contractor oversight programs are vital in the effort to deter misconduct (Thomas, 2012). Dickinson (2013) argued that oversight is the foundation for accountability and prosecutions, and therefore a vital component of deterrence. Oversight programs may prevent and detect misconduct, while informing those responsible for enforcing policy (Best, 2013). Contractor oversight is one of the government's essential elements in deterring misconduct (Amirkhanyan et al., 2010).

The U.S. government performs contractor oversight in multiple ways. The government appoints officials to provide contractor oversight (Butts, 2010). The U.S. government outsources oversight to contractors and requires contractors to self-perform oversight and report violations (Roberts, 2010). Dickinson (2013) believed that contractor provided oversight is ineffective due to improper evidence gathering and the inability to

prosecute misconduct. Observed and reported acts of misconduct inform the prosecutorial phase of a deterrence program (Dickinson, 2013).

Effective deterrence programs require that individuals believe others will discover their misconduct (Ogilvie & Stewart, 2010). Ritchey and Nicholson-Crotty (2011) found that the effectiveness of government-imposed speed limits to reduce speeding increased as the number of highway patrol personnel increased. Moreover, the perception was that the probability of detection affected behavior (Ritchey & Nicholson-Crotty, 2011).

Best (2013) stated that an effective oversight program is essential for deterring government contractor misconduct. However, Sonn and Gebreselassie (2010) believed the government does a poor job of contractor oversight. Kilbride (2010) believed the U.S. government is capable of improving contractor oversight through increased reviews of contractors and contractor operations, which would reduce threat of contractor misconduct. Terman and Yang (2010) found that the government seldom meets their contract monitoring responsibilities; thereby increasing the likelihood of contractor misconduct. Kilbride linked the U.S. government's shortfalls in oversight to funding that did not keep pace with contract spending. Furthermore, money saved through less funding for oversight programs is lost through acts of contractor misconduct (Kilbride, 2010).

Government programs and acquisition regulations make government contractor oversight operations difficult (Amey, 2012). The government's self-imposed time limit on contract audits is an example of policies that increased the government's risk to contractor misconduct (Wegryn & Killian, 2010). Amirkhanyan et al. (2010) believed the

complexity of the contracting relationship determines the amount of oversight the government maintains.

Mori and Doni (2010) believed the increasing complexity of government contract construction increases the difficulty of monitoring contractor performance and reliance on contractor self-reporting. Specialized contracts involve stronger governmental relationships with the contractor and require increased oversight; however, lower degrees of specialization result in decreased government oversight (Amirkhanyan et al., 2010). Decreased government oversight, coupled with lack of institutional oversight and discipline, creates the potential for contractor misconduct to go undetected and unchecked (Amey, 2012). Deciding how much oversight, and how the oversight will be conducted, is determined by U.S. government contracting officials (Butts, 2010).

Contracting officials may determine the particulars of contract oversight programs but contracting officer representatives (COR) or contracting officer technical representatives (COTR) perform the oversight (Butts, 2010). Contracting officials receive training in contract law, contract administration, and contractor oversight (Karstrom, 2013). Government overseers are technically competent, versed in the technical aspects of a contract, and able to provide proper oversight (Karstrom, 2013).

Butts (2010), unlike Karstrom (2013), believed government overseers, such as the COR or COTR, are incapable of performing oversight. CORs are contract specialists not technically proficient enough to provide proper oversight; COTRs, by contrast, are technically proficient yet not trained in contract administration (Butts, 2010). Improperly trained contractors and an improper oversight program led to contractor misconduct in

human rights abuses in the Abu Ghraib military prison in 2004 (Krishnan, 2011). The oversight ability gaps increase because CORs and COTRs have legal authority over the contract yet lack legal supervisory authority over contractors (Krishnan, 2011).

Government supervisors should notify CORs of suspected contractor misconduct (Judd, 2012). CORs should notify the government contractor executives, which have legal authority over the individual contractor (Butts, 2010; Judd, 2012). Butts (2010) believed the relationships between CORs, COTRs, and contractors are dysfunctional due to serving different shareholders. The CORs and COTRs serve the U.S. government and the American taxpayers, while contractors serve the corporation and corporate shareholders (Butts, 2010).

The U.S. government implemented electronic record keeping for improved oversight of contractor performance but the system is only as good as the information it contains (Elmorshidy, 2012). Government organizations seldom share contractor information despite the emphasis on centralized reporting of contractor performance (Terman & Yang, 2010). Contracting officials' increased workloads result in lax recordkeeping and diminished effectiveness of the electronic system (Elmorshidy, 2012).

Issues other than technical ability and workload negatively affect the U.S. government's oversight program (Boerner, 2011; Krishnan, 2011). The U.S. government contracts services to decrease costs and increase efficiency; however, inadequate oversight compromises these goals (Best, 2013; Roberts, 2010). The advanced technology and secrecy involved in intelligence collection makes government monitoring and oversight impossible (Krishnan, 2011). Moreover, Krishnan (2011) found the

government could not account for 25% of Department of Defense (DoD) spending.

Boerner (2011) discussed the failure of existing government oversight and prosecution initiatives involving medical contractors where two cases were prosecuted despite \$1 billion in improper payments.

The U.S. government expanded contractor oversight to include government involvement with authority beyond contracting officials, CORs, and COTRs (Elmorshidy, 2012). The Office of Federal Contract Compliance (OFCCP) oversees both prime contractor and subcontractor performance (Lessack, 2013). Lessack (2013) found the OFFCP's oversight included contract employee wages, corporate hiring practices, and the applicant interview process. The OFFCP issues a list of best practices and recommendations for contractor performance to avoid potential misconduct allegations (Lessack, 2013). Lessack found that the OFFCP cites instances of contractor misconduct; however, they recommend enforcement actions and do not prosecute misconduct.

The government relies on contractors to perform oversight on themselves and other contractors (Roberts, 2010; Young, 2012). The U.S. government has outsourced specialized contract oversight to government contractors (Young, 2012). Furthermore, Stegman (2010) found the government outsources the auditing of medical laboratory claims to increase efficiency. The FAR requires contractors to create ethics programs and corporate compliance positions to perform internal oversight (Roberts, 2010). Stegman believed that requiring corporate positions and programs is not enough because corporate compliance officers are not trained in auditing and incapable of monitoring compliance. Amirkhanyan et al. (2010) believed that despite the level of oversight, government

contractor misconduct would continue unabated. Moreover, increasing oversight does not guarantee reduced misconduct (Amirkhanyan et al., 2010).

U.S. government deterrent steps and programs. The U.S. government requires documented business ethics and conduct policies for contractors awarded contracts worth more than \$5 million (Roberts, 2010). Furthermore, the government requires all large contractors to have a functioning corporate ethics program (Roberts, 2010). Roberts (2010) stated that these programs and policies are implemented to reduce the costs associated with contractor misconduct.

The Government Accountability Office (GAO) attempted to improve contractor performance, reduce fraud, and deter instances of misconduct by strengthening and enforcing standards and regulations (Healthcare Financial Management Association [HFM], 2011). The U.S. government's handling of misconduct enforcement appears inconsistent (HFM, 2011; Tillipman, 2013). Government officials believed that contractors guilty of misconduct should be punished without regard for circumstances (Tillipman, 2013). However, government officials maintained that considering self-reporting, type of misconduct, and contractor viability survivability, are important during the deterrent prosecutorial process (Tillipman, 2013).

Government contracting officers are responsible for a contract's administration, modification, and termination (Judd, 2012). Moreover, the U.S. government provides contractors the ability to elevate a contracting officer's decision to an appellate body (Judd, 2012). Judd (2012) found that the U.S. government's own Court of Federal Claims (CFC) or Board of Contract Appeals (BCA) overruled contracting officer contract

terminations or nonrenewals. The CFC and BCA have standards for supporting punitive contracting actions. Judd believed the CFC's and BCA's standards promote seeking a compromise solution that is acceptable to both parties.

The compromise solutions appear sufficient; however, compromising rules, regulations, and prescribed punitive actions may reduce the desired deterrent effect (Best, 2013). Best (2013) illustrated this belief with an example of corporate deception and fraud. A large government contractor formed a joint venture with a Service Disabled Veteran Owned Small Business (SDVOSB) to win a SDVOSB set-aside contract award (Best, 2013). The FAR (2014) requires that an SDVOSB company receive over 50% of the tasks. In Best's example, the SDVOSB received less than 1% of the work. The contract termination was overturned and the BCA settled with the joint venture. The Veterans Administration has since reported that fraud and abuse of the SDVOSB program continues to be a major problem (Best, 2013). Best surmised that the legislative changes in verification, designed for making debarment or suspension easier, and for increasing misconduct penalties, were compromised by settlements.

The government provides legislative bodies outside of the CFC and CBA that work to determine contractor accountability (Loulakis & McLaughlin, 2013). Each legislative body uses unique parameters in determining accountability. The Armed Forces Board of Contract Appeals reviews all contractor appeals in cases of government penalties and takes performance, impact on the federal government, and impact on the contractor into consideration during deliberations (Loulakis, 2010). Members of the Civilian Board of Contract Appeals concluded that imposing penalties upon a contractor

must go beyond the individual act of misconduct or nonperformance and show the contractor did not act in good faith (Loulakis & McLaughlin, 2011).

The measure of *in good faith* is subjective and difficult to prove or disprove (Loulakis & McLaughlin, 2011). The U.S. Court of Federal Claims established that misconduct alone is not sufficient for sanctions against a federal contractor (Loulakis & McLaughlin, 2013). Loulakis and McLaughlin (2013) determined that intent to perform acts of misconduct must be present for the government to take action against a contractor.

Detractors in deterring contractor misconduct exist beyond compromise and settlement (Brown, 2010; Cea & Stempler, 2010). The government subsidizes legal challenges to contract deterrent actions (Brown, 2010). The FAR (2014) allows for government reimbursement to contractors for breach of contract lawsuits. Financial reimbursement is a win-win for the contractor (Brown, 2010). Brown (2010) found that contractors are authorized to receive government reimbursement for legal fees and settlement costs in cases of fraud against third parties. Protesting contract awards increased due to increased competition and favorable consideration for protesting expenses (Cea & Stempler, 2010). The U.S. government provides financial reimbursement for contractor employee-based lawsuit settlements (Brown, 2010). Furthermore, Brown found that the financial reimbursement for employee-based lawsuit settlements included the contractor's legal fees and settlement costs. The government's current reimbursement policies promote misconduct through subsidized legal expenses without admitting wrongdoing (Brown, 2010; Cea & Stempler, 2010).

Compromising government-imposed prosecutorial steps extends to holding contractors accountable for intent and action (Cea & Stempler, 2010; Dorey et al., 2012). Holding contractors accountable and responsible for providing what they promise, at the price at which they promise, promotes realistic cost estimates and reduces actual contracting costs (Dorey et al., 2012). The U.S. government seldom penalizes contractors for underestimating costs (Dorey et al., 2012). Dorey et al. (2012) stated that when contractors present added costs, the government may cancel the contract initiative, restart the contract bid process, or pay the added costs. Dorey et al. believed the three options present a loss of value regardless; therefore, the government requires weighing the cost against the timeline and viability of the initiative before deciding the next step.

The U.S. government does not allow contractors to lose money on a contract; at worst, contractors make no profit (FAR, 2014). The absence of contractor risk creates the incentive to underestimate the perceived cost and increase the estimate after beginning the work (Dorey et al., 2012). The Weapon Systems Acquisition Reform Act of 2009 requires that cost estimates be within 80% of actual costs; however, Dorey et al. (2012) believed that Congress's attempts to solve the cost estimate problem fail to address contractors that submit cost proposals.

Underestimated contract costs are a type of purposeful contractor practice designed to deceive the government and increase government contractor profits (Dorey et al., 2012). Contractor fraudulent practices, following contract award, include improper pricing and fraudulent billing practices (Martin, 2013). Fraudulent pricing strategies have a long history in government contracting (Martin, 2013).

The False Claims Act (FCA) is a Civil War era statute designed to hold government contractors accountable for fraud (Martin, 2013). Martin (2013) found that through enforcing the FCA, the U.S. government recouped an average of \$3 billion annually from 2009 to 2012. FCA-enforced settlements included government contractors Kellogg, Brown & Root (KBR), Honeywell International, and Armor Holdings (Martin, 2013). The FCA provides financial incentives for private parties to report contractor acts of misconduct by allocating a reward of up to 30% of any monies recovered (Roberts, 2010). The FCA's punitive actions extend beyond the government contracting company to the individual level (Martin, 2013). Martin stated that the FCA's individual punitive actions include contracting industry executive and employee fines, imprisonment, or both.

The legislative bodies of the CFC and BCA, as well as legislative reforms like the Weapons System Acquisition Reform Act or the FCA, are the U.S. government's attempts to deter contractor misconduct (Martin, 2013; Maser & Thompson, 2011; Titolo, 2011). The Competition in Contracting Act established the GAO's authority to decide all contract protests (Maser & Thompson, 2011). Protests can arise for a variety of reasons and include contractor misconduct during the contract bid or award phase (Maser & Thompson, 2011).

The Fraud Enforcement and Recovery Act of 2009 (FERA) empowered both private citizens and the U.S. government to each have a role in policing contractor behavior (Titolo, 2011). The courts interpreted how and when to apply FERA differently

(Titolo, 2011). However, Titolo (2011) found that, in 2009, private citizens' reports led to \$2.4 billion in recovered contractor misconduct assets.

In 2009, the Close the Contractor Fraud Loophole Act required federal government contractors began to self-report misconduct (Warnock, 2012). Additionally, in 2009, Congress established the Federal Awardee Performance and Integrity Information System (FAPIS) as a component of The Duncan Hunter National Defense Authorization Act of 2009 (Nackman et al., 2011). FAPIS provides the government equivalent to POGO's Federal Contractor Misconduct Database (FCMD) that began in 2002 (Stanley, 2012). FAPIS began as a government-only site in 2009; however, in 2010, Congress required including contractor self-reporting and public access (Stanley, 2012). FAPIS assists contracting officials in choosing ethical contractors by providing access to a consolidated contractor performance database (Willard, 2013). However, the lack of detailed analysis of the information provided by FAPIS renders the system useless (Willard, 2013).

The Close the Contractor Fraud Loophole Act caused members of the FAR Council to change the Federal Acquisition Regulation (FAR) in 2009 (FAR, 2008). The change was designed to deter contractor misconduct (Dorey et al., 2012). The change included mandatory contractor requirements for self-reporting of contractor misconduct, creating ethics and compliance programs, and employee ethics and conduct training programs (FAR, 2008). Furthermore, the FAR change included possible debarment or suspension for discovered misconduct violations up to 3 years after a contract ended (FAR, 2008).

The government established the Truth-in-Negotiations Act to reduce contract costs through proper bidding and increased competition (Roberts, 2010). Roberts (2010) found that contractors conspired together during the bidding process to ensure a higher price point; thereby rendering the Truth-in-Negotiations Act ineffective. Furthermore, Rogers (2010) mentioned the Fair Labor Standards Act of 1938 as a method of ensuring contractors establish policies regarding employee wage requirements, work hour limitations, employee treatment, and employee working conditions.

The Procurement Integrity Act of 1988 (PIA) prohibited government contract employees and others from providing information outside of the proposal process (Roberts, 2010). Contractors may be debarred, and individuals held civilly and criminally liable for misconduct violating the PIA (Roberts, 2010). Tillipman (2013) stated that debarment is the most severe government action available. Criminal convictions for misconduct have a pointed effect, whereas debarment affects the entire contracting company (Tillipman, 2013). Tillipman cautioned the necessity of serving the public interest prior to instituting debarment and suspension. Tillipman believed that debarment and suspension applied to contractors that do not take action internally against employees guilty of misconduct.

The U.S. government's contractor misconduct deterrent initiatives included contracting rules and regulations, along with legislative bodies and acts (Best, 2013). However, Best (2013) believed that the U.S. government promoted contractor misconduct. The Reinvestment Recovery Act of 2009 funded \$275 billion in additional funding for U.S. government contracts designed to improve and support economic

growth (Masino & McCurry, 2011). Masino and McCurry (2011) believed government contracts funded by the Reinvestment Recovery Act fell outside of the FAR and other government contracting regulations. Therefore, the lack of government regulatory authority made enforcing contractor misconduct difficult (Best, 2013; Masino & McCurry, 2011).

President Reagan spearheaded the effort promoting contractor self-regulation (Roberts, 2010). President Reagan believed that contractors could regulate their ethical behavior by instituting internal rules and organizations designed to improved ethical behavior (Roberts, 2010). Roberts (2010) reported that in 2009, the U.S. government began requiring government contractors to self-report misconduct violations to deter contractor misconduct. Martin (2013) found that private citizens report more instances of contractor misconduct than the federal government detected, which made self-reporting appealing. The U.S. government increased reliance on contractor self-reporting by relying on prime contractors to self-report subcontracting participation and misconduct violations for all subcontractors (Kidalov, 2013).

The self-reporting requirement has critics (Thomas, 2012). Tillipman (2013) found that the self-reporting requirement applies to all contractors. However, Thomas (2012) believed that self-reporting requirements were responsible for some contractors failing due to the lack of infrastructure or funding for the monitoring software or services required. Kidalov (2013) believed that the U.S. government's dependence upon contractors' self-reporting derogatory information on themselves and fellow contractors is misplaced.

The government's self-reporting initiative included requiring contractors to list past performance pertinent to the contract they are bidding (FAR, 2014). Bradshaw and Su (2013) found that contractors selectively list past performance, including positive reviews and omitting unfavorable reviews. Moreover, Clarke (2010) believed that contractors omit or deceive when reporting unethical behavior. Kidalov (2013) found that instances of contractor misconduct were double the self-reported misconduct for hurricane Katrina recovery contracts.

Contractor self-reporting and other forms of oversight are ineffective if misconduct is not prosecuted (Warnock, 2012). Warnock (2012) believed the government should seek to reduce contracting costs through enforcement of ethical contractor standards. Contract standards and corporate ethics programs inform and educate; however, they do not prevent unethical behavior (Sadler-Smith, 2012). Corporate ethics programs require external oversight, including government audits (Boerner, 2011). Internally, organizational compliance programs require reviewing and updating to ensure maximum effectiveness (Boerner, 2011). Martin (2013) cited the federal court system's inconsistency in interpreting and enforcing contractor self-reporting requirements.

Certain cases of contractor misconduct, such as hostile work environment and employment discrimination, require internal prosecution (Mayrell, 2012). The government's diminished ability to enforce contractor ethical behavior standards reduces the probability of contractor compliance (Martin, 2013). Deceptive practices within the government contracting industry's self-reporting practices caused the U.S. government to

adjust the self-reporting processes to include a government verification process (Best 2013).

Summary

The governing, safety, and security of U.S. citizens are governmental functions that the U.S. government should not outsource (Krishnan, 2011). However, the drive to reduce the expense of keeping all governmental functions in-house creates a need to look elsewhere for support (Terman & Yang, 2010). The U.S. government seeks to reduce costs and improve efficiency through employing federal government contractors (Hansson & Holmgren, 2011). The U.S. government's contracting for goods and services is essential to the continuity of government and vital to the national economy (Jenks, 2010; Masino & McCurry, 2011).

The U.S. government's inability to function without contractors has diminished the ability to control contractor misconduct (Knoll, 2011). The U.S. government's dependence upon contracting caused many, such as Senator McCaskill, to believe that the government's deterrent steps do not restrain government contractor misconduct (Tillipman, 2013). The government contracting industry lobby wields power and influence throughout the branches of the government, thus creating a more profitable contracting environment (Hayden et al., 2010). Kilbride (2010) stated that government contractors are self-focused, profit-driven, and loyal to their companies instead of their country. Hoppe and Schmitz (2013) believed contracting government services does not reduce cost or maximize efficiency because contractors do not pursue innovation without guaranteed payment.

The U.S. government's concern with saving money is contrary to the government contracting industries' desire to maximize profits (Hansson & Holmgren, 2011; Kean, 2011). Sadler-Smith (2012) believed that humans make all decisions by processing information and choosing what is beneficial. The government exercised Sadler-Smith's belief and provided financial incentives to promote cost-effectiveness within the general population (Litsa, Petropoulos, & Nikolopoulos, 2012). Lewis and Bajari (2011) believed that a similar financial incentive program would reduce contractor misconduct. Furthermore, rewarding contractors that exceed contract requirements and penalizing contractors that do not meet contract requirements would reduce contractor misconduct (Lewis & Bajari, 2011). Lewis and Bajari believed that incentive program enforcement is more important than incentive size.

The U.S. government's deterrent actions towards government contractor misconduct may result in increasingly complex contracting processes (Nagle, 2010). Moreover, the complexity created by increased rules, regulations, and legislative actions influences efficiency (Nagle, 2010). Terman and Yang (2010) determined that contracting complexity led the government to monitor only 20% of government contracts annually. Young (2010) believed government regulations and requirements documents, filled with vague wording, make enforcement difficult and settlement preferable. Throughout the last 100 years, legal volumes on government contracting guidelines have increased from one volume covering the entire topic to individual volumes on dozens of topics (Nagle, 2010).

Roberts (2010) reported that misconduct decreased in the late 1990s to late 2000s despite a doubling of contract spending; however, Roberts suspected the reduction in reported misconduct was due to the decrease in oversight and accountability. Sonn and Gebreslassie (2010) believed creating new federal contracting legislation would not improve contractor behavior. However, the GAO believed that strengthening standards and regulations would improve contractor performance, while reducing fraud and other instances of misconduct (HFM, 2011).

Terman and Yang (2010) surmised that U.S. government contracting would continue to thrive despite contractor misconduct and a lack of government monitoring. Sonn and Gebreselassie (2010) found evidence supporting Terman and Yang's position that unethical government contractors continue to win contract awards despite repeated acts of misconduct. Tillipman (2013) believed the current government contracting system effectively reduces contractor misconduct. Roberts (2010) found evidence supporting Tillipman's belief because contractor misconduct rates decreased from the late 1990s to late 2000s.

U.S. government contracting and contractor misconduct began during the Revolutionary War; however, the effect of government policies on contractor decisions and behavior is unknown (Parker, 2010; Roberts, 2010). The academic community lacks information on topics to include contracting and contractor misconduct (Wang & San Miguel, 2012). In this study, I added to the academic research by studying the deterrent effect of the change to the FAR in 2009 on reported government contractor misconduct and the effect on the business process.

Transition and Summary

Section 1 established the foundation for the business study. The section began by presenting the study's foundation and background of why government contractor misconduct is a problem. The section next detailed the problem statement, purpose statement, and nature of the study. Section 1 contained the stated research question and associated hypotheses statements. The theoretical foundation is deterrence theory and a list of defined terms was included in the section. Section 1 continued with a discussion of the study's assumptions, limitations, and delimitations. The significance of the study followed with discussions on reducing the gaps in literature concerning the deterrent effect of government actions towards contractor misconduct. Section 1 concluded with a review of the professional literature that established the academic foundation for the study.

Section 2 details the research phase of the project. The section begins with a restatement of the study's purpose. Section 2 continues by defining the role of the researcher, and explaining the rationale for selecting the participants, population, and sampling methods. The section presented the reasoning behind choosing the study's research method and design. Section 2 concludes with details concerning the data analysis technique and address reliability and validity. Section 3 presents the overall study and study results. The section begins with an overview of the study and presentation of findings. The section presents the implications for business practices and social change. Section 3 concludes with recommendations for action and further study, as well as reflections and summary of the entire study.

Section 2: The Project

In the study, I sought to discover if the U.S. government's actions designed to deter federal government contracting misconduct were effective. The U.S. government's use of contractors to conduct inherent governmental functions continues to increase despite continued instances of contractor misconduct and the widespread belief that governmental deterrent steps do not restrain government contractor misconduct (Jenks, 2010; Knoll, 2011; Tillipman, 2013). The following discussion details the rationale behind and framework for the study's research phase.

Purpose Statement

The purpose of this quantitative, nonexperimental, retrospective, causal-comparative study was to (a) discover if the U.S. government's change in 2009 to the FAR has reduced the rate of reported contractor misconduct and (b) investigate the impact of the change to the FAR in 2009 on federal government contractor ethics business processes. The rate of reported government contractor misconduct and government contractor ethics business processes were the two dependent variables. The study presented secondary quantitative research collected from 2006 through 2012, statistical contracting misconduct information collected from 2006 through 2012, contracting articles, and government contracting studies.

Through data collection and analysis, I sought to determine if a causal relationship existed between the change to the FAR in 2009 and the number of reported acts of contractor misconduct by government contractors and government contractor ethics business processes from 2006 through 2012. I used SPSS to determine the means

from 2006 through 2008 (Time 1) and from 2010 through 2012 (Time 2). I sought to determine if the government's efforts in 2009 to deter contractor misconduct significantly reduced the reported instance of government contractor misconduct and influenced government contractor ethics business processes. The study findings indicated that the change to the FAR in 2009 did not effectively reduce instances of reported contractor misconduct; however, the findings did indicate that the change to the FAR significantly influenced government contractor ethics business processes.

Role of the Researcher

My role as researcher for this quantitative, nonexperimental, retrospective, causal-comparative study was determined by the study's research method, research design, and data collection method (DeForge, 2010). The primary research role was to collect data from credible sources. Yu-Jia (2012) stated that assuring resource credibility is the researcher's responsibility.

The U.S. government provides online, publically available, and archival information pertaining to contract awards and contractor misconduct. Online databases include FAPIIS, SAM, and POGO. I did not collect unverified misconduct information due to the unreliability of the information. I collected and organized data in a format compatible to IBM SPSS Statistics Grad Pack version 20.0. I analyzed the data collected, inferred results from the research and analysis, and recommended future research related to contractor misconduct.

I have 20 years of experience working with government contractors. I have 10 years of experience as a COTR on both goods and services contracts. My COTR duties

included supervising government contractors, reviewing invoices, evaluating contractor performance, and reporting contractor noncompliance to the applicable contracting officer. I have 10 years of experience as a government contractor. My government contractor duties included procurement services, shipping and receiving, maintenance, engineering services, operational planning, research and development, analysis, and program management. My experiences as a government customer, a COTR, and a government contractor create a balanced understanding of federal contractor misconduct.

Participants

Participants were not required for this study. I collected all required research data from two U.S. government databases, SAM and FAPIIS, the government sponsored database POGO, and official FPDS reports. The three databases contained publically available information that included government contract awards, contractor performance, and contractor misconduct. The information was compatible with SPSS. I correlated the data by year and by contractor. The yearly breakdown included two groups. The first group (preintervention) includes data from 2006 through 2008. The second group (postintervention) includes data from 2010 through 2012. Contractors were limited to the top 100 federal contractors by contract awards as listed in FPDS.

Research Method and Design

I intended to discover if the change to the FAR in 2009 affected reported government contractor misconduct (dependent variable) and the government contractor ethics business process (dependent variable). Reported government contractor misconduct and government contractor ethics business processes were the dependent

variable while the 3-year groups, pre and post the change to the FAR in 2009, comprised the independent variable. The quantitative research method and retrospective causal-comparative design was preferred because of the ex post facto cause-and-effect relationship between the dependent variable and the independent variable (Brewer & Kuhn, 2010; Yu-Jia, 2012). Furthermore, statistically measuring the independent variable made causal-comparative the best design choice (Kraska, 2010).

Method

I used quantitative methodology to conduct my study of change to the FAR in 2009 on rates of reported government contractor misconduct, and contractor ethics business processes, from 2006 through 2012. Quantitative methodology produces descriptive results that measure numerical changes in the characteristics of a chosen population (Kraska, 2010). Hypothesis testing determines if significant change has occurred in quantitative methodology (Kraska, 2010). Kraska (2010) believed that researchers use numerical and statistical results to infer generalized conclusions in quantitative methodology. Researchers using qualitative methodology, unlike quantitative methodology, rely on philosophical principles and not on numerical data for interpreting results and providing reasoned conclusions (Staller, 2010; Weathers et al., 2011). Qualitative researchers filter information through their values and beliefs that become part of the analysis; however, quantitative researchers use statistical analysis without inserting additional personal values into the analysis process (Kraska, 2010; Staller, 2010). My study included previously collected numerical data for inferring conclusions, thus making quantitative methodology the preferred choice over qualitative methodology.

Research Design

Selecting a research methodology was my first step in determining the study's design. Choosing quantitative methodology for my study led to selecting the appropriate design. I selected nonexperimental, retrospective, causal-comparative design.

Quantitative methodology designs can be experimental, quasi-experimental, or nonexperimental in design (DeForge, 2010). DeForge (2010) stated that researchers do not manipulate variables in nonexperimental design; however, researchers do manipulate variables in both quasi-experimental and experimental design. My study consisted of historical data that render variable manipulation impossible, thus making nonexperimental design the only acceptable quantitative design.

Nonexperimental design is preferred when researching a large group or when measuring the effectiveness of a program (Lobmeier, 2010). My study was designed to measure the U.S. government's contractor misconduct deterrence program effectiveness in a large population totaling more than 450,000 registered contracting companies. Nonexperimental design consists of a number of different types of more narrowly focused designs including comparative design, causal-comparative design, correlational design, and one-group pretest-posttest design (Lobmeier, 2010).

Researchers use comparative design to compare two or more groups and determine statistically significant differences (Lobmeier, 2010). Lobmeier (2010) stated that retroactive causal-comparative design is an ex post facto design that researchers use to compare differences in one or more groups before and after a manipulating a variable. The quantitative researcher measures two or more nonmanipulated variables and

determines if a relationship exists with a correlational design (Lobmeier, 2010).

Researchers select a one-group, pretest-posttest design to measure differences in a group over time, with one measure before and one measure after manipulating a variable (Lobmeier, 2010).

In my study, I compared the differences in reported federal contractor misconduct before and after the U.S. government's change to the FAR in 2009. The single group of federal government contractors made selecting either comparative design or correlational design untenable. I compared the median for a 3-year period before and the mean a 3-year period after an intervention. Siami and Gorji (2011) conducted a causal-comparative study of a telecommunications company using ex post facto data to infer a cause-and-effect relationship. Liang, Fulmer, Majerich, Clevenstine, and Howanski (2012) selected causal-comparative design to measure differences between two groups over an 8-year period. The ex post facto nature, single participant group, and multiyear comparison were components of my study's causal-comparative design.

Population and Sampling

Individuals were not required to participate in the study. I collected historical data on reported federal government contractor misconduct from 2006 through 2008 and from 2010 through 2012 in my ex post facto research design. POGO employees collect contractor misconduct data and POGO maintains a database supporting the U.S. government contractor oversight program and U.S. government contracting officials (Warnock, 2012). The U.S. government requires contracting officials to deposit all reported federal contractor misconduct into the FAPIIS database (Warnock, 2012). The

U.S. government lists 450,000 active federal government contractors (FPDS, 2014). The contractors listed range from microbusiness to large companies with thousands of employees (Roberts, 2010). POGO collects and maintains datasets on the top 100 contractors annually (POGO, 2014).

I used purposive sampling to determine my sample group. Huck et al. (2010) defined purposive sampling as the intentional selection of a homogeneous subset from a larger population. I selected the top 100 government contractors for each year studied to represent the larger group of 455,000 active, registered contractors (FPDS, 2014). The top 100 federal government contractors varied year-to-year for the years covered in the study. The top 100 government contractors included 182 different contractors from 2006 through 2008 and from 2010 to 2012. The top 100 government contractors were awarded between 53.9% in 2010 and 58.1% in 2008 (see Figure 1) of all government contract awards for years covered in the study (Federal Procurement Data System [FPDS], 2014).

My intentional selection of the top 100 government contractors met Huck et al.'s (2010) purposive sampling method. Furthermore, the study's subset of the top 100 federal government contractors met Muskat, Blackman, and Muskat's (2012) requirement that a representative population must be large enough to generate sufficiently representative data. U.S. government contract spending varied during the years selected for the study from a low of \$404 billion in 2006 to a high of \$531 billion in 2011 (see Figure 2). Contract awards for the top 100 government contractors varied during the same time period from a low of \$220 billion in 2006 to a high of \$303 billion in 2008 (see Figure 3).

Despite the varying amounts for contract awards, the top 100 government contractors were awarded greater than 50% of all contract awards (see Figure 1).

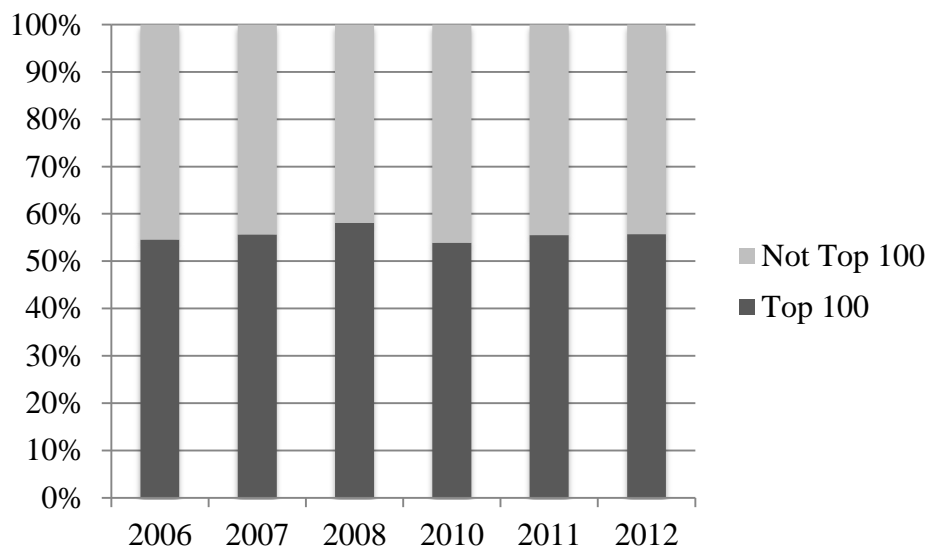


Figure 1. Government contract award percentages. This graph represents the contract award percentages for the top 100 and outside the top 100 government contractors during 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

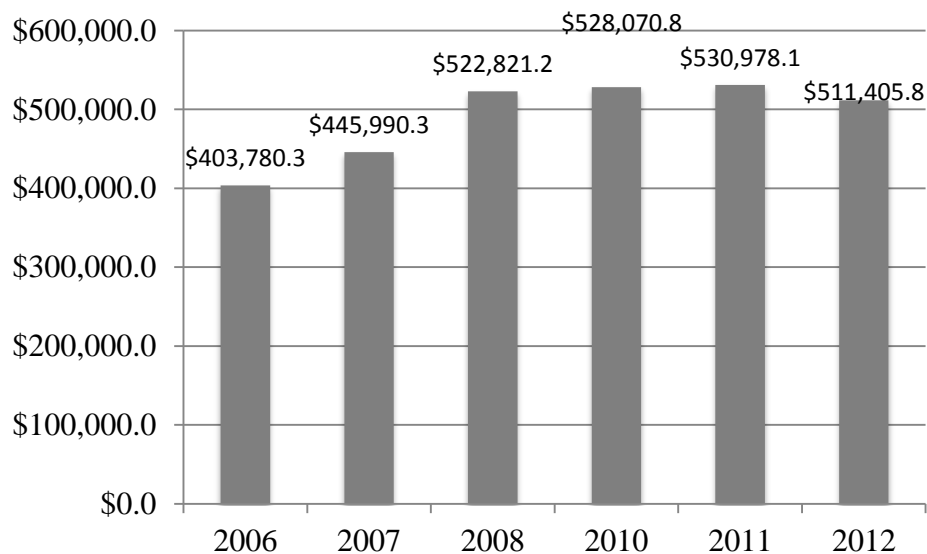


Figure 2. Contract award values. This graph represents the contract award values for all government contractors, in millions, annually from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

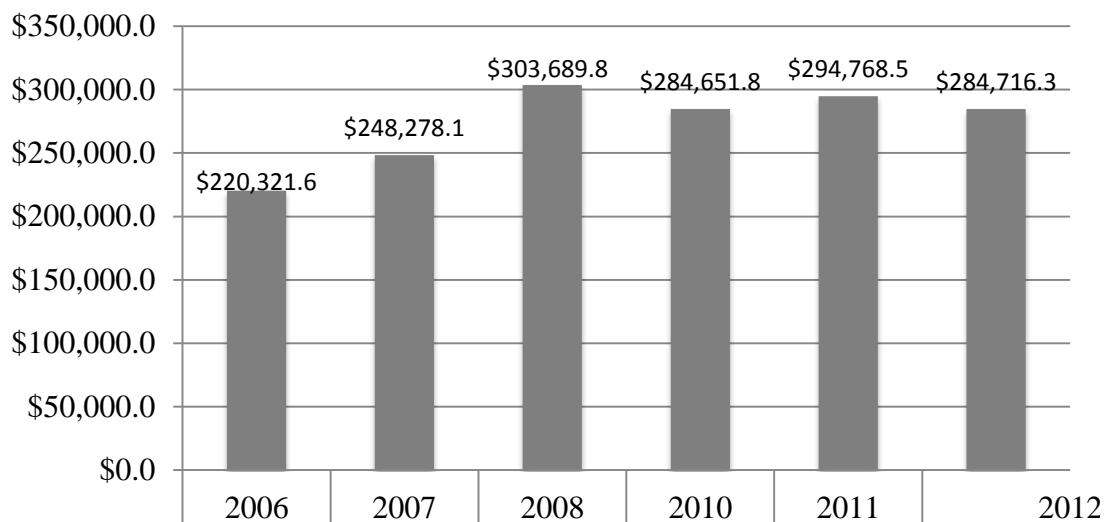


Figure 3. Top 100 contractor contract award values. This graph represents the contract award values for the top 100 government contractors, in millions, annually from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

The data originally collected by POGO and stored in FAPIIS represented a variety of goods and services provided by the federal government contracting industry. Two eligibility requirements existed for inclusion in the purposive sample group. Participants were registered in SAM as active members when data collection occurred, and participants were listed in the top 100 federal contractors according to the FPDS annual contractor report (FPDS, 2014). The sample size, representing 55% of all contract awards for the periods listed, represented the federal government contracting industry and met Meckstroth's (2012) requirement that a study's inferred results accurately represent the larger industry.

Ethical Research

The study does not contain information gathered from individual participants. The lack of individual participants rendered consent forms, incentives, withdrawal processes,

confidentiality agreements, and cooperation agreements unnecessary. POGO permits public access to their federal contractor misconduct reporting records. The U.S. government's FAPIIS database is accessible to the public. Public access to the two data sources selected for this study rendered written permission unnecessary. POGO and FAPIIS collect, control, manage, and secure all data used in this study. Data collected for this study are stored on an external storage device and secured in my home safe when not in my possession. Federal government contractor names were removed and replaced by a generic numerical code accessible only on the external storage device.

Wester (2011) believed that researchers must use ethical practices throughout the study process. The institutional review boards (IRBs) are responsible for ensuring researchers conduct studies ethically (Chappy & Gaberson, 2012). IRBs ensure that a researcher follows policies, procedures, ethical practices, and laws (Chappy & Gaberson, 2012). Furthermore, IRBs ensure a study participant's ethical treatment. I sought and received Walden University's IRB approval, IRB approval number 07-17-14-0340399, before beginning the study's data collection and analysis phase. I complied with the IRB's guidance and with Wester's belief that researchers must follow strict ethical guidelines throughout the study process.

Data Collection

Instruments

POGO's data collection instrument is a digital corruption reporting form that is accessible to anyone seeking to report suspected contractor misconduct outside of official government channels (POGO, 2014). Individuals reporting misconduct are required to

answer a series of eight open-ended questions. The questions cover eight separate areas required for the allegations investigation and verification. The areas include the government agency involved, specific misconduct incident, status of the incident, request for evidence, awareness of breadth of misconduct behavior, others told of the incident, others aware of the incident, and any actions taken against the individual reporting the incident. Reported misconduct is investigated and verified by qualified POGO employees before inclusion on POGO's misconduct database. Investigative techniques include Freedom of Information Act (FOIA) requests, interviews, and legal document searches. POGO employees transfer valid reports of contractor misconduct to POGO's contractor misconduct database, and link investigatory data to each reported misconduct incident listed in POGO's database. POGO secures the misconduct report information database inside of the POGO facility.

Two government databases provide the information available on the FAPIIS database (FAPIIS, 2014). Government contracting officers must complete annual reports on all contracts under their supervision (Warnock, 2012). The COR or COTR completes a two-item, *yes* or *no*, quantitative questionnaire (FAPIIS, 2014). The information requested in the questionnaire includes verification that the contractor is a prime contractor with a current contract and an active registrant in SAM, and reported or alleged misconduct incidences within the past 5 years (FAPIIS, 2014). Government contractors are required to complete the same questionnaire annually when registering as an active business in SAM (FAR, 2014). The U.S. government requires contracting officers and contractors to complete a spreadsheet detailing misconduct incidences

occurring within the previous 5 years, and then post the information in the Contractor Performance Assessment Reporting System (CPARS) database. (FAPIS, 2014; Warnock, 2012). FAPIS extracts questionnaire and spreadsheet data from both SAM and CPARS and compiles the information into a publically available spreadsheet encompassing applicable misconduct information reported since April 15, 2011 (Warnock, 2012).

In 1995, POGO founders responded to the general public's opinion that federal contractors may be corrupt and began operating the contractor misconduct database (POGO, 2014; Sonn & Gebreselassie, 2010). POGO employees created the Federal Contractor Misconduct Database (FCMD) in 2002 to hold the U.S. government and contractors accountable for fraud, waste, and abuse (Stanley, 2012). POGO's contractor misconduct database provides an alternative to government or contractor employees who want to report misconduct without fear of reprisal (POGO, 2014). POGO employees link data available on the publically accessible misconduct database to legal findings and other credible sources (Staley, 2012).

The U.S. government created FAPIS under The Duncan Hunter National Defense Authorization Act of 2009 (Warnock, 2012). Willard (2013) stated that the U.S. government created FAPIS to increase transparency in the contracting process. Congress intended FAPIS to improve contractor responsibility by improving contracting officials' awareness of contractor performance and reducing instances of misconduct (Nackman et al., 2011; Warnock, 2012). FAPIS is the government-controlled repository of reported contractor misconduct information (Willard, 2013).

I collected data from both POGO and FAPIIS databases to compile a list of reported incidences of government contractor misconduct. FPDS's annual contractor reports list the top 100 federal contractors for each year studied (FPDS, 2014). The two databases, compiled according to the contractors listed in FPDS's annual reports, comprised the reported instances of government contractor misconduct. I collected data from the SAM database and FPDS annual reports pertaining to government contractor's establishment of corporate ethics programs.

I added the number of instances of reported misconduct for the top 100 contractors in 2006, 2007, and 2008. I computed the median for each year and the overall median for the 3 years. Moreover, I computed the median for 2010, 2011, and 2012; next, I computed the overall median for 2010 through 2012. I used the Wilcoxon signed-ranks test to determine how much the rate of reported misconduct declined after the change to the FAR in 2009.

I collected data from POGO, SAM, and FPDS to determine the level of the top 100 contractors' ethics programs before and after the change to the FAR in 2009. The FAR (2014) part 32.203.13 requires that corporate ethics programs include four parts: (a) a formal corporate ethics program, (b) a written code of business ethics and conduct, (c) ethics awareness and compliance training, and (d) an internal noncompliance reporting process. I assigned a numerical value, ranging from 0 to 4, corresponding with the number of requirements that each contractor met. I added the scores and computed the medians for 2006, 2007, 2008, 2010, 2011, and 2012. I computed the median for the 3 years prior to 2009 and for the 3 years following 2009. I used a Wilcoxon signed-ranks

test to determine how much government contractor corporate ethics business processes changed after the change to the FAR in 2009.

Data Collection Technique

The GAO collected misconduct data in two separate organizations, CPARS and SAM, and combined the data into one publically available database called FAPIIS (Warnock, 2012). POGO collected misconduct data from sources reluctant to report incidences into the government system for fear of reprisal (Staley, 2012). Each organization does not allow access to misconduct information prior to verifying the information through recognized investigatory techniques (Warnock, 2012). Data I collected from FAPIIS and POGO were properly vetted and each misconduct instance and supporting documentation traced from reporting through legal finding.

The data collected contained categories that include the contractor's name, contracting agency, type of misconduct, legal finding, and reported date of misconduct. The categories and data organization allowed for targeted reporting on instances of misconduct by any of the top 100 federal government contractors. I did not run a pilot program because FAPIIS data are collected through the government's contractor misconduct data collection program, and POGO's data collection program has existed since 1995.

Data Organization Techniques

FAPIIS data are available in Excel spreadsheet format. POGO data are available through an online database format that required entry into an Excel spreadsheet format. Contractor ethics business process data in FPDS and SAM were in reports that required

transcription into Excel spreadsheet format. I organized the data into two datasets of annual reported federal contractor misconduct; from 2006 through 2008 (Time 1) and from 2010 through 2012 (Time 2). Moreover, I categorized the number of instances of misconduct into six columns organized by year. I processed the data through Statistical Program for Social Science (SPSS) Statistics Grad Pack version 20.0.

I categorized the contractor ethics business processes data into six columns. The first three columns included years 2006 through 2008 (Time 1). The last three columns included years 2010 through 2012 (Time 2). I assigned a value to each contractor indicating the level of presence of a corporate ethics program. The values correlated with the number of corporate ethics program requirements met, ranging from 0 to 4.

Study data are stored on an external drive and secured within my personal fireproof safe. I removed contractor names from the data collected and substituted a numeric code that I secured in my personal safe, separately from the external drive. I will secure all data collected and analyzed for a period of 5 years post study completion.

Data Analysis Technique

I did not use a survey for data collection in this quantitative, causal-comparative study. The ex post facto datasets consisted of instances of federal government contractor misconduct from 2006 through 2012. The Close the Contractor Fraud Loophole Act in December 2008 caused a change to the FAR in 2009 (intervention) that required contractor self-reporting (Warnock, 2012). Furthermore, the self-reporting requirement was the government's attempt to deter contractor misconduct (Warnock, 2012). Two matched groups of participants, separated by time (independent variable), were measured

in two time periods that were divided by the change to the FAR in 2009 (intervention). I used data from 2006 through 2008 (Time 1) to represent preintervention, and data from 2010 through 2012 (Time 2) to represent postintervention instances of reported contractor misconduct (dependent variable) and government contractor ethics business process (dependent variable).

SPSS is an accepted statistical analysis tool (Yu-Jia, 2012). SPSS allowed for determining if a cause-and-effect relationship existed between the rates of reported federal contractor misconduct preintervention and the rates postintervention. I used the Wilcoxon signed-ranks test in SPSS to determine if the reported misconduct was significantly reduced after the change to the FAR in 2009. Moreover, I used the Wilcoxon signed-ranks test to determine the impact of the change to the FAR in 2009 effected government contractor ethics business processes. The annual top 100 government contractor misconduct data from the 3-year groups pre and post the change to the FAR in 2009 were added together ($n = 300$).

My null hypotheses were ($H1_0$) that there was no significant decline in the rate of reported contractor misconduct after the change to the FAR in 2009 and ($H2_0$) there was no statistically significant change in government contractors ethics business processes after the change to the FAR in 2009. U.S. government officials changed the FAR in 2009 to deter contractor misconduct (Warnock, 2012). The effectiveness of those actions could be related to deterrence theory. The data collection, organization, and analysis enabled me to infer results that answer both the stated hypothesis and the theoretical framework.

Reliability and Validity

Reliability

Reliability is the repeatability of the research findings in quantitative methodology studies (Farrelly, 2013). The data analysis technique is reliable if other researchers have used the same or similar technique and reached the same results. I used matching and Wilcoxon signed-ranks tests for analysis. Brewer and Kuhn (2010) recommended these two techniques for causal-comparative research design. My study was similar in that I sought to determine if the U.S. government's change to the FAR in 2009 reduced misconduct or changed government contractor ethics business processes. I compared the rates of reported misconduct from before and after the change to the FAR in 2009 to determine if reported misconduct declined by more than 5%. Furthermore, I compared changes in government contractor ethics business processes before and after the change to the FAR in 2009 to determine if contractor ethics business processes changed by more than 5%.

Researchers must take care to (a) avoid biases that interfere with data collection or (b) misrepresent the data collected (Farrelly, 2013). Moreover, Farrelly (2013) believed that researchers should seek confirmation of data from two separate sources if looking at historical or precollected data. I collected data from three sources, POGO, FPDS, and FAPIIS, which gathered information from a variety of sources to capture reported federal government contractor misconduct and contract awards. Moreover, I collected data from three sources, SAM, POGO, and FPDS, to understand changes in

government contractor ethics business processes. Research personal bias did not influence the collection of this empirical data.

Farrelly (2013) believed the researcher must be credible and qualified. I meet these requirements through 20 years of experience in federal government contracting on both the U.S. government side and the government contractor side. I served as a trained COR, COTR on multiple contracts and in various positions as a government contractor. I conformed to Farrelly's (2013) belief that quantitative research includes both numeric and verbal explanations of findings. I used approved research methods, designs, techniques, and procedures to ensure reliability.

Validity

Reliability is vital but unattainable without validity (Farrelly, 2013). Validity measures the investigative quality of the research in a quantitative study. Thorkildsen (2010) stated that validity is simply an argument that supports a concept by using data. The complexity of an argument does not determine validity. The ability to answer the research question completely determines validity. The argument can be as simple as determining between a *yes* and *no*. My study was an argument to determine if the U.S. government policies to reduce misconduct have been effective. The hypotheses phrased the question and required a simple *yes* or *no* response.

Farrelly (2013) defined validity as the ability to reach the same result given the same data. DeForge (2010) stated that validity is a measure of the truthfulness of a researcher's inferences. Controlling threats to validity reduces the researcher's risk in producing false inferences. The inferable nature of quantitative research requires

mitigating the applicable threats to validity to ensure the validity of research results (Petrocelli, 2010). Four threats to validity exist: internal, external, statistical conclusion, and construct validity (DeForge, 2010).

Internal validity focuses on events during the experiment that influence the research variables (DeForge, 2010). The threat events pose alternative reasons for resultant outcomes. Mitigating or eliminating these events was key to establishing validity for my study. In my study, I inferred results based upon the U.S. government's deterrent initiatives against contractor misconduct. I reviewed anomalies within the top 100 contractors and searched for additional influences such as change in corporate leadership or corporate policies outside of those prescribed by U.S. government regulations.

Lobmeier (2010) defined internal validity in nonexperimental design as the determination that there is not more than one explanation for the resultant. Random selection of participants reduces the threat to nonexperimental validity (Lobmeier, 2010). In my study, the participant group was randomly selected through meeting a set performance criteria. The participants were the top 100 federal contractors in the value of contract awards for the applicable year. Lobmeier listed the manipulation of groups through researcher bias and variance in data collection as additional threats to validity. In my study, the groups were predetermined by contract award while the data collected was historical records that did not change over time, thus reducing threats to validity.

External validity is concerned with the applicability of theory to the experiment results (DeForge, 2010). External validity was vital to my applying deterrence theory to

infer causal correlation between the change to the FAR in 2009 and (a) the reduction in the rates of reported government contractor misconduct, or (b) the changes in government contractor ethics business processes. External validity is important to a researcher who desires to generalize results from a target group to wider group (Leighton, 2010).

Threats to external validity include random sampling and variances within the population selected (Leighton, 2010). Random sampling is vital to external validity. The participant group in my study was randomly selected by contract award as defined within FPDS to become a part of the top 100 federal contractors. The specific criteria for inclusion in the sample group, a top 100 contractor by contract awards, meets Leighton's (2010) goal for increasing external validity through narrowly defined criteria. The top 100 contractors provided a variety of goods or services accounting for 55% of government contract awards; however, the FAR applies to all government contractors equally (Warnock, 2012). Therefore, according to Warnock (2012), any variance within the population's business offering should not influence the contractor's propensity for adhering to or ignoring the ethical rules imposed by the U.S. government.

Statistical conclusion validity differs from internal and external validity in that it refers to events that influence the relationship between the research variables (DeForge, 2010). Statistical conclusion validity requires that a researcher base inferred results on the studied variable and not on other variables (Mendoza & Marcus-Mendoza, 2010). Quantitative research results are statistically significant or are not statistically significant (Petrocelli, 2010).

Petrocelli (2010) stated that statistical conclusion validity is threatened either by rejecting a true null hypothesis (Type I error) or not rejecting a false null hypothesis. Quantitative researchers require that the probability of the conclusions statistical significance be less than 5% (Petrocelli, 2010). I used a one-tailed test to measure the statistical significance of the reduction in the rate of reported misconduct after 2009. The one-tailed test determines statistical significance when testing one side of a *t*-distribution (Stone, 2010). I used a two-tailed test to measure the statistical significance of the change in government contractor ethics business processes after 2009. Stone (2010) stated that the two-tailed test determines statistical significance when testing two sides of a *t*-distribution. Mendoza and Marcus-Mendoza (2010) stated that equalizing two or more groups into one matched group achieves statistical conclusion validity.

Petrocelli (2010) believed that Type II errors that threaten validity included small sample size, varying sample selection criterion, and using an inappropriate statistical test. The federal government contractor industry offers a wide variety of goods and services; however, purposive sampling of the pool without regard for variety and combining them into one matched group using the top 100 criteria mitigated the Type II error threat (Huck et al., 2010; Petrocelli, 2010). The study pertained to the entire industry and the variable of change to the FAR in 2009 applied to the government contracting industry without regard for goods and services (Warnock, 2012).

The last of DeForge's (2010) threats to validity was construct validity. Markus and Lin (2010) defined construct validity as the collection of evidence intended to support a nondirectly observed variable using specific research tools. Construct

deficiency and construct-irrelevant variance are the two threats to construct validity (Markus & Lin, 2010). Construct deficiency happens when the research tool fails to measure the desired construct. Construct-irrelevant variance exists when the tool measures the information that is not relevant to the construct.

Markus and Lin (2010) believed careful examination of the desired tool coupled with inspection of the resultant would enable the researcher to verify construct validity. I originally examined the results before and after the change to the FAR in 2009 with the paired-samples *t* test (Stone, 2010); however, after determining that the differences between the samples violated the required assumptions, I changed to a nonparametric test of similar design. The Wilcoxon signed-ranks test is similar to the paired-samples *t* test, but the nonparametric test does not have the restrictive outlier assumptions of the paired-samples *t* test (Gao, 2010). The Wilcoxon signed-ranks test was the appropriate tool for determining the significance of differences between matched groups before and after an intervention (Sawilosky, 2007). I used the Wilcoxon signed-ranks test to measure the change in contractor ethics business processes by comparing the business processes before and after the change to the FAR in 2009. In my study, I compared the rates of reported misconduct and measured the change in government contractor ethics business processes by the top 100 contractors before and after the change to the FAR in 2009.

Transition and Summary

Section 2 detailed the research phase of the project. The section began with a restatement of the study's purpose to determine if a causal relationship exists between the change to the FAR in 2009 and the number of reported instances of contractor

misconduct. Section 2 continued by defining my data collection role as the study's researcher. The section contained the rationale for not requiring the selection of study participants or individuals. The section included explanations for selecting quantitative methodology and retrospective causal-comparative design. In Section 2, I explained selecting the top 100 federal contractors and the purposive sampling technique. The section included details about POGO's data collection instruments and the U.S. government's data collection procedures. I addressed selecting matching and Wilcoxon signed-ranks test for analysis, and the reliability and validity implications and steps required.

Section 3 presents the overall study and study results. The section begins with an overview of the study and presentation of findings. I discuss how the findings may improve the government contracting industry's business practices and implications for social change. The section contains listed recommendations for action and further study. Section 3 concludes with my reflections on and summary of the entire study.

Section 3: Application to Professional Practice and Implications for Change

Sonn and Gebreselassie (2010) found reported misconduct in 80% of the top 100 government contractors. Moreover, POGO (2014) listed 60 of the top 100 government contractors with multiple violations. The U.S. government changed the FAR in 2009 to reduce misconduct violations through increased oversight, expanded enforcement authority, and new mandatory business processes for the government contracting industry (OSBP, 2011; POGO, 2014). I conducted this study to determine if a causal relationship exists between the change to the FAR in 2009 and (a) the number of reported acts of contractor misconduct by government contractors and (b) government contractor ethics business processes.

Overview of Study

The purpose of this quantitative, nonexperimental, retrospective, causal-comparative study was to (a) discover if the U.S. government's change in 2009 to the FAR has reduced the rate of reported contractor misconduct and (b) investigate the impact of the change to the FAR in 2009 on federal government contractor ethics business processes. Two 3-year time groups, pre (Time 1) and post (Time 2) the U.S. government's change to the FAR in 2009, comprised the study's independent variable. The rate of reported government contractor misconduct, and government contractor ethics business processes are the two dependent variables. I created two research questions, one for each independent and dependent variable relationship, to aid in determining the study findings. Null and alternative hypotheses were established to answer each research question.

I developed Research Question 1 to find if the change to the FAR in 2009 reduced the rates of reported government contractor misconduct. The alternative hypothesis ($H1_a$) stated that there is a statistically significant decline in the rate of reported misconduct after the change to the FAR in 2009. The null hypothesis ($H1_0$) stated that there was no statistically significant decline in the rate of reported contractor misconduct after the change to the FAR in 2009. I conducted a Wilcoxon signed-ranks test of the data collected for the 3 years before 2009 (Time 1) and the 3 years after 2009 (Time 2). The results indicated that the null hypothesis was not rejected, $p = .34$ (see Table 2). Therefore, the change to the FAR in 2009 did not significantly reduce the rate of contractor misconduct.

I developed an alternative and null hypothesis to aid in answering if the change to the FAR in 2009 affected government contractor ethics business processes. The alternative hypothesis ($H2_a$) developed for Research Question 2 stated that there is a statistically significant change in the government contractors ethics business processes after the change to the FAR in 2009. The null hypothesis was that there was no statistically significant change in the government contractors' ethics business processes after the change to the FAR in 2009. I conducted a Wilcoxon signed-ranks test of the data collected for the 3 years before 2009 (Time 1) and the 3 years after 2009 (Time 2). The results indicated that the null hypothesis was rejected, $p < .001$ (see Table 6). Therefore, the change to the FAR in 2009 significantly changed government contractor ethics business processes.

Presentation of the Findings

Roberts (2010) stated that the change to the FAR in 2009 was implemented to deter contractor misconduct. I conducted this quantitative, nonexperimental, retrospective, causal-comparative study to determine how the rate of government contractor misconduct (dependent variable) and changes to government contracting industry ethics business processes (dependent variable) were impacted by the change to the FAR in 2009. I collected, organized, and used SPSS analytic software to analyze the data. The findings to Research Questions 1 and 2 follow.

Research Question 1

The rate of government contractor misconduct was the dependent variable for Research Question 1. The independent variable for Research Question 1 was time, with two conditions. Each condition pertained to a 3-year period of time, Time 1 (pre change to the FAR in 2009) and Time 2 (post change to the FAR in 2009).

The rate of reported acts of misconduct by government contractors is the first dependent variable. The research question for this dependent variable was designed to investigate if the change to the FAR in 2009 reduced the rates of reported government contractor misconduct. The data indicated that the number of reported acts of misconduct studied ranged from a low of 32 in 2012 to a high of 124 in 2007; however, no trend was apparent between 2007 and 2011 (see Figure 4).

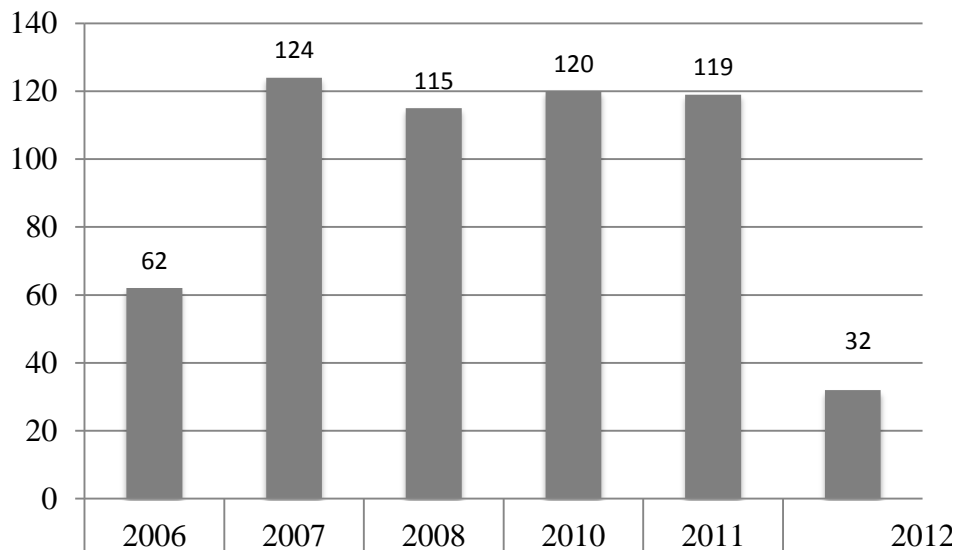


Figure 4. Top 100 contractors misconduct. This graph represents the reported instances of misconduct annually for the top 100 government contractors from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

Data collected from FAPIIS were not as informative as I anticipated; therefore, I relied on data collected from FPDS and POGO, which I compared with FAPIIS data. The information available on FAPIIS was limited to either a *yes* or *no* answer pertaining to contractor misconduct within the last 5-years. No quantification data existed in FAPIIS and the reliability of FAPIIS is questionable because 45% of the top 100 contractors covered in the time frame of the study with instances of misconduct after 2010 did not report any instance of misconduct to FAPIIS (see Figure 5).

The research data indicated a variety of conclusions to reported government contractor misconduct. Reported contractor misconduct resulted in 62.6% of settlements by the contractor without admitting fault, while 1.2% of the government contractors were suspended or debarred (see Figure 6).

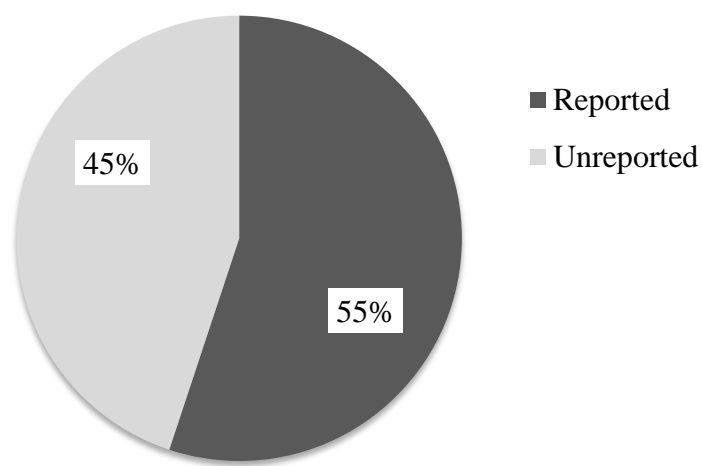


Figure 5. FAPIIS reporting compliance. This graph represents government contractor FAPIIS reporting compliance from 2010 through 2012 (FAPIIS, 2014; POGO, 2014).

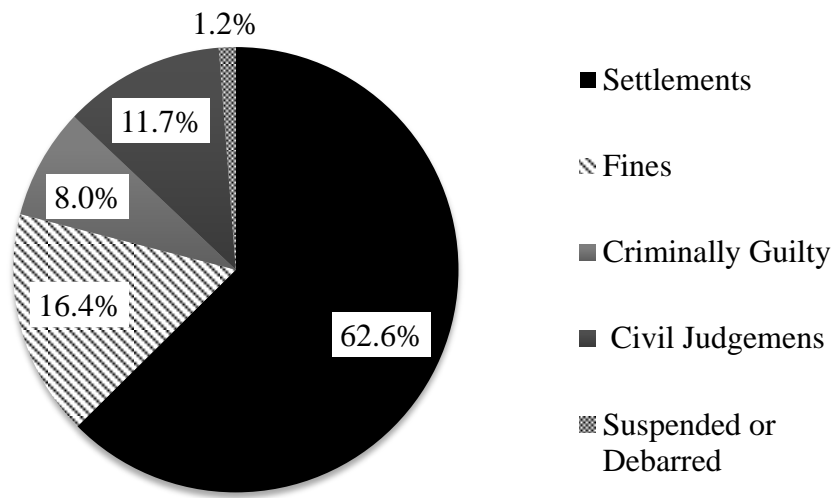


Figure 6. Top 100 misconduct outcomes. This graph represents the percentage of resultant actions for acts of contractor misconduct from 2006 through 2008 and from 2010 through 2012 (POGO, 2014).

I developed an alternative and null hypothesis to aid in answering Research Question 1. The alternative hypothesis (H1_a) stated that there is a statistically significant decline in the rate of reported misconduct after the change to the FAR in 2009. The null

hypothesis (H_{10}) stated that there was no statistically significant decline in the rate of reported contractor misconduct after the change to the FAR in 2009. I conducted a Wilcoxon signed-ranks test comparing the data collected for the 3 years before 2009 (Time 1) and the 3 years after 2009 (Time 2). The results indicated that the null hypothesis was not rejected, $p = .34$. Therefore, the change to the FAR in 2009 did not significantly reduce the rate of contractor misconduct.

I determined that my original choice for analysis, the paired samples t test, was inappropriate after discovering that the data violated the assumption of normality, $p < .001$ (see Table 1). Therefore, I shifted to the Wilcoxon signed-ranks test. The Wilcoxon is a nonparametric test of similar design test that allowed for data that did not meet the paired samples t test assumptions.

Table 1

Shapiro-Wilk Test: Test of Normality for Reported Contractor Misconduct

	Statistic	<i>df</i>	<i>P</i>
RCM Time 2 – RCM Time 1	.862	300	< .001

Note. RCM = reported contractor misconduct; Time 1 = 2006 through 2008; Time 2 = 2010 through 2012.

The selection of the Wilcoxon signed-ranks test required reviewing three assumptions to ensure appropriateness. First, each pair of observations represented members of the top 100 government contractors for their respective times and were independent of all other pairs of observations. Next, the 300 paired values (see Table 3) was a large enough group to yield accurate z test results. Finally, while there were 128

ties (see Table 3), there were 172 nontied scores from the 300 pairings (see Figure 7); thereby mitigating the risk of continuous and symmetrical scores within the population.

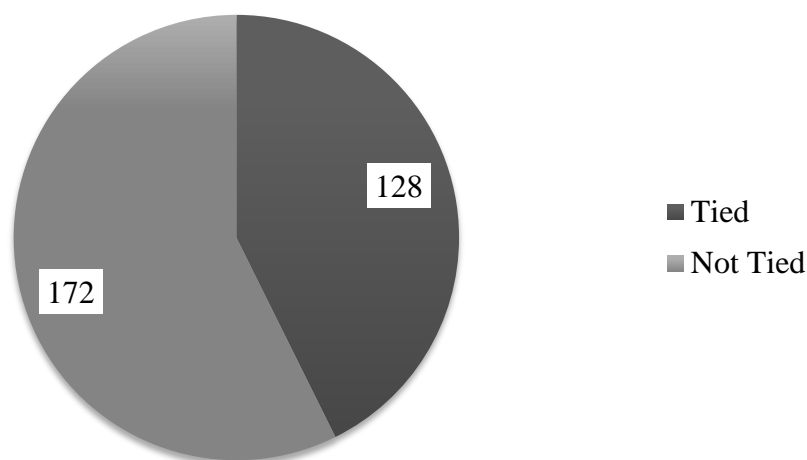


Figure 7. Pie chart of tied pairs. This is the graphic representation of the tied paired-groups for the 3-year time periods before and after the change to the FAR in 2009.

A Wilcoxon signed-ranks test was conducted to evaluate the impact of the change to the FAR in 2009 on the rate of reported government contractor misconduct. The independent variable was time, with two conditions, Time 1 and Time 2. Time 1 was pre-2009 (2006 – 2008) and Time 2 was post 2009 (2010 – 2012). The results indicated that the rate of reported government contractor misconduct was not significantly impacted by the change to the FAR in 2009, $z = -0.949$, $p = .34$ (see Table 2), $N = 172$, $r = -.072$ (see Table 3); therefore, the null hypothesis that there was no statistically significant decline in rate of reported contractor misconduct was not rejected. The median score for reported contractor misconduct higher before the change to the FAR in 2009 was 83.88, while the

median score for reported contractor misconduct higher after the change to the FAR in 2009 was 89.82 (see Table 3).

Table 2

Test Statistics^a: Reported Contractor Misconduct

	RCM Time 2 – RCM Time 1
Z	-.949 ^b
p (2-tailed)	.343

Note. RCM = reported contractor misconduct; Time 1 = 2006 through 2008; Time 2 = 2010 through 2012.

^a Wilcoxon signed-ranks test.

^b Based on positive ranks.

Table 3

Wilcoxon Signed Ranks Test: Reported Contractor Misconduct

		N	Median score	Sum of ranks
RCM Time 2 – RCM Time 1	Negative Ranks	96 ^a	83.88	8052.00
	Positive Ranks	76 ^b	89.82	6826.00
	Ties	128 ^c		
	Total	300		

Note. RCM = reported contractor misconduct; Time 1 = 2006 through 2008; Time 2 = 2010 through 2012.

^a RCM Time 2 < RCM Time 1.

^b RCM Time 2 > RCM Time 1.

^c RCM Time 2 = RCM Time 1.

Paternoster (2010) explained that in implementing deterrence theory, laws are created, violations discovered, and penalties imposed, all with the desire of modifying behavior. The change to the FAR in 2009 was created with the desire to reduce misconduct (Dorey et al., 2012). Roberts (2010) stated that problems exist with the U.S. government's approach to ethics rules and regulations, which may result in no change.

The finding that there was no significant decline in the rate of reported contractor misconduct despite the U.S. government's change to the FAR in 2009, supported Roberts' belief while disconfirming Dorey et al.'s (2012) conclusions.

The findings further supported Robert's (2010) belief that changing ethical rules and regulations does not guarantee change in unethical behavior. Detection of misconduct is a key component of deterrence theory (Ogilvie & Stewart, 2010). Through the findings, I detected misconduct and inferred that the oversight component of the U.S. government's deterrent actions was functional. However, the lack of significant reduction in misconduct after the change to the FAR in 2009 infers that the U.S. government's deterrence actions were not completely functional. Moreover, because the change to the FAR in 2009 did not significantly reduce reported acts of misconduct, I questioned the impact of the change to the FAR in 2009 on the government contracting industry implementation of the required ethics programs.

Research Question 2

The second dependent variable was the government contractor ethics business processes. I designed Research Question 2 to aid in investigating how the change to the FAR in 2009 affected government contractor ethics business processes. I categorized the data to indicate compliance scores for each year studied. Compliance scores ranged from a score of 0, for no components, to a score of 4, for all four components of a viable contractor ethics program as required by the change to the FAR (2008). Upon categorizing the data, I found that the number of the top 100 government contractors with

a compliance score of 4 ranged from a low of 6 in 2006, to a high of 78 in 2008 and 2009 (see Figure 8).

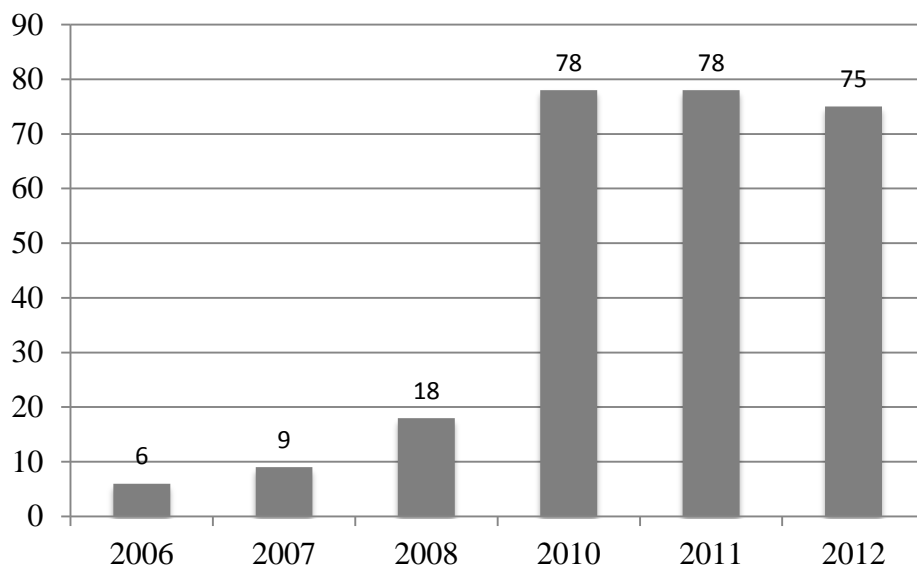


Figure 8. Top 100 scoring a 4. This graph represents the number of top 100 government contractors with all four elements of ethical business programs outlined in change to the FAR in 2009 from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

Government contractor employment of each individual element varied; however, the 2006 remained the lowest scoring year, while 2010 remained the highest scoring year. Contractors with a formal ethics program ranged from 6 in 2006 to 80 in 2010 (see Figure 9). Contractors with a written code of ethics ranged from 57 in 2006 to 92 in 2010 (see Figure 10).

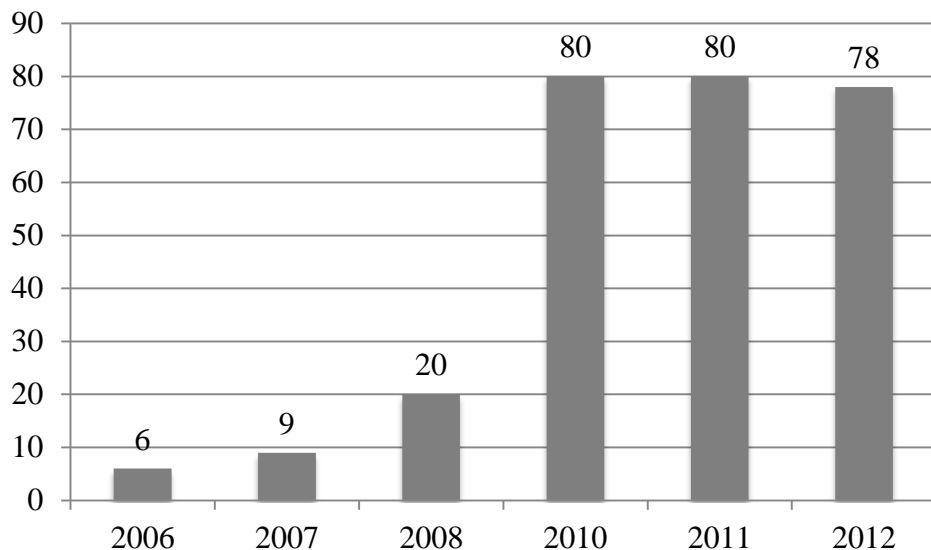


Figure 9. Top 100 with an ethics program. This graph represents the top 100 government contractors with formal ethics programs from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

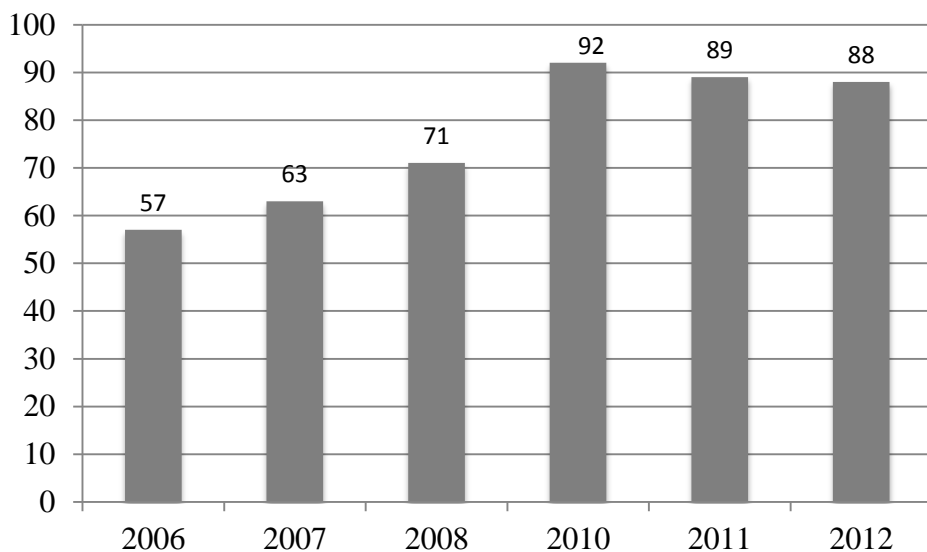


Figure 10. Top 100 with a code of ethics. This graph represents the number of top 100 government contractors with a written code of ethics from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

Contractors with a corporate ethics and compliance training program ranged from 17 in 2006 to 78 in 2010 (see Figure 11). Government contractors with internal noncompliance reporting processes ranged from a low of 22 in 2006 to a high of 83 in 2010 (see Figure 12). Finally, the research data indicated a 433% increase in functional ethics programs to comply with the change to the FAR in 2009; increasing from 18 with all four parts of a functional ethics business program (see Figure 13) to 78 in 2010 (see Figure 14).

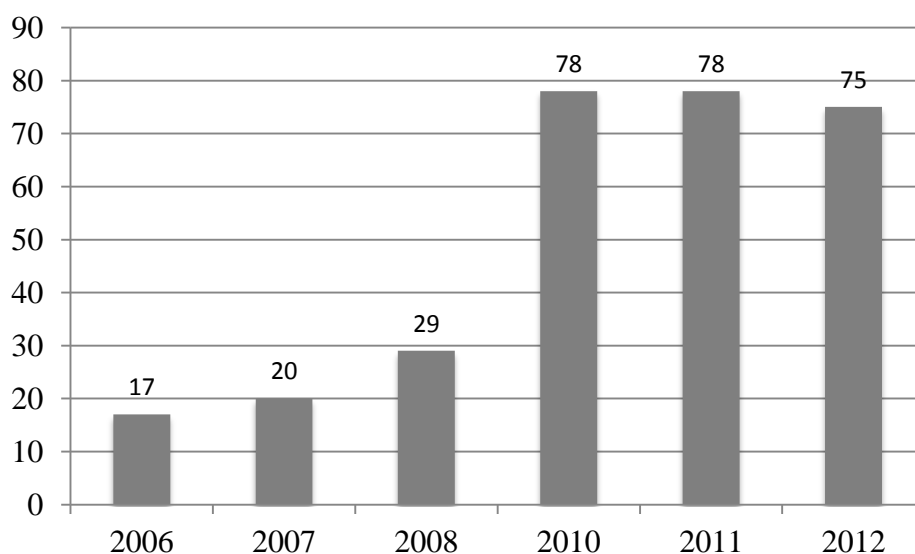


Figure 11. Top 100 with ethics training programs. This graph represents the number of top 100 government contractors with ethics training programs from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

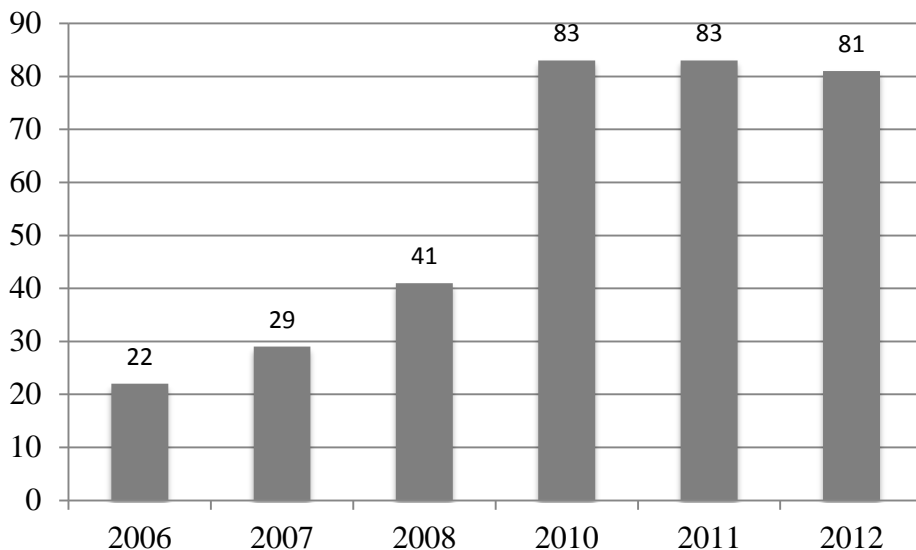


Figure 12. Top 100 with internal compliance processes. This graph represents the number of top 100 government contractors with internal noncompliance reporting processes from 2006 through 2008 and 2010 through 2012 (FPDS, 2014; POGO, 2014).

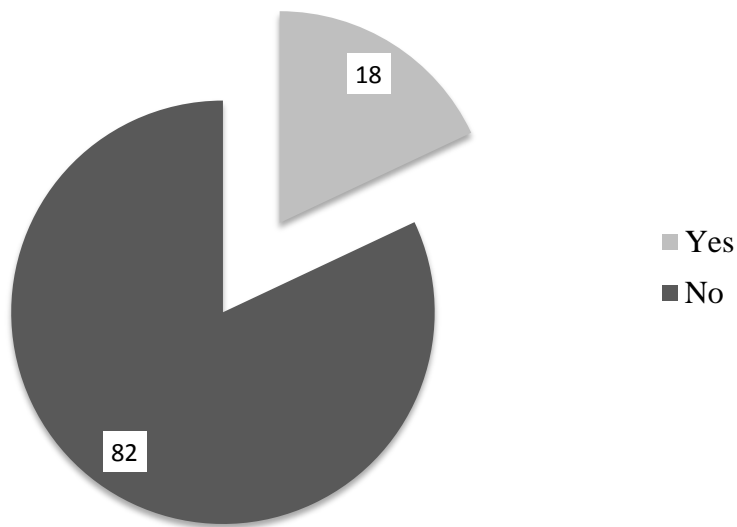


Figure 13. 2008 ethics program compliance. This graph represents the number of top 100 government contractors with all four elements of ethical business programs outlined in change to the FAR in 2009 in 2008 (FPDS, 2014; POGO, 2014).

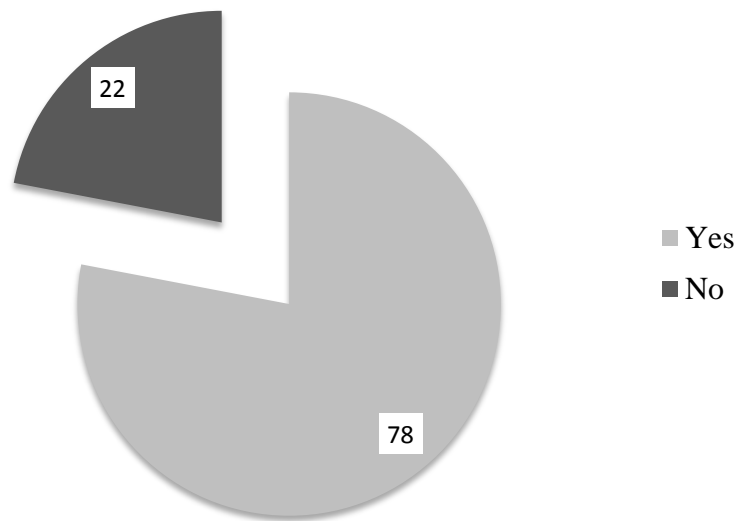


Figure 14. 2010 ethics program compliance. This graph represents the number of top 100 government contractors with all four elements of ethical business programs outlined in change to the FAR in 2009 in 2010 (FPDS, 2014; POGO, 2014).

I developed an alternative and null hypothesis to aid in answering Research Question 2. The alternative hypothesis (H_{2a}) developed for this research question stated that there is a statistically significant change in the government contractors ethics business processes after the change to the FAR in 2009. The null hypothesis was that there was no statistically significant change in the government contractors' ethics business processes after the change to the FAR in 2009.

My second research question centered on prevention and detection, which are two of the components that Best (2013) listed as essential components of deterrence theory. The dependent variable for Research Question 2 was government contractor ethics business processes. The independent variable for Research Question 2 was time, with two conditions, Time 1 (pre change to the FAR in 2009) and Time 2 (post change to the FAR

in 2009). I initially chose to analyze the data through a paired samples *t* test; however, I determined that the paired samples *t* test was inappropriate after discovering that the data violated the assumption of normality. Therefore, I chose the Wilcoxon signed-ranks test, which is a nonparametric test of similar design test that allows for data that violates the paired samples *t* test assumptions.

Table 4

Shapiro-Wilk Test: Test of Normality for Contractor Ethics Business Processes

	Statistic	<i>df</i>	<i>P</i>
GCEBP Time 2 – GCEBP Time 1	.886	300	< .001

Note. GCEBP = government contractor ethics business processes; Time 1 = 2006 through 2008; Time 2 = 2010 through 2012.

The Wilcoxon signed-ranks test required reviewing three assumptions to ensure appropriateness. First, each pair of observations represented members of the top 100 government contractors for their respective times and were independent of all other pairs of observations. Next, the 300 (see Table 5) paired values was a large enough sample size to yield accurate *z* test results. Finally, while there were 42 ties, there were 258 nontied differences (see Figure 15), which indicated a low risk of noncontinuous and asymmetrical scores within the population.

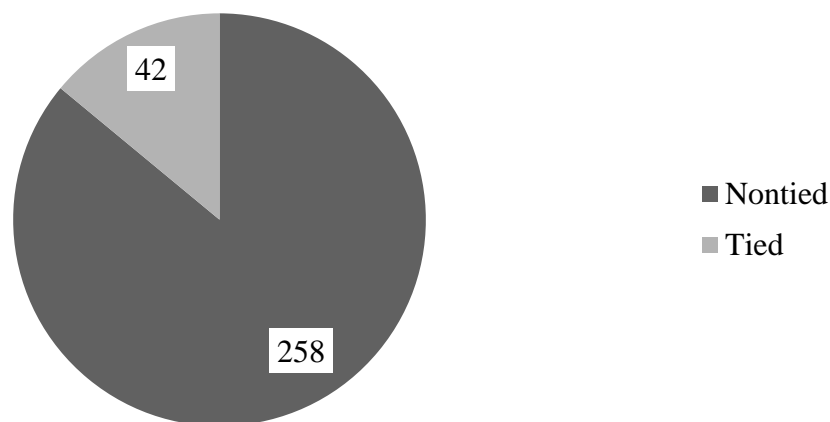


Figure 15. Pie chart of tied pairs for RQ 2. This is a graphic representation of the tied pairs distribution for the contractor ethics business processes pre and post the change to the FAR in 2009.

I conducted a Wilcoxon signed-ranks test to evaluate the impact of the change to the FAR in 2009 on changing government contractor ethics business processes. The independent variable was time, with two conditions, Time 1 and Time 2. Time 1 was pre-2009 (2006 through 2008) and Time 2 was post-2009 (2010 through 2012). The results indicated that government contractor ethics business processes were significantly impacted by the change to the FAR in 2009, $z = -12.263$, $p < .001$ (see Table 6), $N = 258$, $r = -.763$ (see Table 5); therefore, the null hypothesis that there was no statistically significant impact in government contractor ethics business processes after the change to the FAR in 2009 was rejected. The median score for government contractor ethics business processes that were higher before the change to the FAR in 2009 was 73.40, while the median score for government contractor ethics business processes that were higher after the change to the FAR in 2009 was 133.14 (see Table 5).

Table 5

Wilcoxon Signed Ranks Test: Contractor Ethics Business Processes

		<i>N</i>	Median score	Sum of ranks
GCEBP Time 2 –	Negative Ranks	26 ^a	73.40	1908.50
GCEBP Time 1	Positive Ranks	227 ^b	133.14	30222.50
	Ties	47 ^c		
	Total	300		

Note. GCEBP = government contractor ethics business processes;
Time 1 = 2006 through 2008; Time 2 = 2010 through 2012.

^a GCEBP Time 2 < GCEBP Time 1.

^b GCEBP Time 2 > GCEBP Time 1.

^c GCEBP Time 2 = GCEBP Time 1.

Table 6

Test Statistics^a: Contractor Ethics Business Processes

	GCEBP Time 2 – GCEBP Time 1
<i>Z</i>	-12.263 ^b
<i>p</i> (2-tailed)	< .001

Note. GCEBP = government contractor ethics business processes;
Time 1 = 2006 through 2008; Time 2 = 2010 through 2012.

^a Wilcoxon Signed Ranks Test.

^b Based on positive ranks.

Dorey et al. (2012) found that the U.S. government implemented the change to the FAR in 2009 to deter contractor misconduct. The findings in Research Question 1 inferred that change did not have the desired impact. The findings to Research Question 2 inferred that the government contracting industry's functional ethics business processes were significantly impacted. Paternoster's (2010) belief that in implementing deterrence theory, laws are created to modify contractor behavior was supported by the increase the median score changes in government contractor ethics business processes from 73.40

before 2009 to 133.14 after 2009. Deterrence theory worked in spurring change in contractor business processes; however, the changes did not lead to significant reductions in reported contractor misconduct. The findings support Stegman's (2010) belief that changing business processes does not guarantee change in corporate behavior. The findings extend the literature on government contractor ethics business processes, on contractor ethical behavior, and how the two are not necessarily related. The findings extend the understanding of the application of deterrence theory in modifying contractor behavior, including what was and was not effective.

Applications to Professional Practice

The U.S. government has continued to take steps to deter contractor misconduct, including the change to the FAR in 2009 (Roberts, 2010). The U.S. government's deterrent actions include imposing new rules and regulations governing conduct, creating additional oversight programs, and expanding punishment for violations (Amirkhanyan et al., 2010). U.S. government contracting officials, as well as government contracting industry executives may benefit from understanding the study findings to infer the level of success of the change to the FAR in 2009.

Dorey et al. (2012) stated that the U.S. government contracting officials designed the change to the FAR in 2009 to deter contractor misconduct; however, no academic information was available that determined if the change had the desired effect. Research Question 1 in the study addressed the lack of information on the trend of misconduct post the change to the FAR in 2009. Through interpreting the findings, I increased the knowledge base for the contracting industry through understanding that reported

contractor misconduct has not significantly declined despite the deterrent steps taken. Government contracting officials and contracting industry executives may use the findings to seek ways to reduce misconduct beyond the steps already taken. The findings for Research Question 2 indicated that the U.S. government's deterrent steps significantly impacted the contracting industry's ethical business processes. Government officials may take the knowledge in understanding what was effective and apply similar techniques to improve upon what was unsuccessful.

Two of the three essential elements of deterrence theory, prevention and detection, were addressed by the change to the FAR in 2009 (Best, 2013; Roberts, 2010). Moreover, the U.S. government's change to the FAR in 2009 supported Paternoster's (2010) belief that laws are created with the desire to modify behavior. The findings indicated that the government contracting industry made significant increases in their corporate ethics programs and therefore significant changes in their business processes. Stegman (2010) believed that implementing required corporate programs do not create change in corporate ethical behavior due to training shortfalls. The finding that the contracting industry implemented significant changes in ethics business process coupled with the finding that no significant change occurred in the rate of reported misconduct supports Stegman's (2010) assertion that changing business processes does not guarantee a change in corporate behavior. Contracting industry executives may look at the findings and determine ethical training shortfalls and design training improvements that may lead to significant reductions in contractor misconduct.

The application of deterrence theory in the case of reducing contractor misconduct was made apparent through data collection and analysis. Deterrence theory is the threat of applying penalties to prevent illegal or unethical acts (Paternoster, 2010). The U.S. government contracting officials created a change to the FAR in 2009 to prevent future government contractor acts of misconduct (Roberts, 2010). The data indicated a 433% increase in functional corporate ethics programs, from which I inferred, true to deterrence theory, that corporate behavior was modified comply with the new regulation and prevent the U.S. government from applying penalties for noncompliance. Government officials can use similar deterrent steps to further modify contracting industry behavior.

Bradshaw and Su (2013) determined that misconduct mitigation steps were ineffective because of the U.S. government's lack of emphasis or inability to monitor, report, and share contractor performance information. Government contracting officials and contracting officers may improve the use and complexity of the existing contracting oversight programs. Furthermore, the contract violations enforcement areas of the U.S. government may improve violation enforcement, including enforcing the appearance of continued misconduct. The data indicated that the majority of reported contractor misconduct was settled without admitting fault, while 1% received the maximum punishment possible. Rogers (2010) believed that the government contracting industry places the highest value on profitability and comply only when profitability is threatened. U.S. government officials may use the findings to determine if increased cost for violations would reduce acts of misconduct.

The findings may provide the federal government contracting industry with information to aid in reducing or deterring misconduct. The findings may inform leaders throughout the federal government contracting industry on the trends in contractor misconduct and government oversight. Rogers (2010) found that while the government may require corporations to acknowledge ethical standards, true corporate change is created internally (Rogers, 2010). Industry leaders may use the finding to understand that the current form of ethical business processes are insufficient and can investigate ways to improve; thereby, significantly reducing acts of misconduct as was the intent of the change to the FAR in 2009. Corporate leaders may investigate trends within their organizations and seek to improve ethical behavior through internal deterrent actions.

The study findings may provide researchers, academicians, and U.S. government contracting officials with information on the effectiveness of deterrence theory to modify corporate ethical behavior. Academic investigation into successful application of deterrence theory in other areas such as speed limits (Ritchey & Nicholson-Crotty, 2011), corporate anti-trust actions (Lande & Davis, 2011), nuclear deterrence or mutually assured destruction (O'Neil, 2011), and information security policies (Chen et al., 2012) demonstrate the effectiveness of deterrence theory. Researchers and academicians may review the findings and recommendations for further study to investigate the continued acts of misconduct and further educate the U.S. government and government contracting industry.

Implications for Social Change

The implications for positive social change include the potential to improve corporate ethical behavior throughout the organization. The study data indicated instances of increased corporate social ethics programs as components of their ethics business processes. Improving corporate ethics business processes may lead to improved ethical conduct throughout the organization, which benefits all stakeholders, including society (DeCremer et al., 2010).

The findings indicated a significant impact in government contractors increased ethics business processes. The threat of reduced contracts for noncompliance coupled with the increase in ethics programs support Demessie's (2012) belief that corporations would change if the cost of not changing exceeds the cost of change. Further academic understanding may lead to increased public awareness campaigns that would impact the contracting industry's bottom line, which could improve corporate ethical behavior.

The findings indicated that government contractor misconduct was not significantly reduced by the change to the FAR in 2009. The findings, coupled with Cragg et al.'s (2012) belief that instances of misconduct are not confined to a single area, lead to the conclusion that unethical conduct may be a problem throughout an organization. Increased awareness of insignificant improvement in misconduct may lead to further actions designed to reduce misconduct; thereby improving ethical behavior throughout corporations and the government contracting industry.

Recommendations for Action

The findings indicated that the change to the FAR in 2009 significantly impacted government contracting industry ethics business processes; however, the change did not attain Dorey et al.'s (2012) stated goals of reducing contractor misconduct. I propose recommendations for both the U.S. government contracting officials and government contracting industry executives. The recommendations include three recommendations for the U.S. government contracting officials and two recommendations for government contracting industry executives as a result of the findings.

First, I recommend that the U.S. government contracting officials seek to improve oversight programs, such as FAPIIS, by requiring self-reporting of violations to be listed individually; thereby improving contracting officials understanding of a contractor's ethical profile. Next, government contracting officials should review the instances of reported misconduct, compare the results with the information posted in FAPIIS, and recommend punitive action against noncompliant contractors. Finally, I recommend the government impose penalties that will reduce misconduct. The Federal Acquisition Regulation (2014) lists penalties for contractor misconduct, which includes exclusion from the bidding process, fines, debarment, and criminal prosecution.

The study data indicated that 37.4% of reported instances of misconduct resulted in imposed penalties (see Figure 14). Deterrence depends upon a government contractor believing acts of misconduct will be detected and the cost of the action to be greater than the potential profit (Paternoster, 2010). The U.S. government ability to deter contractor

misconduct depends upon the likelihood of detection and increased cost to the government contractor for the act of misconduct.

I recommend that government contracting industry executives improve internal misconduct reporting and publish misconduct statistics within annual reports. The study data indicated that ethical compliance programs are present in 78% of the top 100 contractors since the change to the FAR in 2009 (see Figure 13); however, there was no significant reduction in acts of misconduct after the implementation of the ethical compliance programs. The findings support Sadler-Smith's (2012) conclusion that corporate ethics programs inform and educate; however, unethical behavior persists.

Industry executives should review the findings, determine if their corporate ethics programs are reducing misconduct, and revise the ethics program to improve ethical behavior. Amey (2012) believed the government contracting industry poorly performs internal oversight. I believe that improving internal oversight and reporting the results to corporate stakeholders could improve internal compliance and reduce instances of misconduct. Moreover, the government's desire to reduce costs may lead to future changes that could threaten corporate profits for those who fail to prepare.

Recommendations for Further Study

My causal-comparative study findings determined that the change the FAR in 2009 significantly impacted government contractor ethics business processes, yet did not significantly reduce reported contractor misconduct. I recommend three studies that would further academic understanding of the contractor misconduct issue. First, I recommend a comparative study to discover if there is a significant difference in the rates

of reported misconduct between contractors with high settlement percentages versus contractors that experience punitive actions. This study would further the understanding of deterrence theory in government contracting, specifically if punishment produces compliance.

Next, I recommend a qualitative study of government contracting industry executives to determine the perceived level of believed probability of detection and threat of punishment. This study would measure the two aspects required in deterrence theory; the likelihood of detections and the belief that punishment for violations will exceed reward (Ogilvie & Stewart, 2010; Qing et al., 2011). Understanding the perception of the government contracting industry executives may further understanding of why the change to the FAR in 2009 did not significantly reduced contractor misconduct. Finally, I recommend further exploration of contractor misconduct through a case study approach. Academicians may expand this research by studying companies with greater levels of misconduct or lesser levels of misconduct. Individual contractor based case studies would enhance the understanding of both academia and industry on government contractor misconduct and corporate ethical behavior.

Reflections

Investigating government contractor misconduct and government contracting industry ethics programs was both interesting and enlightening. Learning the history of government contracting, contracting misconduct, and government steps to deter misconduct enhanced my understanding of the topic. With over 20 years of experience in

government contracting, I had preconceived notions of what to expect prior to conducting the study.

I chose quantitative methodology to limit my potential bias. Moreover, I selected a causal-comparative ex post facto design that required no participants; thereby eliminating effects or interactions with participants. I used official government and government watchdog databases as the source for all data used in the analysis. The potential for personal bias was limited to post analysis. I expected the acts of misconduct to remain the same or increase after the change to the FAR in 2009 and was surprised to find that misconduct had declined, albeit insignificantly. I interpreted the findings based upon unbiased analysis; therefore limiting any personal bias to explaining the findings.

I assumed that government databases would provide adequate data for my study; however, my experience with FAPIIS did not meet my expectations. I anticipated collecting valuable data from FAPIIS; however, I found that almost half of the contractors studied did not report derogatory information in FAPIIS. I agree with Willard (2013) that the database was an unreliable source for information.

The information gained and understanding obtained during this study spurred further curiosity. I am excited to see progress in reducing misconduct despite that the progress is not statistically significant. Understanding and improving corporate ethical behavior is my passion. The next phase of my research will be to understand corporate executive decision making in the area of ethical compliance. I look forward to learning more and to working to further improve the ethical climate within the government contracting industry.

Summary and Study Conclusions

The purpose of this quantitative, nonexperimental, retrospective, causal-comparative study was to discover if the change to the FAR in 2009 has influenced the rate of reported contractor misconduct and to investigate the impact of the change on government contractor ethics business processes. Time, divided into 3-year time periods pre and post the change to the FAR in 2009, was the independent variable. The instances of reported contractor misconduct and the change in federal contractor ethics business processes were the dependent variables. I used Wilcoxon signed-ranks tests to analyze the data and infer the relationships between the study variables.

Demessie (2012) believed that U.S. government officials created regulations designed to decrease misconduct, yet the regulations increased the propensity for misconduct. U.S. government contracting officials changed the FAR in 2009 to deter future instance of misconduct (Roberts, 2010). Effective deterrence begins with an individual's belief that discovery of the misconduct is likely (Ogilvie & Stewart, 2010). The second component of effective deterrence requires that punishment for misconduct must exceed the potential reward for misconduct violations (Qing et al., 2011). Deterrence theory has proven effective in deterring nuclear war (O'Neil, 2011), in reducing instances of speeding (Ritchey & Nicholson-Crotty, 2011), in limiting corporate antitrust actions (Lande & Davis, 2011) and in information assurance policies (Chen et al., 2012).

The deterrent effect of the change to the FAR in 2009 met with mixed results in the study. The study findings indicate that reported acts of misconduct declined after the

change to the FAR in 2009; however, the change was not significant. Further findings indicated that the change to the FAR in 2009 created significant change on the government contracting business processes. Kim and Lambright (2010) believed that the level of government involvement does not change contractor behavior. The findings dispute Kim and Lambright by indicating a significant change in contractor ethics business processes. Bell and Barkhuizen (2011) stated that influencing change within an organization begins with understanding the problem. Finding that U.S. government regulations can influence the government contracting industry provided evidence that the misconduct problem is correctable; however, the task of significantly reducing government contractor misconduct remains.

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Appendix: POGO Corruption Form

Report Corruption Form

<http://www.pogo.org/report-corruption/form.html>

[Home](#) > [Report Corruption](#) > Report Corruption Form

Report Corruption Form



FOR YOUR PROTECTION, DO NOT USE A GOVERNMENT PHONE, FAX, OR COMPUTER TO CONTACT POGO

What organization(s)/government agency/government contractor is involved in the alleged wrongdoing?

What is the specific wrongdoing of which you have knowledge? Be as specific as possible by providing detailed information.

Is the wrongdoing still going on? If no, when was the activity suspended?

Do you have documents or other physical evidence that you would be able to send us to support your claim if POGO takes your case?

Do you know if this wrongdoing is occurring elsewhere or is it limited to your office/region/branch?

Who have you told of the possible wrongdoing (co-workers, supervisors, other organizations, etc)?

Other than those you may have told, are others also aware of this wrongdoing?

What adverse action has occurred against you (if any)?

May we contact you? Yes or No

If not, please give us as much detail about the substance of the waste, fraud, or abuse as possible, and contact us during regular business hours in about 10 working days. We are likely to have follow-up questions.

Have you been in contact with the media? Yes or No

Is it OK if POGO contacts the media about your case? Yes or No

Please provide us with as much of the following as you wish:

Name

Former/Current Job Title

Address

Phone

Email (required)

Report Corruption Form

<http://www.pogo.org/report-corruption/form.html>

Please add me to the email update list

FOR YOUR PROTECTION, DO NOT USE A GOVERNMENT PHONE, FAX, OR COMPUTER TO CONTACT POGO

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Our Mission:

Founded in 1981, the Project On Government Oversight is a nonpartisan independent watchdog that champions good government reforms. POGO's investigations into corruption, misconduct, and conflicts of interest achieve a more effective, accountable, open, and ethical federal government.

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Curriculum Vitae

Jeffery Patrignani**EDUCATION**

Doctor of Business Administration: Walden University	Expected December 2014
Master of Business Administration: Regent University	December 2003
Bachelor of Science in Liberal Arts: Regents College	September 2000

PROFESSIONAL EXPERIENCE

Senior Engineer / Analyst: Command and Control, Communication, Computers, and Intelligence (C4I) Experiment Planner	2009 – Present
Vice President of Business Development and Special Programs	2008 – 2009
Vice President of Operations	2005 – 2008
Director of Electronic Maintenance and Contracting Officer Representative	1998 – 2005
Electronic Maintenance Officer and Contracting Officer Representative	1994 – 1998
Electronic Maintenance Technician	1981 – 1994

PROFESSIONAL CERTIFICATIONS

Six Sigma Black Belt: Villanova University

Contracting Officer Representative (COR): Management Concepts Inc.

Federal Acquisition Regulation (FAR): Management Concepts Inc.

Procurement Planning: Management Concepts Inc.

OSHA Safety Certification: Alamo Safety